As filed with the Securities and Exchange Commission on January 16, 2018.

Registration No. 333-222373

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Amendment No. 1
to
FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

resTORbio, Inc.
(Exact name of registrant as specified in its charter)

Delaware	**2834**	**81-3305277**
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)

500 Boylston Street, 12th Floor
Boston, MA 02116
(617) 482-2333
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Chen Schor
President and Chief Executive Officer
resTORbio, Inc.
500 Boylston Street, 12th Floor
Boston, MA 02116
(617) 482-2333
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Mitchell S. Bloom, Esq. **Danielle M. Lauzon, Esq.** **Goodwin Procter LLP** **100 Northern Avenue** **Boston, Massachusetts 02210** **Telephone: (617) 570-1000**	**Peter N. Handrinos, Esq.** **Nathan Ajiashvili, Esq.** **Latham & Watkins LLP** **200 Clarendon Street** **Boston, Massachusetts 02116** **Telephone: (617) 948-6000**

Approximate date of commencement of proposed sale to the public:
As soon as practicable after this Registration Statement is declared effective.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box. ☐

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐	Accelerated filer ☐	Non-accelerated filer ☒ (Do not check if a smaller reporting company)	Smaller reporting company ☐	Emerging growth company ☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. ☐

CALCULATION OF REGISTRATION FEE

TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED	AMOUNT TO BE REGISTERED(1)	PROPOSED MAXIMUM OFFERING PRICE PER SHARE	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE(2)	AMOUNT OF REGISTRATION FEE(3)
Common Stock, par value $0.0001 per share	6,516,667	$16.00	$104,266,672	$12,982

(1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(a) under the Securities Act of 1933, as amended. Includes 850,000 shares that the underwriters have an option to purchase.
(2) Includes the offering price of shares that the underwriters may purchase pursuant to an option to purchase additional shares.
(3) $10,582.50 of this registration fee was previously paid by the Registrant in connection with the filing of its Registration Statement on Form S-1 on December 29, 2017.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

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The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion
Preliminary Prospectus dated January 16, 2018

PROSPECTUS

5,666,667 Shares

Common Stock

This is resTORbio, Inc.'s initial public offering. We are selling 5,666,667 shares of our common stock.

We expect the public offering price to be between $14.00 and $16.00 per share. Currently, no public market exists for the shares. We have applied to list common stock on The Nasdaq Global Market under the symbol "TORC."

We are an "emerging growth company" under federal securities laws and are subject to reduced public company disclosure standards. See "Summary—Implications of Being an Emerging Growth Company."

Investing in the common stock involves risks that are described in the "Risk Factors" section beginning on page 11 of this prospectus.

	Per Share	Total
Public offering price	$	$
Underwriting discounts and commissions(1)	$	$
Proceeds to us before expenses	$	$

(1) We refer you to "Underwriting" beginning on page 174 of this prospectus for additional information regarding underwriting compensation.

Certain of our existing stockholders, including certain affiliates of our directors, have indicated an interest in purchasing an aggregate of up to $35 million of shares of our common stock in this offering at the initial public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters may determine to sell more, less or no shares in this offering to any of these stockholders, or any of these stockholders may determine to purchase more, less or no shares in this offering.

The underwriters may also exercise their option to purchase up to an additional 850,000 shares from us, at the public offering price, less underwriting discounts and commissions, for 30 days after the date of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The shares will be ready for delivery on or about , 2018.

BofA Merrill Lynch **Leerink Partners** **Evercore ISI**

Wedbush PacGrow

The date of this prospectus is , 2018.

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Neither we nor the underwriters have authorized anyone to provide you with any information or to make any representations other than those contained in this prospectus, any amendment or supplement to this prospectus or in any free writing prospectus we may authorize to be delivered or made available to you. Neither we nor the underwriters take responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date on the front cover of this prospectus, regardless of the time of delivery of this prospectus or any sale of shares of our common stock. Our business, financial condition, results of operations and prospects may have changed since that date.

For investors outside the United States: We have not, and the underwriters have not, done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of common stock and the distribution of this prospectus outside the United States.

SUMMARY

This summary highlights, and is qualified in its entirety by, the more detailed information and financial statements included elsewhere in this prospectus. This summary does not contain all of the information that may be important to you. You should read and carefully consider the entire prospectus, especially our financial statements and the notes thereto appearing at the end of this prospectus and the "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" sections of this prospectus, before deciding to invest in our common stock. Except as otherwise indicated herein or as the context otherwise requires, references in this prospectus to "resTORbio," "the Company," "we," "us" and "our" refer to resTORbio, Inc.

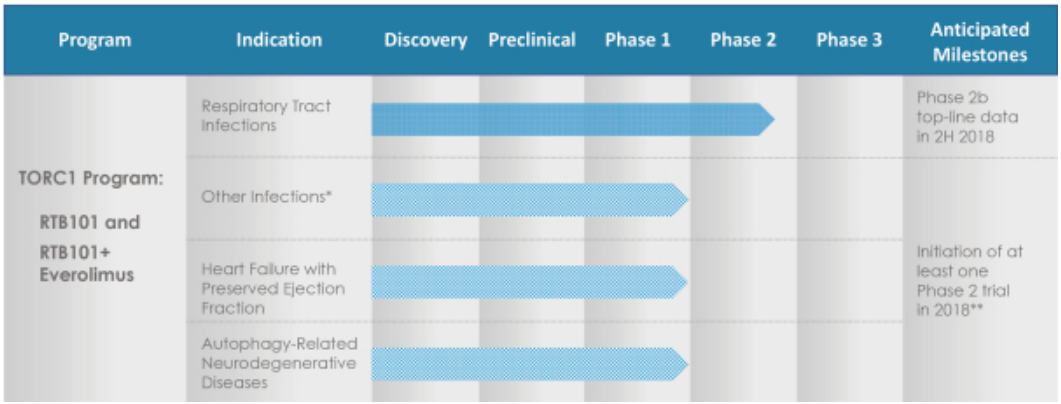
Overview

We are a clinical-stage biopharmaceutical company focused on the development and commercialization of novel therapeutics for the treatment of aging-related diseases. Our lead program has demonstrated in several clinical trials, including a randomized, placebo-controlled trial, the potential to treat multiple diseases of aging for which there are no approved therapies. The decline in immune function that occurs during aging, or immunosenescence, increases susceptibility to a variety of diseases, including respiratory tract infections, or RTIs, that significantly contribute to morbidity and mortality in the elderly. Our approach focuses on the mechanistic target of rapamycin, or mTOR, pathway, an evolutionarily conserved pathway that regulates aging, and specifically on selective inhibition of the target of rapamycin complex 1, or TORC1. Our initial focus is on the development of RTB101, an orally administered, small molecule, potent TORC1 inhibitor, alone and in combination with other mTOR inhibitors such as everolimus—as a first-in-class immunotherapy program designed to improve immune function and thereby reduce the incidence of RTIs in the elderly regardless of the causative pathogen. We licensed the worldwide rights to our TORC1 program, including RTB101 alone or in combination with everolimus or other mTOR inhibitors, from Novartis International Pharmaceutical Ltd., or Novartis, in March 2017.

Our TORC1 immunotherapy approach is supported by a randomized, placebo-controlled Phase 2a clinical trial in 264 elderly subjects that provided statistically significant and clinically meaningful results. This trial demonstrated that treatment with RTB101 alone and in combination with everolimus can enhance the ability of the aging immune system to fight infectious pathogens and consequently reduce the incidence of all infections, including RTIs in elderly subjects. Six weeks of treatment with RTB101 alone and in combination with everolimus met a prespecified endpoint of reducing the incidence of infections by 33% and 38%, respectively, during a period of one year following initiation of therapy. We are evaluating RTB101 alone and in combination with everolimus in a Phase 2b clinical trial for the reduction in the incidence of RTIs in the elderly and expect to report top-line data from this trial in the second half of 2018.

Our Product Pipeline

The following table summarizes key information about our product candidates.



* Other infections include those that the elderly are at increased risk of contracting, such as urinary tract infections.

** For heart failure with preserved ejection fraction, autophagy-related neurodegenerative diseases and certain other infections, we may be required to file an investigational new drug application, or IND, prior to initiating Phase 2 clinical trials. We expect to have the ability to initiate these Phase 2 clinical trials without the need to conduct prior Phase 1 clinical trials.

We also have a follow-on TORC1 inhibitor program at discovery stage.

We expect market exclusivity for RTB101 alone and in combination with everolimus until at least 2031 in the United States, 2032 in major European markets, and 2030 in Japan, and additional pending patent applications may prolong the exclusivity of these product candidates up to 2036.

TORC1 Inhibition for Improving Immune Function in the Elderly

Recent scientific findings, including those published in the scientific journals Cell, Nature and Science suggest that aging and aging-related conditions, such as immunosenescence, are attributable not only to random cellular wear and tear, but also to specific intra-cellular signaling pathways, including the mTOR pathway. mTOR is a protein kinase that signals via two multiprotein complexes, known as TORC1 and TORC2. TORC1 inhibition has been observed to prolong lifespan, enhance immune function, ameliorate heart failure, enhance memory and mobility and delay the onset of aging-related diseases in multiple animal studies. Specifically with respect to enhanced immune function, TORC1 inhibition was observed in preclinical studies to rejuvenate blood, or hematopoietic, stem cell function, increase infection-fighting white blood cell production and enhance antibody-mediated, or adaptive, immunity. On the other hand, TORC2 inhibition has been observed to decrease lifespan in preclinical studies and cause unwanted side effects of hyperlipidemia and hyperglycemia in certain animals and humans. Therefore, based on these observations and data from the Phase 2a clinical trial, we believe our TORC1 program is well-suited to improve immune function and counteract immunosenescence in the elderly.

High Unmet Need for Addressing Respiratory Tract Infections in the Elderly

The reduced ability of elderly patients to effectively detect and fight infections is most commonly manifested in their susceptibility to RTIs and the negative effects such infections have on their overall health. According to the U.S. Census Bureau, RTIs are the fifth leading cause of death in people age 85 and over and the

seventh leading cause of death in people age 65 and over, and result in high healthcare burdens and costs for the elderly population and the healthcare system. The majority of RTIs are caused by viruses for which there are no approved therapies. Despite this, antibiotics, which are ineffective against viruses, are often prescribed indiscriminately to treat RTIs, which may cause side effects related to antibiotic use and contribute to the growing global problem of antibiotic resistance. As the elderly represent the fastest growing population in the world as a whole, we believe there is significant unmet medical need for innovative therapeutic options for reducing the incidence of RTIs by enhancing the function of the aging immune system.

Our TORC1 Program for Addressing Respiratory Tract Infections in the Elderly

We believe our approach to addressing RTIs in the elderly possesses several clinical and commercial advantages. Our TORC1 program offers an immunotherapy approach that has the potential to address a broad range of viral, and potentially bacterial, pathogens. Statistically significant and clinically meaningful reductions in RTI incidence were observed in the Phase 2a clinical trial that evaluated RTB101 alone and in combination with everolimus. We believe the risk-to-benefit ratio of our program is well-suited to the elderly due to the following observations: our oral product candidates were well-tolerated in elderly subjects and none of the participants in the active treatment arms experienced a serious adverse event that was related to the study drug, and the doses being investigated in our ongoing Phase 2b clinical trial are 60 to 240 times lower than maximum tolerated doses established in prior clinical trials for other indications. Based on communications, including those during a high-level policy meeting, with the U.S. Food and Drug Administration, or FDA, to date, we believe a reduction in the incidence of RTIs has the potential to be a clinically relevant endpoint.

We are conducting a randomized, double-blinded, placebo-controlled Phase 2b clinical trial to assess the safety, tolerability and efficacy of 16 weeks of treatment with RTB101 alone or in combination with everolimus as compared to placebo in elderly patients without unstable medical conditions but who are at increased risk of RTI-related morbidity or mortality. Elderly patients at increased risk of RTI-associated morbidity and mortality are defined as subjects who are 85 years of age or older or subjects 65 years of age or older with asthma, chronic obstructive pulmonary disease, chronic bronchitis, Type 2 diabetes mellitus, congestive heart failure, an emergency room visit or hospitalization for an RTI within the past 12 months, or who are current smokers. We are conducting the trial in two parts across two hemispheres. The first part was conducted during the winter cold and flu season in the southern hemisphere. Following an interim analysis that we conducted in October 2017, we commenced the second part during the winter cold and flu season in the United States in the fourth quarter of 2017. We expect to report top-line data from this trial in the second half of 2018. The primary endpoint of the trial is to assess the potential of RTB101 alone or in combination with everolimus to decrease the percentage of subjects with RTIs compared to placebo during the 16-week administration period.

If the results from the ongoing Phase 2b clinical trial are positive, we intend to conduct two Phase 3 pivotal clinical trials across two hemispheres. The Phase 3 clinical program is expected to start in the southern hemisphere in the first half of 2019 at the beginning of the winter cold and flu season and run through the second quarter of 2020. If our Phase 3 clinical trials are successful, we anticipate filing a New Drug Application, or NDA, with the FDA in 2020, and a Marketing Authorization Application, or MAA, with the European Medicines Agency, or EMA, in 2021.

Other Potential Indications for Our TORC1 Program

We may evaluate RTB101 alone or in combination with everolimus or other drugs for the treatment of additional indications, such as heart failure with preserved ejection fraction, urinary tract infections, Huntington’s disease and Parkinson’s disease. We plan to initiate at least one Phase 2 proof of concept study in 2018. We expect to select indications based on strong scientific rationale, preclinical or clinical data, unmet medical need and other relevant considerations.

Company Management and Investors

We were founded by Chen Schor, who serves as our President and Chief Executive Officer, Joan Mannick, M.D., who serves as our Chief Medical Officer, and PureTech Health LLC, or PureTech Health, an affiliate of PureTech Health plc, an advanced clinical-stage biopharma company. Dr. Mannick led the TORC1 clinical program at Novartis Institutes for Biomedical Research, Inc., or NIBR, prior to our in-licensing of the program. PureTech Health currently provides us with certain business services pursuant to a business services, personnel and information management agreement. In addition, we currently share administrative resources with PureTech Health, including legal, accounting and human resources support, computer and telecommunications systems and other office infrastructure pursuant to the agreement. PureTech Health has also assisted with our market research efforts, including conducting a market survey in the United States prior to our initiation of our ongoing Phase 2b clinical trial of RTB101 alone and in combination with everolimus. We were a subsidiary of PureTech Health until the closing of our Series B financing in November 2017. Based on the number of shares outstanding as of December 31, 2017 and after giving effect to the sale of 5,666,667 shares in this offering (without giving effect to any potential purchases by PureTech Health of shares of our common stock in this offering), PureTech Health will beneficially own shares representing approximately 35.2% of our outstanding common stock. In addition, PureTech Health has appointed two directors to our board of directors.

Our management team includes veterans in drug development and discovery, with executive experience in leading global pharmaceutical companies. We are supported by investors that include both private equity venture capital funds and public healthcare investment funds. Our investors include OrbiMed Advisors, Fidelity Management & Research Company, Rock Springs Capital, Quan Capital and Nest Bio.

Our Strategy

Our goal is to be a leading biopharmaceutical company focused on treating aging-related diseases. We strive to maintain a leadership position in the TORC1 inhibitor class of pharmaceutical products. The key elements of our strategy to achieve this goal include:

- Rapidly advance our TORC1 program as immunotherapy for reducing the incidence of RTIs in elderly subjects;
- Develop our TORC1 program for additional indications;
- Commercialize our product candidates in the United States and potentially collaborate with others globally to maximize their commercial value;
- Maintain and grow a robust intellectual property portfolio in the field of TORC1 inhibition for aging-related diseases; and
- Develop, acquire or in-license product candidates that enhance our global leadership position.

Risks Associated with Our Business

Our business is subject to a number of risks of which you should be aware before making an investment decision. These risks are discussed more fully in the “Risk Factors” section of this prospectus immediately following this prospectus summary. These risks include the following:

- We have a limited operating history, have incurred significant operating losses since inception, expect to incur significant and increasing losses for the foreseeable future, will need substantial additional funding and may never achieve or maintain profitability; investors may lose their entire investment;

- Our business has no history of commercialization and depends virtually entirely upon the success of RTB101 alone or in combination with everolimus, which is still under clinical development. If we are unable to obtain regulatory approval for or successfully commercialize RTB101, our business would be materially harmed. Even if we receive regulatory approval to market product candidates, the market may not be receptive to our product candidates upon their commercial introduction, which will prevent us from becoming profitable;

- Our product candidates may cause undesirable side effects or have other properties that could delay or prevent their regulatory approval, limit the commercial profile of an approved label, or result in significant negative consequences following regulatory approval, if any;

- We may be subject to additional risks because we are administering RTB101 in combination with other mTOR inhibitors, such as everolimus;

- If we fail to develop RTB101 alone or in combination with an mTOR inhibitor for additional therapies or develop other product candidates, we may be unable to grow our business;

- Use of third parties to manufacture our product candidates may increase the risk that we will not have sufficient quantities of our product candidates or products, or necessary quantities at an acceptable cost;

- Our commercial success depends on our ability to protect our intellectual property and proprietary technology;

- We depend heavily on our executive officers and principal consultants and the loss of their services could materially harm our business; and

- Concentration of ownership of our common stock may prevent new investors in this offering from influencing significant corporate decisions.

Our Corporate Information

We were incorporated under the laws of the State of Delaware on July 5, 2016 under the name resTORbio, Inc. Our executive offices are located at 501 Boylston Street, Suite 6102, Boston, Massachusetts 02116, and our telephone number is (617) 482-2333. Our website address is *www.restorbio.com*. The information contained on, or that can be accessed through, our website is not a part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

In this prospectus, unless otherwise stated or the context otherwise requires, references to “resTORbio,” “the Company,” “we,” “us,” “our” and similar references refer to resTORbio, Inc. resTORbio and other trademarks or service marks of resTORbio appearing in this prospectus are the property of resTORbio. The other trademarks, trade names and service marks appearing in this prospectus are the property of their respective owners. Solely for convenience, the trademarks and trade names in this prospectus are referred to without the ® and ™ symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto.

Implications of Being an Emerging Growth Company

As a company with less than $1.07 billion of revenue during our last fiscal year, we qualify as an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act.

We may remain an emerging growth company for up to five years, or until such earlier time as we have more than $1.07 billion in annual revenue, the market value of our stock held by non-affiliates is more than $700.0 million or we issue more than $1.0 billion of non-convertible debt over a three-year period. For so long as we remain an emerging growth company, we are permitted and intend to rely on exemptions from certain disclosure and other requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include:

- only two years of audited financial statements in addition to any required unaudited interim financial statements with correspondingly reduced "Management's Discussion and Analysis of Financial Condition and Results of Operations" disclosure;
- reduced disclosure about our executive compensation arrangements;
- no non-binding advisory votes on executive compensation or golden parachute arrangements;
- exemption from the auditor attestation requirement in the assessment of our internal control over financial reporting; and
- an exemption from new or revised financial accounting standards until they would apply to private companies and from compliance with any new requirements adopted by the Public Company Accounting Oversight Board requiring mandatory audit firm rotation.

In particular, in this prospectus, we have not included all of the executive compensation-related information that would be required if we were not an emerging growth company. Accordingly, the information contained herein may be different than the information you receive from other public companies in which you hold stock. We are considering whether to "opt out" of the exemption for the delayed adoption of certain accounting standards and thereby be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies. If we do elect to "opt out" of this exemption, such election is irrevocable.

THE OFFERING

Common stock offered by us	5,666,667 shares
Common stock to be outstanding immediately following this offering	27,196,315 shares (28,046,315 shares if the underwriters exercise their option to purchase additional shares of common stock in full)
Option to purchase additional shares	The underwriters have the option to purchase an additional 850,000 shares of common stock. The underwriters may exercise this option at any time within 30 days from the date of this prospectus.
Use of proceeds	We estimate that the net proceeds to us from this offering, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, will be approximately $77.6 million, or approximately $89.4 million if the underwriters exercise their option to purchase additional shares from us in full, assuming an initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus. We intend to use the net proceeds from this offering, together with our existing cash and cash equivalents, to fund the development of RTB101, alone and in combination with everolimus, for RTIs and other indications, and our TORC1 follow-on candidate and other pipeline candidates, and the remainder, if any, for working capital and general corporate purposes. See the “Use of Proceeds” section in this prospectus for a more complete description of the intended use of proceeds from this offering.
Risk factors	You should read the “Risk Factors” section of this prospectus for a discussion of factors to consider carefully before deciding to invest in shares of our common stock.
Nasdaq Global Market symbol	“TORC”

Certain of our existing stockholders, including certain affiliates of our directors, have indicated an interest in purchasing an aggregate of up to $35 million of shares of our common stock in this offering at the initial public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters may determine to sell more, less or no shares in this offering to any of these stockholders, or any of these stockholders may determine to purchase more, less or no shares in this offering.

The number of shares of our common stock to be outstanding after this offering is based on 5,659,089 shares of our common stock outstanding as of January 16, 2018 and 15,870,559 additional shares of our common stock issuable upon the automatic conversion of all outstanding shares of our preferred stock upon the closing of this offering.

The number of shares of our common stock to be outstanding after this offering excludes:

- 306,988 shares of our common stock issuable upon the exercise of stock options outstanding as of January 16, 2018, at a weighted average exercise price of $7.63 per share;

- 1,559,021 additional shares of our common stock available for future issuance under our 2017 stock incentive plan, which will no longer be available for future issuance following this offering; and

- 2,475,290 additional shares of our common stock that will become available for future issuance under our 2018 stock incentive plan and our 2018 employee stock purchase plan, each to be effective upon the effectiveness of the registration statement of which this prospectus forms a part, and from which we intend to grant options to purchase an aggregate of 331,310 shares of common stock to certain of our officers upon the pricing of this offering.

Unless otherwise indicated, all information in this prospectus assumes or gives effect to:

- no exercise of the outstanding options described above;

- no exercise by the underwriters of their option to purchase up to 850,000 additional shares of our common stock;

- the automatic conversion of all outstanding shares of our preferred stock into an aggregate of 15,870,559 shares of our common stock upon the closing of this offering;

- a 1-for-1.2804 reverse split of our common stock effected on January 12, 2018; and

- the amendment and restatement of our certificate of incorporation and the amendment and restatement of our bylaws upon the closing of this offering.

SUMMARY FINANCIAL DATA

The following tables summarize our financial data as of the dates and for the periods indicated. The statements of operations data for the period from July 5, 2016 (inception) through December 31, 2016 and the nine months ended September 30, 2017 and the balance sheet data as of September 30, 2017 have been derived from our audited financial statements included elsewhere in this prospectus. The statement of operations data for the period from July 5, 2016 (inception) through September 30, 2016 have been derived from our unaudited financial statements included elsewhere in this prospectus and have been prepared on the same basis as the audited financial statements. In the opinion of management, the unaudited data reflects all adjustments, consisting only of normal, recurring adjustments, necessary for a fair statement of the financial information in those statements. Our historical results from any prior period are not necessarily indicative of results to be expected in any future period, and our interim period results are not necessarily indicative of results to be expected for a full year or any other interim period. The summary financial data below should be read in conjunction with the sections entitled "Selected Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and related notes included elsewhere in this prospectus.

	July 5, 2016 (inception) through December 31, 2016	July 5, 2016 (inception) through September 30, 2016	Nine Months Ended September 30, 2017
	(In thousands, except share and per share data)		
Statements of Operations Data:			
Operating expenses:			
Research and development	$ —	$ —	$ 10,047
General and administrative	1	1	1,312
Total operating expenses	1	1	11,359
Loss from operations	(1)	(1)	(11,359)
Other income, net	—	—	635
Net loss	$ (1)	$ (1)	$ (10,724)
Net loss per share, basic and diluted(1)	$ (0.00)	$ (0.00)	$ (2.79)
Weighted-average common shares used in computing net loss per share, basic and diluted(1)	1,978,137	1,919,841	3,839,306
Pro forma net loss per share, basic and diluted(1)			$ (1.30)
Weighted-average common shares used in computing pro forma net loss per share, basic and diluted(1)			8,230,457

(1) See Notes 2 and 12 in the notes to our financial statements included elsewhere in this prospectus for an explanation of the calculation of our basic and diluted net loss per share, the weighted-average common shares used in computing basic and diluted net loss per share, basic and diluted pro forma net loss per share and the weighted-average common shares used in computing basic and diluted pro forma net loss per share. The information presented in this table does not give effect to the sale and issuance of our Series A preferred stock in October 2017 and Series B preferred stock in November 2017.

	As of September 30, 2017		
	Actual	Pro Forma(2)	Pro Forma As Adjusted(3)
	(In thousands)		
Balance Sheet Data:			
Cash	$ 3,965	$58,911	$ 136,461
Working capital(1)	684	57,009	134,559
Total assets	4,215	59,161	136,711
Total liabilities	3,495	2,116	2,116
Redeemable convertible preferred stock	9,764	—	—
Total stockholders' (deficit) equity	(9,044)	57,045	134,595

(1) We define working capital as current assets less current liabilities.

(2) Pro forma amounts give effect to (i) the sale and issuance of 7,763,975 shares of our Series A preferred stock in October 2017 for aggregate net proceeds of $15.0 million, (ii) the sale and issuance of 4,792,716 shares of our Series B preferred stock in November 2017 for aggregate net proceeds of $39.9 million and (iii) the automatic conversion of all of our outstanding shares of preferred stock into an aggregate of 15,870,559 shares of common stock upon the closing of this offering.

(3) Pro forma as adjusted amounts reflect pro forma adjustments described in footnote (2) as well as the sale of 5,666,667 shares of our common stock in this offering at the assumed initial public offering price of $15.00 per share, the midpoint of the price range set forth on the cover page of this prospectus, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The pro forma as adjusted information discussed above is illustrative only and will change based on the actual initial public offering price and other terms of this offering determined at pricing. A $1.00 increase (decrease) in the assumed initial public offering price of $15.00 per share, the midpoint of the price range set forth on the cover of this prospectus, would increase (decrease) the pro forma as adjusted amount of each of cash, working capital, total assets and total stockholders' equity by approximately $5.3 million, assuming that the number of shares offered by us, as set forth on the cover of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase (decrease) of 1,000,000 shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted amount of each of cash, working capital, total assets and total stockholders' equity by approximately $14.0 million, assuming the assumed initial public offering price remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the following risks and uncertainties, together with all other information in this prospectus, including our financial statements and related notes and "Management's Discussion and Analysis of Results of Operations and Financial Condition," before investing in our common stock. Any of the risk factors we describe below could adversely affect our business, financial condition or results of operations. The market price of our common stock could decline if one or more of these risks or uncertainties actually occur, causing you to lose all or part of your investment in our common stock. The risks and uncertainties we describe below are not the only ones we face. Additional risks and uncertainties that we currently do not know about or that we currently believe to be immaterial may also impair our business. Certain statements below are forward-looking statements. See "Special Note Regarding Forward-Looking Statements and Industry Data" in this prospectus.

Risks Related to Our Financial Position and Need for Capital

We have incurred significant losses since our inception. We anticipate that we will continue to incur significant losses for the foreseeable future, and we may never achieve or maintain profitability.

We are a clinical-stage biopharmaceutical company with a limited operating history. Investment in biopharmaceutical product development is highly speculative because it entails substantial upfront capital expenditures and significant risk that any potential product candidate will fail to demonstrate adequate effect or an acceptable safety profile, gain regulatory approval and become commercially viable. We have no products approved for commercial sale and have not generated any revenue from product sales to date, and we will continue to incur significant research and development and other expenses related to our ongoing operations. As a result, we are not profitable and have incurred losses in each period since our inception in July 2016. We have devoted substantially all of our financial resources and efforts to research and development, including preclinical studies and our clinical trials. Our financial condition and operating results, including net losses, may fluctuate significantly from quarter to quarter and year to year. Accordingly, you should not rely upon the results of any quarterly or annual periods as indications of future operating performance. Additionally, net losses and negative cash flows have had, and will continue to have, an adverse effect on our stockholders' equity and working capital. For the period from July 5, 2016 (inception) to December 31, 2016, we reported a net loss of $1,000. For the nine months ended September 30, 2017, we reported a net loss of $10.7 million. As of September 30, 2017, we had an accumulated deficit of $10.7 million. We expect to continue to incur significant losses for the foreseeable future, and we expect these losses to increase as we continue our research and development of, and seek regulatory approvals for, RTB101, alone or in combination with everolimus, and other product candidates.

We anticipate that our expenses will increase substantially if and as we:

- continue to develop and conduct clinical trials for our lead product candidate, RTB101, alone and in combination with everolimus;
- initiate and continue research, preclinical and clinical development efforts for any current or future product candidates;
- seek to identify additional product candidates;
- seek regulatory approvals for RTB101, alone or in combination with everolimus, or any other product candidates that successfully complete clinical development, if any;
- establish sales, marketing, distribution, manufacturing, supply chain and other commercial infrastructure in the future to commercialize various products for which we may obtain regulatory approval, if any;

- require the manufacture of larger quantities of RTB101 alone or in fixed dose combination with everolimus for clinical development and, potentially, commercialization;
- maintain, expand and protect our intellectual property portfolio;
- hire and retain additional personnel, such as clinical, quality control, scientific and commercial personnel;
- add operational, financial and management information systems and personnel, including personnel to support our product development and help us comply with our obligations as a public company;
- add equipment and physical infrastructure to support our research and development; and
- acquire or in-license other product candidates and technologies.

Our ability to become and remain profitable depends on our ability to generate revenue. We do not expect to generate significant revenue unless and until we are, or any future collaborator is, able to obtain regulatory approval for, and successfully commercialize, RTB101, alone or in combination with everolimus, or any other product candidates. Successful commercialization will require achievement of key milestones, including demonstrating safety and efficacy in clinical trials, obtaining regulatory, including marketing, approval for these product candidates, manufacturing, marketing and selling those products for which we, or any of our future collaborators, may obtain regulatory approval, satisfying any post-marketing requirements and obtaining reimbursement for our products from private insurance or government payors. Because of the uncertainties and risks associated with these activities, we are unable to accurately and precisely predict the timing and amount of revenues, the extent of any further losses or if or when we might achieve profitability. We and any future collaborators may never succeed in these activities and, even if we do, or any future collaborators do, we may never generate revenues that are large enough for us to achieve profitability. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Additionally, our expenses could increase if we are required by the U.S. Food and Drug Administration, or FDA, or any comparable foreign regulatory authority to perform studies in addition to those currently expected, or if there are any delays in completing our clinical trials or the development of any of our product candidates.

Our failure to become and remain profitable would depress the market price of our common stock and could impair our ability to raise capital, expand our business, diversify our product offerings or continue our operations. If we continue to suffer losses as we have in the past, investors may not receive any return on their investment and may lose their entire investment.

Our company has a limited operating history and no history of commercializing pharmaceutical products, which may make it difficult to evaluate the prospects for our future viability.

We were formed in July 2016 and commenced research and development operations in March 2017. Our operations to date have been limited to organizing, staffing and financing our company, raising capital, in-licensing our technology and conducting research and development activities for our product candidates. We have not yet demonstrated an ability to obtain regulatory approvals, manufacture a commercial-scale product, or arrange for a third party to do so on our behalf, or conduct sales and marketing activities necessary for successful product commercialization. Accordingly, you should consider our prospects in light of the costs, uncertainties, delays and difficulties frequently encountered by companies in clinical development, especially clinical-stage biopharmaceutical companies such as ours. Any predictions you make about our future success or viability may not be as accurate as they could be if we had a longer operating history or a history of successfully developing and commercializing pharmaceutical products.

We may encounter unforeseen expenses, difficulties, complications, delays and other known or unknown factors in achieving our business objectives. We will eventually need to transition from a company with

a development focus to a company capable of supporting commercial activities. We may not be successful in such a transition.

We will need substantial additional funding, and if we are unable to raise capital when needed, we could be forced to delay, reduce or eliminate our product discovery and development programs or commercialization efforts.

Our operations have required substantial amounts of cash since inception. Developing pharmaceutical products, including conducting preclinical studies and clinical trials, is a very time-consuming, expensive and uncertain process that takes years to complete. For the foreseeable future, we expect to continue to rely on additional financing to achieve our business objectives.

From July 5, 2016 (inception) to December 31, 2016, we did not use any cash for our operating activities, and in the nine months ended September 30, 2017, we used $6.0 million in net cash for our operating activities, substantially all of which related to research and development activities. We expect our expenses to increase substantially in connection with our ongoing activities, particularly as we initiate new clinical trials of, initiate new research and preclinical development efforts for and seek regulatory approval for, RTB101, alone or in combination with everolimus, or any product candidates that we develop or acquire, if any. In addition, if we obtain regulatory approval for RTB101, alone or in combination with everolimus, or any other product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution. Some of these expenses may be incurred in advance of regulatory approval, and could be substantial. Furthermore, following the completion of this offering, we expect to incur significant additional costs associated with operating as a public company. Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. If we are unable to raise capital when needed or on attractive terms, we may be forced to delay, reduce or eliminate our research and development programs or any future commercialization efforts.

We intend to use the net proceeds from this offering, together with our existing cash, to fund the development of RTB101, alone and in combination with everolimus, for RTIs and other indications, and of our TORC1 follow-on candidate and other pipeline candidates, and the remainder, if any, for working capital and general corporate purposes. We will be required to expend significant funds in order to advance the development of RTB101 alone and in combination with everolimus, as well as other product candidates we may seek to develop or acquire. In addition, while we may seek one or more collaborators for future development of RTB101 alone and in combination with everolimus for one or more additional indications beyond immunosenescence or in geographies outside of the United States, Europe and key territories, we may not be able to enter into a collaboration for RTB101 or any other product candidates for such indications or in such geographies on suitable terms, on a timely basis or at all. In any event, the net proceeds of this offering and our existing cash will not be sufficient to fund all of the efforts that we plan to undertake or to fund the completion of development of RTB101 alone or in combination with everolimus, including activities related to the development of RTB101, alone and in combination with everolimus, for RTIs and other indications, and the development of our TORC1 follow-on candidate and other pipeline candidates. Accordingly, we will be required to obtain substantial additional funding through public or private equity offerings, debt financings, collaborations and licensing arrangements or other sources.

We cannot be certain that additional funding will be available on acceptable terms, or at all. We have no committed source of additional capital and if we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we may have to significantly delay, scale back or discontinue the development or commercialization of our product candidates or other research and development initiatives. Any of our current or future license agreements may also be terminated if we are unable to meet the payment or other obligations under the agreements. We could be required to seek collaborators for product candidates at an earlier stage than otherwise would be desirable or on terms that are less favorable than might otherwise be available or relinquish or license on unfavorable terms our rights to product candidates in markets where we otherwise would seek to pursue development or commercialization ourselves.

We believe that the net proceeds from this offering, together with our existing cash and cash equivalents, will enable us to fund our operating expenses and capital expenditure requirements through 2020, including the completion of our ongoing Phase 2b clinical trial of RTB101 alone or in combination with everolimus, the completion of a subsequent pivotal Phase 3 clinical program, assuming a successful outcome in our Phase 2b clinical trial of RTB101 alone or in combination with everolimus, and the filing of an NDA with the FDA, assuming a successful outcome in our Phase 3 clinical program. Our estimate may prove to be wrong, and we could use our available capital resources sooner than we currently expect. Further, changing circumstances, some of which may be beyond our control, could cause us to consume capital significantly faster than we currently anticipate, and we may need to seek additional funds sooner than planned. Our future funding requirements, both short- and long-term, will depend on many factors, including:

- the scope, progress, timing, costs and results of clinical trials of, and research and preclinical development efforts for, RTB101, alone or in combination with everolimus, and any future product candidates;
- our ability to enter into, and the terms and timing of, any collaborations, licensing or other arrangements on favorable terms, if at all;
- the number of future product candidates that we pursue and their development requirements;
- the outcome, timing and costs of seeking regulatory approvals;
- if approved, the costs of commercialization activities for RTB101, alone or in combination with everolimus, or any other product candidate that receives regulatory approval to the extent such costs are not the responsibility of any future collaborators, including the costs and timing of establishing product sales, marketing, distribution and manufacturing capabilities;
- subject to receipt of regulatory approval, revenue, if any, received from commercial sales of RTB101, alone or in combination with everolimus, or any future product candidates;
- the extent to which we in-license or acquire rights to other products, product candidates or technologies;
- our headcount growth and associated costs as we expand our research and development and establish a commercial infrastructure;
- the amount and timing of any payments we may be required to make, or that we may receive, in connection with the licensing, filing, prosecution, defense and enforcement of any patents or other intellectual property rights, including milestone and royalty payments and patent prosecution fees that we are obligated to pay pursuant to our license agreement;
- the costs of preparing, filing and prosecuting patent applications, maintaining and protecting our intellectual property rights including enforcing and defending intellectual property related claims; and
- the costs of operating as a public company.

Raising additional capital may cause dilution to our stockholders, including purchasers of common stock in this offering, restrict our operations or require us to relinquish rights to our technologies or product candidates.

We expect our expenses to increase in connection with our planned operations. Unless and until we can generate a substantial amount of revenue from our product candidates, we expect to finance our future cash needs through public or private equity offerings, debt financings, collaborations, licensing arrangements or other sources, or any combination of the foregoing. In addition, we may seek additional capital due to favorable market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans.

To the extent that we raise additional capital through the sale of common stock, convertible securities or other equity securities, your ownership interest may be diluted, and the terms of these securities could include liquidation or other preferences and anti-dilution protections that could adversely affect your rights as a common stockholder. In addition, debt financing, if available, may result in fixed payment obligations and may involve agreements that include restrictive covenants that limit our ability to take specific actions, such as incurring additional debt, making capital expenditures, creating liens, redeeming stock or declaring dividends, that could adversely impact our ability to conduct our business. In addition, securing financing could require a substantial amount of time and attention from our management and may divert a disproportionate amount of their attention away from day-to-day activities, which may adversely affect our management's ability to oversee the development of our product candidates.

If we raise additional funds through collaborations or marketing, distribution or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

Our ability to use net operating losses and research and development credits to offset future taxable income may be subject to certain limitations.

As of September 30, 2017, we had federal and state net operating loss carryforwards of $7.5 million and $7.4 million, respectively, which begin to expire in various amounts in 2036. As of September 30, 2017, we also had federal research and development tax credit carryforwards of $0.1 million, which begin to expire in 2037. These net operating loss and tax credit carryforwards could expire unused and be unavailable to offset future income tax liabilities. In addition, in general, under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, or the Code, a corporation that undergoes an "ownership change" is subject to limitations on its ability to utilize its pre-change net operating losses or tax credits, or NOLs or credits, to offset future taxable income or taxes. For these purposes, an ownership change generally occurs where the aggregate stock ownership of one or more stockholders or groups of stockholders who owns at least 5% of a corporation's stock increases its ownership by more than 50 percentage points over its lowest ownership percentage within a specified testing period. Our existing NOLs or credits may be subject to limitations arising from previous ownership changes, and if we undergo an ownership change in connection with or after this offering, our ability to utilize NOLs or credits could be further limited by Sections 382 and 383 of the Code. In addition, future changes in our stock ownership, many of which are outside of our control, could result in an ownership change under Sections 382 and 383 of the Code. Our NOLs or credits may also be impaired under state law. Accordingly, we may not be able to utilize a material portion of our NOLs or credits. If we determine that an ownership change has occurred and our ability to use our historical NOLs or credits is materially limited, it would harm our future operating results by effectively increasing our future tax obligations.

Furthermore, our ability to utilize our NOLs or credits is conditioned upon our attaining profitability and generating U. S. federal and state taxable income. As described above under "Risk Factors—Risks Related to our Financial Position and Need for Additional Capital," we have incurred significant net losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future; and therefore, we do not know whether or when we will generate the U.S. federal or state taxable income necessary to utilize our NOL or credit carryforwards that are subject to limitation by Sections 382 and 383 of the Code.

Comprehensive tax reform legislation could adversely affect our business and financial condition.

The U.S. government has recently enacted comprehensive tax legislation that includes significant changes to the taxation of business entities. These changes include, among others, a permanent reduction to the corporate income tax rate. Notwithstanding the reduction in the corporate income tax rate, the overall impact of this tax reform is uncertain, and our business and financial condition could be adversely affected. This prospectus does not discuss any such tax legislation or the manner in which it might affect purchasers of our common stock. We urge our stockholders to consult with their legal and tax advisors with respect to any such legislation and the potential tax consequences of investing in our common stock.

Risks Related to the Discovery, Development and Commercialization of Our Product Candidates

Our business depends virtually entirely upon the success of RTB101 alone or in combination with everolimus. If we are unable to obtain regulatory approval for or successfully commercialize RTB101, alone or in combination with everolimus, our business may be materially harmed.

We currently have no products approved for sale and are investing the majority of our efforts and financial resources in the development of our lead product candidate, RTB101, either alone or in combination with everolimus. Successful continued development and ultimate regulatory approval of RTB101, alone or in combination with everolimus, for the treatment of aging-related diseases, including our lead indication, reducing the incidence of respiratory tract infections, or RTIs, is critical to the future success of our business. We will need to raise sufficient funds for, and successfully enroll and complete, our clinical development program for RTB101, alone or in combination with everolimus, to treat RTIs and possibly other aging-related diseases. The future regulatory and commercial success of this product candidate is subject to a number of risks, including the following:

- we may not have sufficient financial and other resources to initiate or complete the necessary clinical trials for RTB101, alone or in combination with everolimus;
- we may not be able to obtain adequate evidence of clinical efficacy and safety for RTB101, alone or in combination with everolimus, or to obtain regulatory approval of RTB101, alone or in combination with everolimus, for reducing the incidence of RTIs or other indications;
- even if RTB101 monotherapy succeeds in its clinical development and is approved for one or more targeted indications, there can be no assurance that the RTB101+everolimus combination therapy would be developed successfully and approved, and vice versa;
- we may not be able to maintain an acceptable safety profile for RTB101 alone or in combination with everolimus, even if approved;
- we do not know the degree to which RTB101 alone or in combination with everolimus will have market uptake as a therapy by patients, the medical community or third-party payors, among others, if approved;
- in our clinical programs, we may experience variability in the response of subjects to treatment, the need to adjust clinical trial procedures and the need for additional clinical trial sites, which could delay our clinical trial progress;
- the results of our clinical trials may not meet the level of statistical significance required by the FDA, the European Medicines Agency, or EMA, or comparable foreign regulatory bodies for regulatory approval for reducing the incidence of RTIs or for other indications;
- we may have difficulty enrolling subjects in trials if, for instance, a current or future effective standard of care limits the desire of patients, physicians, or regulatory agencies to participate in or support clinical trials, or if patients choose to participate in the trials of other sponsors' product candidates;
- patients in our clinical trials may die or suffer other adverse effects for reasons that may or may not be related to RTB101, which could delay or prevent further clinical development;
- the requirements implemented by regulatory agencies may change at any time;

- the FDA, EMA or foreign regulatory agencies may require efficacy endpoints for a future clinical trial for reducing the incidence of RTIs that differ from the endpoints of our current or future trials, which may require us to conduct additional clinical trials;
- the mechanism of action of RTB101, alone or in combination with everolimus, is complex and we cannot guarantee the degree to which it will translate into a medical benefit in any indications;
- competitor products including generic products may be developed to reduce the incidence of RTIs that may have similar or better safety and efficacy or lower costs than RTB101 alone or in combination with everolimus;
- we may not be able to establish sales, marketing, distribution and other commercial infrastructure in the future to commercialize various products for which we may obtain regulatory approval;
- we or our contract manufacturers may not be able to manufacture RTB101, everolimus, the fixed dose combination of RTB101 with everolimus or other future product candidates at the appropriate quality or sufficient quantities to support further clinical development and/or commercialization;
- our investigational drug products or manufacturing processes may be considered by regulatory authorities, such as the FDA or EMA, to be unsuitable for continued development and/or commercialization;
- we may observe unexpected toxicities in preclinical safety or efficacy animal studies that delay, limit or prevent further clinical development;
- our intellectual property may not be patentable, valid or enforceable; and
- we may not be able to obtain, maintain, defend, protect or enforce our patents, our trade secrets, regulatory exclusivities and other intellectual property rights, both in the United States and internationally, including those that we have licensed under our license agreement with Novartis.

Many of these risks are beyond our control, including the risks related to clinical development, the regulatory submission process, potential threats to our intellectual property rights and the manufacturing, marketing and sales efforts of any future collaborator. If we are unable to develop, receive regulatory approval for, or successfully commercialize RTB101 alone or in combination with everolimus, or if we experience delays as a result of any of these risks or otherwise, our business could be materially harmed.

In addition, of the large number of drugs in development in the pharmaceutical industry, only a small percentage result in the submission of an NDA to the FDA and even fewer are approved for commercialization. Furthermore, even if we do receive regulatory approval for RTB101, alone or in combination with everolimus, any such approval may be subject to limitations on the indicated uses or patient populations for which we may market the product. Accordingly, even if we are able to obtain the requisite financing to continue to fund our development programs, we cannot assure you that we will successfully develop or commercialize RTB101, alone or in combination with everolimus, for RTIs or any other indications. If we or any of our future collaborators are unable to develop, or obtain regulatory approval for, or, if approved, successfully commercialize RTB101, alone or in combination with everolimus, for RTIs or any other indications, we may not be able to generate sufficient revenue to continue our business.

We have no experience as a company in obtaining regulatory approval for a drug.

As a company, we have never obtained regulatory approval for, or commercialized, a drug. It is possible that the FDA may refuse to accept any or all of our planned NDAs for substantive review or may conclude after

review of our data that our application is insufficient to obtain regulatory approval for any current or future product candidates. If the FDA does not approve any of our planned NDAs, it may require that we conduct additional costly clinical, nonclinical or manufacturing validation studies before it will reconsider our applications. Depending on the extent of these or any other FDA-required studies, approval of any NDA or other application that we submit may be significantly delayed, possibly for several years, or may require us to expend more resources than we have available. Any failure or delay in obtaining regulatory approvals would prevent us from commercializing RTB101 alone or in combination with everolimus or any other product candidate, generating revenues and achieving and sustaining profitability. It is also possible that additional studies, if performed and completed, may not be considered sufficient by the FDA to approve any NDA or other application that we submit. If any of these outcomes occur, we may be forced to abandon the development of our product candidates, which would materially adversely affect our business and could potentially cause us to cease operations. We face similar risks for our applications in foreign jurisdictions.

We depend on the successful initiation and completion of clinical trials for RTB101 alone or in combination with everolimus. The positive clinical results, if any, obtained in prior or ongoing clinical trials may not be predictive of future results or repeated in later-stage clinical trials.

Before obtaining regulatory approval for the sale of RTB101, alone or in combination with everolimus, or any other potential product candidate, we must conduct additional clinical trials to demonstrate safety and efficacy in humans. The regulatory requirements for demonstrating efficacy and safety for obtaining approval for reducing the incidence of RTIs or other indications with RTB101 alone or in combination with everolimus may differ. We have not completed the clinical trials necessary to support an application for approval to market RTB101 alone or in combination with everolimus. Successful completion of such clinical trials is a prerequisite to submitting an NDA to the FDA and, consequently, the ultimate approval and commercial marketing of RTB101 alone or in combination with everolimus or any other potential product candidate. A failure of one or more clinical trials can occur at any stage of testing. We need to complete our ongoing Phase 2b clinical trial of RTB101 alone and in combination with everolimus, and subsequently the requisite Phase 3 clinical trials prior to a submission for regulatory approval. We have conducted limited safety studies in humans to date and have only recently commenced our Phase 2b clinical program to assess the safety, tolerability and efficacy of RTB101, alone or in combination with everolimus, in elderly patients. Additional toxicity and metabolism studies may be required by the FDA or other regulatory agencies. A number of companies in the pharmaceutical and biotechnology industries, including those with greater resources and experience than us, have suffered significant setbacks in late stage clinical development, even after seeing promising results in earlier clinical trials.

We may experience a number of unforeseen events during, or as a result of, clinical trials for RTB101, alone or in combination with everolimus, or any other potential product candidate that could adversely affect the costs, timing, or successful completion of our clinical trials, including:

- regulators or other comparable foreign regulatory authorities may disagree as to the design or implementation of our clinical trials;
- regulators, and/or institutional review boards or other reviewing bodies may not authorize us or our investigators to commence a clinical trial, or to conduct or continue a clinical trial at a prospective or specific trial site;
- we may not reach agreement on acceptable terms with prospective contract research organizations, or CROs, and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- clinical trials of RTB101, alone or in combination with everolimus, or any other potential product candidate may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical trials or abandon product development programs;

- the number of subjects or patients required for clinical trials of RTB101, alone or in combination with everolimus, or any other potential product candidate may be larger than we anticipate, enrollment in these clinical trials may be insufficient or slower than we anticipate, and the number of clinical trials being conducted at any given time may be high and result in fewer available patients for any given clinical trial, or patients may drop out of these clinical trials at a higher rate than we anticipate;

- our third-party contractors, including those manufacturing our product candidates or conducting clinical trials on our behalf, may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all;

- we might have to suspend or terminate clinical trials of RTB101, alone or in combination with everolimus, or any other potential product candidate for various reasons, including a finding that the subjects are being exposed to unacceptable health risks;

- we may have to amend clinical trial protocol submitted to regulatory authorities or conduct additional studies to reflect changes in regulatory requirements or guidance, which we may be required to resubmit to an Institutional Review Board, or IRB, and regulatory authorities for re-examination;

- regulators, institutional review boards or data monitoring committees may require or recommend that we or our investigators suspend or terminate clinical research for various reasons, including safety signals or noncompliance with regulatory requirements;

- the cost of clinical trials of RTB101, alone or in combination with everolimus, or any other potential product candidate may be greater than we anticipate;

- regulators, institutional review boards or other reviewing bodies may fail to approve or subsequently find fault with the manufacturing processes or facilities of third-party manufacturers with which we enter into agreement for clinical and commercial supplies, or the supply or quality of RTB101, everolimus or the fixed dose combination of RTB101 and everolimus or any other potential product candidate or other materials necessary to conduct clinical trials of our product candidates may be insufficient, inadequate or not available at an acceptable cost, or we may experience interruptions in supply;

- the potential for approval policies or regulations of the FDA or the applicable foreign regulatory agencies to significantly change in a manner rendering our clinical data insufficient for approval; and

- RTB101, alone or in combination with everolimus, or any other potential product candidate may have undesirable side effects or other unexpected characteristics.

Regulators, institutional review boards of the institutions in which clinical trials are being conducted or data monitoring committees may suspend or terminate a clinical trial due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA or other regulatory authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a drug, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial.

Negative or inconclusive results from our ongoing clinical trial of RTB101 alone and in combination with everolimus, or any other clinical trial or preclinical studies in animals that we conduct, could mandate

repeated or additional clinical trials. We do not know whether any clinical trials that we may conduct will demonstrate adequate efficacy and safety to result in regulatory approval to market RTB101, alone or in combination with everolimus, or any other potential product candidate. If later stage clinical trials do not produce favorable results, our ability to obtain regulatory approval for RTB101, alone or in combination with everolimus, or any other potential product candidate may be adversely impacted.

Clinical trials must be conducted in accordance with the laws and regulations of the FDA, EMA and regulations and other applicable regulatory authorities' legal requirements, regulations or guidelines, and are subject to oversight by these governmental agencies and IRBs at the medical institutions where the clinical trials are conducted. In addition, clinical trials must be conducted with supplies of our product candidates produced under current good manufacturing practice, or cGMP, requirements and other regulations. Furthermore, we rely on CROs, and clinical trial sites to ensure the proper and timely conduct of our clinical trials and while we have agreements governing their committed activities, we have limited influence over their actual performance. We depend on our collaborators and on medical institutions and CROs to conduct our clinical trials in compliance with good clinical practice, or GCP, requirements. To the extent our collaborators or the CROs fail to enroll participants for our clinical trials, fail to conduct the study to GCP standards or are delayed for a significant time in the execution of trials, including achieving full enrollment, we may be affected by increased costs, program delays or both. In addition, clinical trials that are conducted in countries outside the United States and EU may subject us to further delays and expenses as a result of increased shipment costs, additional regulatory requirements and the engagement of non-U.S. and non-EU CROs, as well as expose us to risks associated with clinical investigators who are unknown to the FDA or the EMA, and different standards of diagnosis, screening and medical care.

We may be subject to additional risks because we are administering RTB101 in combination with other mTOR inhibitors, such as everolimus.

We are evaluating RTB101 in combination with other mTOR inhibitors. For example, in our ongoing Phase 2b clinical trial, we are assessing the safety, tolerability and efficacy of RTB101 alone and in combination with everolimus. The use of RTB101 in combination with other compounds may subject us to risks that we would not face if RTB101 were being administered as a monotherapy. For example, the other mTOR inhibitors, including everolimus, may have safety issues that are improperly attributed to RTB101 or the administration of RTB101 with such other therapies may result in safety issues that such other therapies or RTB101 would not have when used alone. In addition, other mTOR inhibitors with which we may administer RTB101, such as everolimus, could be removed from the market and thus be unavailable for testing or commercial use concomitantly with RTB101. The outcome and cost of developing a product candidate to be used with other compounds is difficult to predict and dependent on a number of factors that are outside our reasonable control. If we experience efficacy or safety issues in our clinical trials in which RTB101 is being administered with everolimus, we may not receive regulatory approval for RTB101, which could prevent us from ever generating revenue or achieving profitability.

Competitive products may reduce or eliminate the commercial opportunity for RTB101, alone or in combination with everolimus. If our competitors develop technologies or product candidates more rapidly than we do, or their technologies are more effective or safer than ours, our ability to develop and successfully commercialize RTB101 alone or in combination with everolimus may be adversely affected.

The clinical and commercial landscape for aging-related diseases is highly competitive and subject to rapid and significant technological change. New data from competitors' product candidates continue to emerge. It is possible that these data may alter the current standard of care, completely precluding us from further developing RTB101, alone or in combination with everolimus, for RTIs or other aging-related diseases. Further, it is possible that we may initiate a clinical trial or trials for RTB101, alone or in combination with everolimus, or any other potential product candidate only to find that data from competing products make it impossible for us to complete enrollment in clinical trials, resulting in our inability to submit applications for regulatory approval

with regulatory agencies. Even if RTB101 were approved, alone or in combination with everolimus, it may have limited sales due to competition in the specific indications approved.

Competitive therapeutic treatments for aging-related diseases, including RTIs, include those that are currently in development and any new treatments that enter the market. We believe that a significant number of product candidates are currently under development, and may become commercially available in the future, for the treatment of conditions for which we may try to develop product candidates. Our potential competitors include large pharmaceutical and biotechnology companies, specialty pharmaceutical and generic drug companies, academic institutions, government agencies and research institutions. We consider Navitor Pharma to be our most direct competitor in developing novel therapeutics targeting the TORC1 mechanism of action. Additionally, we are also aware of other companies, including Calico and Unity, which are seeking to develop treatments to prevent or treat aging-related diseases through biological pathways that may be unrelated to mTOR inhibition. Similarly, there are several other companies, such as PrEP BioPharm, Virion Health and Innavac, which are pursuing broad-spectrum prophylactic and therapeutic treatments in RTIs.

Many of our competitors have greater financial, technical, manufacturing, marketing, sales and supply resources, and human resources or experience than us and significantly greater experience in the discovery and development of product candidates, obtaining FDA and other regulatory approvals of products and the commercialization of those products. Accordingly, our competitors may be more successful than we may be in obtaining regulatory approval for therapies and achieving widespread market acceptance. Our competitors' products may be more effective, or more effectively marketed and sold, than any product candidate we may commercialize and may render our therapies obsolete or non-competitive before we can recover development and commercialization expenses. If RTB101, alone or in combination with everolimus, is approved for the indications we are currently pursuing, it could compete with a range of therapeutic treatments that are in development. In addition, our competitors may succeed in developing, acquiring or licensing technologies and drug products that are more effective or less costly than RTB101 alone or in combination with everolimus or any other product candidates that we are currently developing or that we may develop, which could render our product candidates obsolete and noncompetitive.

If we obtain approval for RTB101, alone or in combination with everolimus, or any other future product candidate, we may face competition based on many different factors, including the efficacy, safety and tolerability of our products, the ease with which our products can be administered, the timing and scope of regulatory approvals for these products, the availability and cost of manufacturing, marketing and sales capabilities, price, reimbursement coverage and patent position. Existing and future competing products could present superior treatment alternatives, including being more effective, safer, less expensive or marketed and sold more effectively than any products we may develop. Competitive products may make any products we develop obsolete or noncompetitive before we recover the expense of developing and commercializing our product candidates. Such competitors could also recruit our employees, which could negatively impact our level of expertise and our ability to execute our business plan. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a small number of competitors.

We also compete with other clinical stage companies and institutions for clinical trial participants, which could reduce our ability to recruit participants for our clinical trials. Delay in recruiting clinical trial participants could adversely affect our ability to bring a product to market prior to our competitors. Further, research and discoveries by others may result in breakthroughs that render our product candidates obsolete even before they begin to generate any revenue.

In addition, our competitors may obtain patent protection, regulatory exclusivities, or FDA approval and commercialize products more rapidly than we do, which may impact future approvals or sales of any of our product candidates that receive regulatory approval. If the FDA approves the commercial sale of RTB101, alone or in combination with everolimus, or any other product candidate, we will also be competing with respect to

marketing capabilities and manufacturing efficiency. We expect competition among products will be based on product efficacy and safety, the timing and scope of regulatory approvals, availability of supply, marketing and sales capabilities, product price, reimbursement coverage by government and private third-party payers, regulatory exclusivities and patent position. Our profitability and financial position will suffer if our product candidates receive regulatory approval, but cannot compete effectively in the marketplace.

Many of our competitors have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than we do. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller and other early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These third parties compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites, as well as in acquiring technologies complementary to, or necessary for, our programs.

Furthermore, regulatory authorities' assessment of the data and results required to demonstrate safety and efficacy can change over time and can be affected by many factors, such as the emergence of new information, including on other products, changing policies and agency funding, staffing and leadership. We cannot be sure whether future changes to the regulatory environment will be favorable or unfavorable to our business prospects. For example, average review times at the FDA for regulatory approval applications can be affected by a variety of factors, including budget and funding levels and statutory, regulatory and policy changes.

The regulatory approval processes of the FDA, EMA and comparable foreign authorities are lengthy, time consuming and inherently unpredictable. If clinical trials of RTB101, alone or in combination with everolimus, fail to satisfactorily demonstrate safety and efficacy to the FDA or other regulators, or do not otherwise produce favorable results, we, or any future collaborators, may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of RTB101 alone or in combination with everolimus.

We, and any future collaborators, are not permitted to commercialize, market, promote or sell any product candidate in the United States without obtaining regulatory approval from the FDA. Foreign regulatory authorities, such as the EMA, impose similar requirements. The time required to obtain approval by the FDA, EMA and comparable foreign authorities is unpredictable, but typically takes many years following the commencement of clinical trials and depends upon numerous factors, including substantial discretion of the regulatory authorities. In addition, approval policies, regulations, or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions. To date, we have not submitted an NDA to the FDA or similar drug approval submissions to comparable foreign regulatory authorities for RTB101, alone or in combination with everolimus, or any other product candidate. We, and any future collaborators, must complete additional preclinical or nonclinical studies and clinical trials to demonstrate the safety and efficacy of our product candidates in humans before we will be able to obtain these approvals.

Clinical testing is expensive, difficult to design and implement, can take many years to complete and is inherently uncertain as to outcome. We cannot guarantee that any clinical trials will be conducted as planned or completed on schedule, if at all. The clinical development of RTB101 alone or in combination with everolimus or other drugs is susceptible to the risk of failure inherent at any stage of development, including failure to demonstrate efficacy in a clinical trial or across a broad population of patients, the occurrence of adverse events that are severe or medically or commercially unacceptable, failure to comply with protocols or applicable regulatory requirements, and determination by the FDA or any comparable foreign regulatory authority that a product candidate may not continue development or is not approvable. It is possible that even if RTB101, alone or in combination with everolimus, or any other product candidate has a beneficial effect, that effect will not be detected during clinical evaluation as a result of one or more of a variety of factors, including the seasonal and

geographical RTI rates and size, duration, design, measurements, conduct or analysis of our clinical trials. Conversely, as a result of the same factors, our clinical trials may indicate an apparent positive effect of RTB101, alone or in combination with everolimus, or any other product candidate that is greater than the actual positive effect, if any. Similarly, in our clinical trials we may fail to detect toxicity of or intolerability caused by RTB101, everolimus or any other product candidate, or mistakenly believe that our product candidates are toxic or not well tolerated when that is not in fact the case.

Any inability to successfully complete preclinical and clinical development could result in additional costs to us, or any future collaborators. Moreover, if we, or any future collaborators, are required to conduct additional clinical trials or other testing of RTB101, alone or in combination with everolimus, or any other product candidate beyond the trials and testing that we or they contemplate, if we or they are unable to successfully complete clinical trials of our product candidates or other testing or the results of these trials or tests are unfavorable, uncertain or are only modestly favorable, or there are unacceptable safety concerns associated with our product candidates, we, or any future collaborators may:

- incur additional unplanned costs;
- be delayed in obtaining regulatory approval for our product candidates;
- not obtain regulatory approval at all;
- obtain approval for indications or patient populations that are not as broad as intended or desired;
- obtain approval with labeling that includes significant use or distribution restrictions or significant safety warnings, including boxed warnings;
- be subject to additional post-marketing testing or other requirements; or
- be required to remove the product from the market after obtaining regulatory approval.

Our failure to successfully initiate and complete clinical trials of RTB101, alone or in combination with everolimus, or any other product candidate and to demonstrate the efficacy and safety necessary to obtain regulatory approval to market RTB101, alone or in combination with everolimus, or any other product candidate would significantly harm our business. Our product candidate development costs will also increase if we experience delays in testing or regulatory approvals and we may be required to obtain additional funds to complete clinical trials. We cannot assure you that our clinical trials will begin as planned or be completed on schedule, if at all, or that we will not need to restructure our trials after they have begun. Significant clinical trial delays also could shorten any periods during which we may have the exclusive right to commercialize our product candidates or allow our competitors to bring products to market before we do and impair our ability to successfully commercialize our product candidates, which may harm our business and results of operations. In addition, many of the factors that cause, or lead to, delays of clinical trials may ultimately lead to the denial of regulatory approval of RTB101 alone or in combination with everolimus or any other product candidate.

Our product candidates may cause undesirable side effects or have other properties that could delay or prevent their regulatory approval, limit the commercial profile of an approved label, or result in significant negative consequences following regulatory approval, if obtained.

Undesirable side effects caused by RTB101, alone or in combination with everolimus, or any other product candidate could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or comparable foreign regulatory authorities. Results of our clinical trials could reveal a high and unacceptable severity and prevalence of side effects or unexpected characteristics. In clinical trials of RTB101, alone or in combination with

everolimus, to date, there were no observed study drug-related serious adverse events in the Phase 2a clinical trial except in the placebo arm. The majority of observed study-drug related adverse events were mild or moderate in severity, transient and resolved without stopping the study drug. However, there can be no guarantee that we would observe a similar tolerability profile of RTB101, alone or in combination with everolimus, in our ongoing Phase 2b clinical trial or in future clinical trials. Many compounds that initially showed promise in clinical or earlier stage testing are later found to cause undesirable or unexpected side effects that prevented further development of the compound.

If unacceptable side effects arise in the development of our product candidates, we, the FDA or comparable foreign regulatory authorities, the IRBs, or independent ethics committees at the institutions in which our trials are conducted, or the Data Safety Monitoring Board, or DSMB, could suspend or terminate our clinical trials or the FDA or comparable foreign regulatory authorities could order us to cease clinical trials or deny approval of our product candidates for any or all targeted indications. Treatment-emergent side effects that are deemed to be treatment-related could also affect subject recruitment or the ability of enrolled subjects to complete the trial or result in potential product liability claims. In addition, these side effects may not be appropriately recognized or managed by the treating medical staff. We expect to have to train medical personnel using our product candidates to understand the side effect profiles for our clinical trials and upon any commercialization of any of our product candidates. Inadequate training in recognizing or managing the potential side effects of our product candidates could result in patient injury or death. Any of these occurrences may harm our business, financial condition and prospects significantly.

Moreover, clinical trials of our product candidates are conducted in carefully defined sets of patients who have agreed to enter into clinical trials. Consequently, it is possible that our clinical trials, or those of any future collaborator, may indicate an apparent positive effect of a product candidate that is greater than the actual positive effect, if any, or alternatively fail to identify undesirable side effects. If, following approval of a product candidate, we, or others, discover that the product is less effective than previously believed or causes undesirable side effects that were not previously identified, any of the following adverse consequences could occur:

- regulatory authorities may withdraw their approval of the product, seize the product, or seek an injunction against its manufacture or distribution;
- we, or any future collaborators, may need to recall the product, or be required to change the way the product is administered or conduct additional clinical trials, develop a surveillance program;
- additional restrictions may be imposed on the marketing of, or the manufacturing processes for, the particular product;
- regulatory authorities may require one or more post-market studies;
- we may be subject to fines, injunctions or the imposition of civil or criminal penalties;
- regulatory authorities may require the addition of labeling statements, such as a “black box” warning or a contraindication, or issue safety alerts, Dear Healthcare Provider letters, press releases or other communications containing warnings or other safety information about the product;
- we, or any future collaborators, may be required to create a Medication Guide outlining the risks of the previously unidentified side effects for distribution to patients;
- we, or any future collaborators, could be sued and held liable for harm caused to patients;
- the product may become less competitive; and
- our reputation may suffer.

Any of these events could harm our business and operations, and could negatively impact our stock price.

If we fail to develop and commercialize RTB101, alone or in combination with everolimus, for additional indications or fail to discover, develop and commercialize other product candidates, we may be unable to grow our business and our ability to achieve our strategic objectives would be impaired.

Although the development and commercialization of RTB101 alone or in combination with everolimus for RTIs is our primary focus, as part of our longer-term growth strategy, we may evaluate RTB101, alone or in combination with everolimus, in other indications and develop other product candidates. We intend to evaluate internal opportunities from RTB101, alone or in combination with everolimus, or other product candidates from our TORC1 program, and also may choose to in-license or acquire other product candidates as well as commercial products to treat patients suffering from other disorders with significant unmet medical needs and limited treatment options. These other product candidates will require additional, time-consuming development efforts prior to commercial sale, including preclinical studies, clinical trials and approval by the FDA and/or applicable foreign regulatory authorities. All product candidates are prone to the risks of failure that are inherent in pharmaceutical product development, including the possibility that the product candidate will not be shown to be sufficiently safe and effective for approval by regulatory authorities. In addition, we cannot assure you that any such products that are approved will be manufactured or produced economically, successfully commercialized or widely accepted in the marketplace or be more effective than other commercially available alternatives.

Research programs to identify product candidates require substantial technical, financial and human resources, whether or not any product candidates are ultimately identified. Our research programs may initially show promise in identifying potential product candidates, yet fail to yield product candidates for clinical development for many reasons, including the following:

- the research methodology used may not be successful in identifying potential product candidates;
- competitors may develop alternatives that render our product candidates obsolete;
- product candidates that we develop may nevertheless be covered by third parties' patents or other exclusive rights;
- a product candidate may, on further study, be shown to have harmful side effects or other characteristics that indicate it is unlikely to be effective or otherwise does not meet applicable regulatory criteria;
- a product candidate may not be capable of being produced in commercial quantities at an acceptable cost, or at all; and
- a product candidate may not be accepted as safe and effective by patients, the medical community or third-party payors.

If we are unsuccessful in identifying and developing additional product candidates, our potential for growth and achieving our strategic objectives may be impaired.

Our preclinical programs may not produce new product candidates that are suitable for clinical trials or that can be successfully commercialized or generate revenue through collaborations.

We must successfully complete preclinical testing for our preclinical programs, including our TORC1 follow-on program, which may include demonstrating activity and comprehensive studies to show the lack of

toxicity and other adverse effects in established animal models, before commencing clinical trials for any product candidate. Many pharmaceutical products do not successfully complete preclinical testing and, even if preclinical testing is successfully completed, may fail in clinical trials. In addition, there can be no assurance that positive results from preclinical studies will be predictive of results obtained from subsequent preclinical studies or clinical trials. Many pharmaceutical candidates are not suitable for manufacture on the scale or of the quality required for clinical trials or commercialization. Some pharmaceutical candidates that initially seem suitable may later be found to be insufficiently stable or may generate toxic impurities over time. We also cannot be certain that any product candidates that do advance into clinical trials will successfully demonstrate safety and efficacy in clinical trials. Even if we achieve positive results in early preclinical studies or clinical trials, they may not be predictive of the results in later trials.

We may expend our resources to pursue a particular product candidate or indication and forgo the opportunity to capitalize on product candidates or indications that may ultimately be more profitable or for which there is a greater likelihood of success.

Because we have limited financial and managerial resources, we intend to focus on developing product candidates for specific indications that we identify as most likely to succeed, in terms of both their potential for regulatory approval and commercialization. As a result, we may forego or delay pursuit of opportunities with other product candidates or for other indications that may prove to have greater commercial potential.

Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on current and future research and development programs and product candidates for specific indications may not yield any commercially viable product candidates. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to the product candidate.

If the FDA or comparable foreign regulatory authorities approve generic versions of RTB101, alone or in combination with everolimus, or any other product candidate of ours that receives regulatory approval, or such authorities do not grant our products appropriate periods of non-patent exclusivity before approving generic versions of such products, the sales of such products could be adversely affected.

Once an NDA is approved, the product covered thereby becomes a “listed drug” in the FDA’s publication, “Approved Drug Products with Therapeutic Equivalence Evaluations,” or the Orange Book. Manufacturers may seek approval of generic versions of reference listed drugs through submission of abbreviated new drug applications, or ANDAs, in the United States. In support of an ANDA, a generic manufacturer generally must show that its product has the same active ingredient(s), dosage form, strength, route of administration, conditions of use and labeling as the reference listed drug and that the generic version is bioequivalent to the reference listed drug, meaning, in part, that it is absorbed in the body at the same rate and to the same extent. Generic products may be significantly less costly to bring to market than the reference listed drug and companies that produce generic products are generally able to offer them at lower prices. Moreover, many states allow or require substitution of therapeutically equivalent generic drugs at the pharmacy level even if the branded drug is prescribed. Thus, following the introduction of a generic drug, a significant percentage of the sales of any branded product or reference listed drug may be lost to the generic product.

The FDA may not approve an ANDA for a generic product until any applicable period of non-patent exclusivity for the reference listed drug has expired. The Federal Food, Drug, and Cosmetic Act, or FDCA, provides a period of five years of non-patent exclusivity for a new drug containing a new chemical entity, or NCE. Specifically, in cases where such exclusivity has been granted, an ANDA may not be filed with the FDA until the expiration of five years unless the submission is accompanied by a Paragraph IV certification that a patent covering the listed drug is invalid, unenforceable or will not be infringed by the generic product, in which

case the applicant may submit its application four years following approval of the listed drug. It is unclear whether the FDA will treat the active ingredients in our product candidates as NCEs and, therefore, afford them five years of NCE data exclusivity if they are approved. If any product we develop does not receive five years of NCE exclusivity, the FDA may approve generic versions of such product three years after its date of approval, subject to the requirement that the ANDA applicant certifies to any patents listed for our products in the Orange Book. Three year exclusivity is given to a drug if it contains an active moiety that has previously been approved, and the NDA includes reports of one or more new clinical investigations, other than bioavailability or bioequivalence studies, that were conducted by or for the applicant and are essential to the approval of the NDA. If approved, manufacturers may seek to launch these generic products following the expiration of the applicable marketing exclusivity period, even if we still have patent protection for our product.

Competition that our products, if approved, may face from generic versions of our products could negatively impact our future revenue, profitability and cash flows and substantially limit our ability to obtain a return on our investments in those product candidates.

If we encounter difficulties enrolling patients in our future clinical trials, our clinical development activities could be delayed or otherwise adversely affected.

We may experience difficulties in patient enrollment in our clinical trials for a variety of reasons. The timely completion of clinical trials in accordance with their protocols depends, among other things, on our ability to enroll a sufficient number of patients who remain in the study until its conclusion.

Patient enrollment is affected by many factors, including:

- the patient eligibility criteria defined in the protocol;
- the size of the patient population required for analysis of the trial's primary endpoints;
- the proximity of patients to study sites;
- the design of the trial;
- our ability to recruit clinical trial investigators with the appropriate competencies and experience;
- competing clinical trials and clinicians' and patients' perceptions as to the potential advantages and risks of the product candidate being studied in relation to other available therapies, including any new drugs that may be approved for the indications that we are investigating;
- our ability to obtain and maintain patient consents; and
- the risk that patients enrolled in clinical trials will drop out of the trials before completion.

In addition, our clinical trials will compete with other clinical trials for product candidates that are in the same therapeutic areas as our product candidates, and this competition will reduce the number and types of patients available to us, because some patients who might have opted to enroll in our trials may instead opt to enroll in a trial being conducted by one of our competitors. Since the number of qualified clinical investigators is limited, we expect to conduct some of our clinical trials at the same clinical trial sites that some of our competitors use, which will reduce the number of patients who are available for our clinical trials in such clinical trial site. In addition, because we intend to investigate our product candidates during the winter cold and flu season, this timing requirement may further limit the available pool of clinical trial subjects.

Our inability to enroll a sufficient number of patients for our clinical trials would result in significant delays or might require us to abandon one or more clinical trials altogether. Delays in patient enrollment may

result in increased costs, affect the timing or outcome of the planned clinical trials, product candidate development and approval process and jeopardize our ability to seek and obtain the regulatory approval required to commence product sales and generate revenue, which could prevent completion of these trials, adversely affect our ability to advance the development of our product candidates, cause the value of our company to decline and limit our ability to obtain additional financing if needed.

Ingredients, excipients and other materials necessary to manufacture RTB101 or everolimus may not be available on commercially reasonable terms, or at all, which may adversely affect the development and commercialization of RTB101, alone or in combination with everolimus.

We and our third-party manufacturers must obtain from other third-party suppliers the active pharmaceutical ingredients, excipients and primary and secondary packaging materials necessary for our contract manufacturers to produce RTB101 or everolimus for our clinical trials and, to the extent approved or commercialized, for commercial distribution. There is no guarantee that we would be able to enter into all the necessary agreements with third-party suppliers that we require for the supply of such materials on commercially reasonable terms or at all. Even if we were able to secure such agreements or guarantees, our suppliers may be unable or choose not to provide us the ingredients, excipients or materials in a timely manner or in the quantities required. If we or our third-party manufacturers are unable to obtain the quantities of these ingredients, excipients or materials that are necessary for the manufacture of commercial supplies of RTB101 or everolimus, our ability to generate revenue from the sale of RTB101 alone or in combination with everolimus would be materially and adversely affected. Further, if we or our third-party manufacturers are unable to obtain active pharmaceutical ingredients, excipients and materials as necessary for our clinical trials or for the manufacture of commercial supplies of our product candidates, if approved, potential regulatory approval or commercialization would be delayed, which would materially and adversely affect our ability to generate revenue from the sale of our product candidates. As a result of these and other factors, the cost of manufacturing drug material may not support continued development or commercialization or may materially reduce revenue.

Even if RTB101, alone or in combination with everolimus, or any other product candidate of ours receives regulatory approval, it may fail to achieve the degree of market acceptance by physicians, patients, third-party payors and others in the medical community necessary for commercial success, in which case we may not generate significant revenues or become profitable.

We have never commercialized a product, and even if RTB101, alone or in combination with everolimus, or any other product candidate of ours is approved by the appropriate regulatory authorities for marketing and sale, it may nonetheless fail to gain sufficient market acceptance by physicians, patients, third-party payors and others in the medical community. The market for therapies targeting aging-related diseases with an immunotherapy is novel, and physicians may be reluctant to adopt novel therapies. In addition, patients and their physicians may not desire to add RTB101, alone or in combination with everolimus, even if approved, to their existing prophylactic treatment regime. For example, physicians are often reluctant to switch their patients from existing prophylactics for RTIs even when new and potentially more effective or convenient alternatives enter the market. Further, patients often acclimate to the treatment regime that they are currently taking and do not want to switch unless their physicians recommend switching products or they are required to switch due to lack of coverage and reimbursement. In addition, even if we are able to demonstrate our product candidates' safety and efficacy to the FDA and other regulators, safety or efficacy concerns in the medical community may hinder market acceptance.

Efforts to educate the medical community and third-party payors on the benefits of our product candidates may require significant resources, including management time and financial resources, and may not be successful. If RTB101, alone or in combination with everolimus, or any other product candidate is approved but does not achieve an adequate level of market acceptance, we may not generate significant revenues and we

may not become profitable. The degree of market acceptance of our product candidates, if approved for commercial sale, will depend on a number of factors, including:

- the efficacy and safety of the product;
- the potential advantages of the product compared to competitive therapies;
- the prevalence and severity of any side effects;
- whether the product is recommended under physician prophylactic guidelines;
- whether the product is designated under physician treatment guidelines as a first-, second- or third-line therapy;
- our ability, or the ability of any future collaborators, to offer the product for sale at competitive prices;
- the product's convenience and ease of administration compared to alternative treatments;
- the willingness of the target patient population to try, and of physicians to prescribe, the product;
- limitations or warnings, including distribution or use restrictions contained in the product's approved labeling;
- the strength of sales, marketing and distribution support;
- changes in the standard of care for the targeted indications for the product; and
- availability and adequacy of coverage and reimbursement from government payors, managed care plans and other third-party payors.

Any failure by RTB101 alone or in combination with everolimus or any other product candidate of ours that obtains regulatory approval to achieve market acceptance or commercial success would adversely affect our business prospects.

Even if we, or any future collaborators, are able to commercialize any product candidate that we, or they, develop, the product may become subject to unfavorable pricing regulations or third-party payor coverage and reimbursement policies, any of which could harm our business.

Patients who are provided medical treatment for their conditions generally rely on third party payors to reimburse all or part of the costs associated with their treatment. Therefore, our ability, and the ability of any future collaborators to commercialize any of our product candidates will depend in part on the extent to which coverage and reimbursement for these products and related treatments will be available from third-party payors including government health administration authorities and private health coverage insurers. Third-party payors decide which medications they will cover and establish reimbursement levels. We cannot be certain that coverage will be available and reimbursement will be adequate for RTB101, alone or in combination with everolimus, or any of our other product candidates. Also, we cannot be certain that reimbursement policies will not reduce the demand for, or the price paid for, our products.

If coverage and reimbursement are not available, or reimbursement is available only to limited levels, we, or any future collaborators, may be limited in our ability to successfully commercialize our product candidates. Even if coverage is provided, the approved reimbursement amount may not be high enough to allow

us, or any future collaborators, to establish or maintain pricing sufficient to realize a sufficient return on our or their investment. In the United States, no uniform policy of coverage and reimbursement for products exists among third-party payors and coverage and reimbursement for products can differ significantly from payor to payor. As a result, the coverage determination process is often a time-consuming and costly process that will require us to provide scientific and clinical support for the use of our products to each payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance.

There is significant uncertainty related to third-party payor coverage and reimbursement of newly approved drugs. Regulatory approvals, pricing and reimbursement for new drug products vary widely from country to country. Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after marketing or product licensing approval is granted. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we, or any future collaborators, might obtain regulatory approval for a product in a particular country, but then be subject to price regulations that delay commercial launch of the product, which may negatively impact the revenues we are able to generate from the sale of the product in that country. Adverse pricing limitations may hinder our ability or the ability of any future collaborators to recoup our or their investment in one or more product candidates, even if our product candidates obtain regulatory approval.

The healthcare industry is acutely focused on cost containment, both in the United States and elsewhere. Government authorities and other third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for certain medications, which could affect our ability or that of any future collaborators to sell our product candidates profitably. These payors may not view our products, if any, as cost-effective, and coverage and reimbursement may not be available to our customers, or those of any future collaborators, or may not be sufficient to allow our products, if any, to be marketed on a competitive basis. Cost-control initiatives could cause us, or any future collaborators, to decrease the price we, or they, might establish for products, which could result in lower than anticipated product revenues. If the prices for our products, if any, decrease or if governmental and other third-party payors do not provide coverage or adequate reimbursement, our prospects for revenue and profitability will suffer.

There may also be delays in obtaining coverage and reimbursement for newly approved drugs, and coverage may be more limited than the indications for which the drug is approved by the FDA or comparable foreign regulatory authorities. Moreover, eligibility for reimbursement does not imply that any drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. Reimbursement rates may vary, by way of example, according to the use of the product and the clinical setting in which it is used. Reimbursement rates may also be based on reimbursement levels already set for lower cost drugs or may be incorporated into existing payments for other services.

In addition, increasingly, third-party payors are requiring higher levels of evidence of the benefits and clinical outcomes of new technologies and are challenging prices. We cannot be sure that coverage will be available for any product candidate that we, or any future collaborator, commercialize and, if available, that the reimbursement rates will be adequate. Further, the net reimbursement for drug products may be subject to additional reductions if there are changes to laws that presently restrict imports of drugs from one country to another. An inability to promptly obtain coverage and adequate payment rates from both government-funded and private payors for any of our product candidates for which we, or any future collaborator, obtain regulatory approval could significantly harm our operating results, our ability to raise capital needed to commercialize products and our overall financial condition.

Product liability lawsuits against us or any of our future collaborators could divert our resources and attention, cause us incur substantial liabilities and limit commercialization of our product candidates.

We are exposed to potential product liability and professional indemnity risks that are inherent in the research, development, manufacturing, marketing and use of pharmaceutical products. Currently, we have no

products that have been approved for commercial sale; however, the current and future use of our product candidates by us and any collaborators in clinical trials, and the sale of these product candidates, if approved, in the future, may expose us to liability claims. We face an inherent risk of product liability lawsuits related to the use of our product candidates in elderly patients and will face an even greater risk if product candidates are approved by regulatory authorities and introduced commercially. Product liability claims may be brought against us or our partners by participants enrolled in our clinical trials, patients, health care providers, pharmaceutical companies, our collaborators or others using, administering or selling any of our future approved products. If we cannot successfully defend ourselves against any such claims, we may incur substantial liabilities or be required to limit commercialization of our product candidates. Regardless of the merits or eventual outcome, liability claims may result in:

- decreased demand for any of our future approved products;
- injury to our reputation;
- withdrawal of clinical trial participants;
- termination of clinical trial sites or entire trial programs;
- significant litigation costs;
- substantial monetary awards to, or costly settlements with, patients or other claimants;
- product recalls or a change in the indications for which they may be used;
- loss of revenue;
- diversion of management and scientific resources from our business operations; and
- the inability to commercialize our product candidates.

Although the clinical trial process is designed to identify and assess potential side effects, clinical development does not always fully characterize the safety and efficacy profile of a new medicine, and it is always possible that a drug, even after regulatory approval, may exhibit unforeseen side effects. If our product candidates were to cause adverse side effects during clinical trials or after approval, we may be exposed to substantial liabilities. Physicians and patients may not comply with any warnings that identify known potential adverse effects and patients who should not use our product candidates. If any of our product candidates are approved for commercial sale, we will be highly dependent upon consumer perceptions of us and the safety and quality of our products. We could be adversely affected if we are subject to negative publicity associated with illness or other adverse effects resulting from patients' use or misuse of our products or any similar products distributed by other companies.

Although we maintain product liability insurance coverage in the amount of up to $10.0 million in the aggregate, including clinical trial liability, this insurance may not fully cover potential liabilities that we may incur. The cost of any product liability litigation or other proceeding, even if resolved in our favor, could be substantial. We will need to increase our insurance coverage if we commercialize any product that receives regulatory approval. In addition, insurance coverage is becoming increasingly expensive. If we are unable to maintain sufficient insurance coverage at an acceptable cost or to otherwise protect against potential product liability claims, it could prevent or inhibit the development and commercial production and sale of our product candidates, which could harm our business, financial condition, results of operations and prospects.

We currently have no marketing, sales or distribution infrastructure. If we are unable to develop our sales, marketing and distribution capability on our own or through collaborations with marketing partners, we will not be successful in commercializing our product candidates.

We currently have no marketing, sales or distribution capabilities. If RTB101, alone or in combination with everolimus, is approved for RTIs, we intend to establish a sales and marketing organization with technical expertise and supporting distribution capabilities to commercialize the approved product in key territories, which will require substantial additional resources. Some or all of these costs may be incurred in advance of any approval of RTB101, alone or in combination with everolimus. Any failure or delay in the development of our or third parties' internal sales, marketing and distribution capabilities would adversely impact the commercialization of RTB101, alone or in combination with everolimus, and other future product candidates.

Factors that may inhibit our efforts to commercialize our products on our own include:

- our inability to recruit and retain adequate numbers of effective sales and marketing personnel;
- the inability of sales personnel to obtain access to or persuade adequate numbers of physicians to prescribe any future products;
- the lack of complementary products to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines; and
- unforeseen costs and expenses associated with creating an independent sales and marketing organization.

With respect to our existing and future product candidates, we may choose to collaborate with third parties that have direct sales forces and established distribution systems to serve as an alternative to our own sales force and distribution systems. Our product revenue may be lower than if we directly marketed or sold our products, if approved. In addition, any revenue we receive will depend in whole or in part upon the efforts of these third parties, which may not be successful and are generally not within our control. If we are not successful in commercializing any approved products, our future product revenue will suffer and we may incur significant additional losses.

If we do not establish sales and marketing capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing our product candidates.

If we, or any future collaborators, experience any of a number of possible unforeseen events in connection with clinical trials of RTB101, alone or in combination with everolimus, or any other product candidate, potential clinical development, regulatory approval or commercialization of our product candidates could be delayed or prevented.

We, or any future collaborators, may experience numerous unforeseen events during, or as a result of, clinical trials that could delay or prevent clinical development, regulatory approval or commercialization of our product candidates, including:

- our product candidates may produce unfavorable or inconclusive results;
- regulators may require us or any future collaborators, to conduct additional clinical trials or abandon product development programs;
- the number of patients required for clinical trials of our product candidates may be larger than we, or any future collaborators anticipate, patient enrollment in these clinical trials may be slower than we, or any future collaborators, may anticipate or participants may drop out of these clinical trials at a higher rate than we, or any future collaborators, anticipate;

- the cost of planned clinical trials of our product candidates may be greater than we anticipate;
- our third-party contractors or those of any future collaborators, including those manufacturing our product candidates or components or ingredients thereof or conducting clinical trials on our behalf or on behalf of any future collaborators, may fail to comply with regulatory requirements or meet their contractual obligations to us or any future collaborators in a timely manner or at all;
- regulators, IRBs or independent ethics committees may not authorize us, any future collaborators or our or their investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- delays in reaching or failure to reach agreement on acceptable clinical trial contracts or clinical trial protocols with prospective trial sites;
- patients who enroll in a clinical trial may misrepresent their eligibility to do so or may otherwise not comply with the clinical trial protocol, resulting in the need to drop the patients from the clinical trial, increase the needed enrollment size for the clinical trial or extend the clinical trial's duration;
- delay, suspension or termination of clinical trials of our product candidates for various reasons, including a finding that the participants are being exposed to unacceptable health risks, undesirable side effects or other unexpected characteristics of the product candidate; and
- regulators, IRBs or independent ethics committees may require that we, or any future collaborators, or our or their investigators suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements or their standards of conduct, a finding that the participants are being exposed to unacceptable health risks, undesirable side effects or other unexpected characteristics of the product candidate or findings of undesirable effects caused by a chemically or mechanistically similar product or product candidate.

Further, conducting clinical trials in foreign countries, as we have done and plan to do for our product candidates, presents additional risks that may delay completion of our clinical trials. These risks include the failure of enrolled patients in foreign countries to adhere to clinical protocol as a result of differences in healthcare services or cultural customs, managing additional administrative burdens associated with foreign regulatory schemes, as well as political and economic risks relevant to such foreign countries.

Product development costs for us, or any future collaborators, will increase if we, or they, experience delays in testing or pursuing regulatory approvals and we, or they, may be required to obtain additional funds to complete clinical trials and prepare for possible commercialization of our product candidates. We do not know whether any preclinical studies or clinical trials will begin as planned, will need to be restructured, or will be completed on schedule or at all. Significant preclinical study or clinical trial delays also could shorten any periods during which we, or any future collaborators, may have the exclusive right to commercialize our product candidates or allow our competitors, or the competitors of any future collaborators, to bring products to market before we, or any future collaborators, do and impair our ability, or the ability of any future collaborators, to successfully commercialize our product candidates and may harm our business and results of operations. In addition, many of the factors that lead to clinical trial delays may ultimately lead to the denial of regulatory approval of any of our product candidates.

Results of preclinical studies and early clinical trials may not be predictive of results of future clinical trials, and such results do not guarantee approval of a product candidate by regulatory authorities.

The outcome of preclinical studies and early clinical trials may not be predictive of the success of later clinical trials, and interim results of clinical trials do not necessarily predict success in the results of completed

clinical trials. Many companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in late-stage clinical trials after achieving positive results in earlier development, and we could face similar setbacks. The design of a clinical trial can determine whether its results will support approval of a product and flaws in the design of a clinical trial may not become apparent until the clinical trial is well advanced. In addition, preclinical and clinical data are often susceptible to varying interpretations and analyses. Many companies that believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain regulatory approval for their product candidates. Even if we complete clinical development of RTB101 alone or in combination with everolimus for RTIs or any other indication, there can be no assurance that the FDA, EMA, or other regulatory authorities will approve RTB101 alone or in combination with everolimus for marketing.

In some instances, there can be significant variability in safety or efficacy results between different clinical trials of the same product candidate due to numerous factors, including changes in trial procedures set forth in protocols, differences in the size and type of the patient populations, changes in and adherence to the dosing regimen and other clinical trial procedures and the rate of dropout among clinical trial participants. If we fail to receive positive results in clinical trials of our product candidates, the development timeline and regulatory approval and commercialization prospects for our most advanced product candidate, and, correspondingly, our business and financial prospects would be negatively impacted.

Risks Related to Regulatory Approval and Marketing of Our Product Candidates and Other Legal Compliance Matters

Even if we complete the necessary preclinical studies and clinical trials, the regulatory approval process for product candidates is expensive, time consuming and uncertain and may prevent us or any future collaborators from obtaining approvals for the commercialization of RTB101 alone or in combination with everolimus or any other product candidate. As a result, we cannot predict when or if, and in which territories, we, or any future collaborators, will obtain regulatory approval to commercialize a product candidate.

The research, testing, manufacturing, labeling, approval, selling, marketing, promotion and distribution of products are subject to extensive regulation by the FDA and comparable foreign regulatory authorities. We, and any future collaborators, are not permitted to market RTB101, alone or in combination with everolimus, or any other product candidate in the United States or in other countries until we, or they, receive approval of an NDA from the FDA or regulatory approval from applicable regulatory authorities outside the United States. RTB101 is in clinical development and is subject to the risks of failure inherent in drug development. We have not submitted an application for or received regulatory approval for RTB101, alone or in combination with everolimus, or any other product candidate in the United States or in any other jurisdiction. We have limited experience in conducting and managing the clinical trials necessary to obtain regulatory approvals, including obtaining FDA approval of an NDA.

The process of obtaining regulatory approvals, both in the United States and abroad, is lengthy, expensive and uncertain. It may take many years, if approval is obtained at all, and can vary substantially based upon a variety of factors, including the type, complexity and novelty of the product candidates involved. Securing regulatory approval requires the submission of extensive preclinical and clinical data and supporting information to regulatory authorities for each therapeutic indication to establish the product candidate’s safety and efficacy. Securing regulatory approval also requires the submission of information about the product manufacturing process to, and inspection of manufacturing facilities by, the regulatory authorities. The FDA or other regulatory authorities may determine that RTB101, alone or in combination with everolimus, or any other product candidates are not safe and effective, only moderately effective or have undesirable or unintended side effects, toxicities or other characteristics that preclude our obtaining regulatory approval or prevent or limit commercial use. Any regulatory approval we ultimately obtain may be limited or subject to restrictions or post-approval commitments that render the approved product not commercially viable.

In addition, changes in regulatory approval policies during the development period, changes in or the enactment or promulgation of additional statutes, regulations or guidance or changes in regulatory review for each submitted product application, may cause delays in the approval or rejection of an application. Regulatory authorities have substantial discretion in the approval process and may refuse to accept any application or may decide that our data are insufficient for approval and require additional preclinical, clinical or other studies. In addition, varying interpretations of the data obtained from preclinical and clinical testing could delay, limit or prevent regulatory approval of a product candidate. Any regulatory approval we, or any future collaborators, ultimately obtain may be limited or subject to restrictions or post-approval commitments that render the approved product not commercially viable.

Moreover, principal investigators for our clinical trials may serve as scientific advisors or consultants to us from time to time and receive compensation in connection with such services. Under certain circumstances, we may be required to report some of these relationships to the FDA or other regulatory authority. The FDA or other regulatory authority may conclude that a financial relationship between us and a principal investigator has created a conflict of interest or otherwise affected interpretation of the study. The FDA or other regulatory authority may therefore question the integrity of the data generated at the applicable clinical trial site and the utility of the clinical trial itself may be jeopardized. This could result in a delay in approval, or rejection, of our marketing applications by the FDA or other regulatory authority, as the case may be, and may ultimately lead to the denial of regulatory approval of one or more of our product candidates.

Any delay in obtaining or failure to obtain required approvals could negatively impact our ability or that of any future collaborators to generate revenue from the particular product candidate, which likely would result in significant harm to our business and adversely impact our stock price.

Our failure to obtain regulatory approval in foreign jurisdictions would prevent our product candidates from being marketed abroad, and any approval we are granted for RTB101, alone or in combination with everolimus, or any of our other product candidates in the United States would not assure approval of product candidates in foreign jurisdictions.

In order to market any products outside of the United States, we must establish and comply with numerous and varying regulatory requirements of other countries regarding clinical trial design, safety and efficacy. Clinical trials conducted in one country may not be accepted by regulatory authorities in other countries, and regulatory approval in one country does not mean that regulatory approval will be obtained in any other country. Approval procedures vary among countries and can involve additional product testing and validation and additional administrative review periods. Seeking foreign regulatory approvals could result in significant delays, difficulties and costs for us and may require additional preclinical studies or clinical trials which would be costly and time consuming and could delay or prevent introduction of RTB101, alone or in combination with everolimus, or any of our other product candidates in those countries. We do not have experience in obtaining regulatory approval in international markets. If we or our partners fail to comply with regulatory requirements or to obtain and maintain required approvals, our target market will be reduced and our ability to realize the full market potential of our product candidates will be harmed.

Additionally, on June 23, 2016, the electorate in the United Kingdom voted in favor of leaving the European Union, commonly referred to as Brexit. On March 29, 2017, the country formally notified the European Union of its intention to withdraw pursuant to Article 50 of the Lisbon Treaty. Since a significant proportion of the regulatory framework in the United Kingdom is derived from European Union directives and regulations, the referendum could materially impact the regulatory regime with respect to the approval of our product candidates in the United Kingdom or the European Union. Any delay in obtaining, or an inability to obtain, any regulatory approvals, as a result of Brexit or otherwise, would prevent us from commercializing our product candidates in the United Kingdom and/or the European Union and restrict our ability to generate revenue and achieve and sustain profitability. If any of these outcomes occur, we may be forced to restrict or delay efforts to seek regulatory approval in the United Kingdom and/or European Union for our product candidates, which could significantly and materially harm our business.

Even if we, or any future collaborators, obtain regulatory approvals for our product candidates, the terms of approvals and ongoing regulation of our products may limit how we manufacture and market our products, which could impair our ability to generate revenue.

Once regulatory approval has been granted, an approved product and its manufacturer and marketer are subject to ongoing review and extensive regulation. We, and any future collaborators, must therefore comply with requirements concerning advertising and promotion for any of our product candidates for which we or they obtain regulatory approval. Promotional communications with respect to prescription drugs are subject to a variety of legal and regulatory restrictions and must be consistent with the information in the product's approved labeling. Thus, we and any future collaborators will not be able to promote any products we develop for indications or uses for which they are not approved.

In addition, manufacturers of approved products and those manufacturers' facilities are required to comply with extensive FDA requirements, including ensuring that quality control and manufacturing procedures conform to current Good Manufacturing Practices, or cGMPs, which include requirements relating to quality control and quality assurance as well as the corresponding maintenance of records and documentation and reporting requirements. We, our contract manufacturers, any future collaborators and their contract manufacturers could be subject to periodic unannounced inspections by the FDA to monitor and ensure compliance with cGMPs. Despite our efforts to inspect and verify regulatory compliance, one or more of our third-party manufacturing vendors may be found on regulatory inspection by FDA or other authorities to be not in compliance with cGMP regulations, which may result in shutdown of the third-party vendor or invalidation of drug product lots or processes. In some cases, a product recall may be warranted or required, which would materially affect our ability to supply and market our drug products.

Accordingly, assuming we, or any future collaborators, receive regulatory approval for one or more of our product candidates, we, and any future collaborators, and our and their contract manufacturers will continue to expend time, money and effort in all areas of regulatory compliance, including manufacturing, production, product surveillance and quality control.

If we, and any future collaborators, are not able to comply with post-approval regulatory requirements, we, and any future collaborators, could have the regulatory approvals for our products withdrawn by regulatory authorities and our, or any future collaborators', ability to market any future products could be limited, which could adversely affect our ability to achieve or sustain profitability. Further, the cost of compliance with post-approval regulations may have a negative effect on our operating results and financial condition.

We are subject to extensive government regulation and the failure to comply with these regulations may have a material adverse effect on our operations and business.

Both before and after approval of any product, we and our suppliers, contract manufacturers and clinical investigators are subject to extensive regulation by governmental authorities in the United States and other countries, covering, among other things, testing, manufacturing, quality control, clinical trials, post-marketing studies, labeling, advertising, promotion, distribution, import and export, governmental pricing, price reporting and rebate requirements. Failure to comply with applicable requirements could result in one or more of the following actions: warning or untitled letters; unanticipated expenditures; delays in approval or refusal to approve a product candidate; voluntary product recall; product seizure; interruption of manufacturing or clinical trials; operating or marketing restrictions; injunctions; criminal prosecution and civil or criminal penalties including fines and other monetary penalties; exclusion from federal health care programs such as Medicare and Medicaid; adverse publicity; and disruptions to our business. Further, government investigations into potential violations of these laws would require us to expend considerable resources and face adverse publicity and the potential disruption of our business even if we are ultimately found not to have committed a violation.

Obtaining FDA approval of our product candidates requires substantial time, effort and financial resources and may be subject to both expected and unforeseen delays, and there can be no assurance that any

approval will be granted for any of our product candidates on a timely basis, if at all. The FDA may decide that our data are insufficient for approval of our product candidates and require additional preclinical, clinical or other studies or additional work related to chemistry, manufacturing and controls. In addition, we, the FDA, IRBs or independent ethics committees may suspend or terminate human clinical trials at any time on various grounds, including a finding that the patients are or would be exposed to an unacceptable health risk or because of the way in which the investigators on which we rely carry out the trials. If we are required to conduct additional trials or to conduct other testing of our product candidates beyond that which we currently contemplate for regulatory approval, if we are unable to complete successfully our clinical trials or other testing, or if the results of these and other trials or tests fail to demonstrate efficacy or raise safety concerns, we may face substantial additional expenses, be delayed in obtaining regulatory approval for our product candidates or may never obtain regulatory approval.

We are also required to comply with extensive governmental regulatory requirements after a product has received marketing authorization. Governing regulatory authorities may require post-marketing studies that may negatively impact the commercial viability of a product. Once on the market, a product may become associated with previously undetected adverse effects and/or may experience manufacturing or other commercial difficulties. As a result of any of these or other problems, a product's regulatory approval could be withdrawn, which could harm our business and operating results.

Any of our product candidates for which we, or any future collaborators, obtain regulatory approval in the future will be subject to ongoing obligations and continued regulatory review, which may result in significant additional expense. If approved, our product candidates could be subject to post-marketing restrictions or withdrawal from the market and we, or any future collaborators, may be subject to substantial penalties if we, or they, fail to comply with regulatory requirements or if we, or they, experience unanticipated problems with our products following approval.

Any of our product candidates for which we, or any future collaborators, obtain regulatory approval, as well as the manufacturing processes, post-approval studies, labeling, advertising and promotional activities for such product, among other things, will be subject to ongoing requirements of and review by the FDA, EMA and other regulatory authorities. These requirements include submissions of safety and other post-marketing information and reports, registration and listing requirements, requirements relating to manufacturing, quality control, quality assurance and corresponding maintenance of records and documents, requirements regarding the distribution of samples to physicians and recordkeeping. We and our contract manufacturers will also be subject to user fees and periodic inspection by the FDA, EMA and other regulatory authorities to monitor compliance with these requirements and the terms of any product approval we may obtain. Even if regulatory approval of a product candidate is granted, the approval may be subject to limitations on the indicated uses for which the product may be marketed or to the conditions of approval, including the requirement to implement a Risk Evaluation and Mitigation Strategy, or REMS.

The FDA, EMA and other regulatory authorities may also impose requirements for costly post-marketing studies or clinical trials and surveillance to monitor the safety or efficacy of a product. The FDA and other agencies, including the Department of Justice, closely regulate and monitor the post-approval marketing and promotion of products to ensure that they are manufactured, marketed and distributed only for the approved indications and in accordance with the provisions of the approved labeling. The FDA imposes stringent restrictions on manufacturers' communications regarding off-label use and if we, or any future collaborators, do not market any of our product candidates for which we, or they, receive regulatory approval for only their approved indications, we, or they, may be subject to warnings or enforcement action for off-label marketing if it is alleged that we are doing so. Violation of the FDCA and other statutes relating to the promotion and advertising of prescription drugs may lead to investigations or allegations of violations of federal and state health care fraud and abuse laws and state consumer protection laws, including the False Claims Act.

In addition, later discovery of previously unknown adverse events or other problems with our products or their manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may yield various results, including:

- restrictions on the manufacturing of such products;
- restrictions on the labeling or marketing of such products;
- restrictions on product distribution or use;
- requirements to conduct post-marketing studies or clinical trials;
- warning letters or untitled letters;
- withdrawal of the products from the market;
- refusal to approve pending applications or supplements to approved applications that we submit;
- recall of products;
- restrictions on coverage by third-party payors;
- fines, restitution or disgorgement of profits or revenues;
- exclusion from federal health care programs such as Medicare and Medicaid;
- suspension or withdrawal of regulatory approvals;
- refusal to permit the import or export of products;
- product seizure; or
- injunctions or the imposition of civil or criminal penalties.

The efforts of the Administration to pursue regulatory reform may limit FDA's ability to engage in oversight and implementation activities in the normal course, and that could negatively impact our business.

The policies of the FDA and of other regulatory authorities may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or executive action, either in the United States or abroad. For example, certain policies of the Trump administration may impact our business and industry. Namely, the Trump administration has taken several executive actions, including the issuance of a number of executive orders, that could impose significant burdens on, or otherwise materially delay, the FDA's ability to engage in routine regulatory and oversight activities such as implementing statutes through rulemaking, issuance of guidance, and review and approval of marketing applications. On January 30, 2017, President Trump issued an executive order, applicable to all executive agencies, including the FDA, that requires that for each notice of proposed rulemaking or final regulation to be issued in fiscal year 2017, the agency shall identify at least two existing regulations to be repealed, unless prohibited by law. These requirements are referred to as the "two-for-one" provisions. This executive order includes a budget neutrality provision that requires the total incremental cost of all new regulations in the 2017 fiscal year, including repealed regulations, to be no greater than zero, except in limited circumstances. For fiscal years 2018 and beyond, the executive order requires agencies to identify regulations to offset any incremental cost of a new regulation. In interim guidance issued by the Office of Information and

Regulatory Affairs within OMB on February 2, 2017, the administration indicates that the "two-for-one" provisions may apply not only to agency regulations, but also to significant agency guidance documents, and on September 8, 2017, the FDA published notices in the Federal Register soliciting broad public comment to identify regulations that could be modified in compliance with these Executive Orders. It is difficult to predict how these requirements will be implemented, and the extent to which they will impact the FDA's ability to exercise its regulatory authority. If these executive actions impose constraints on FDA's ability to engage in oversight and implementation activities in the normal course, our business may be negatively impacted.

Our relationships with healthcare providers, physicians and third-party payors will be subject to applicable anti-kickback, fraud and abuse, privacy and transparency and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, exclusion from government healthcare programs, contractual damages, reputational harm and diminished profits and future earnings.

Healthcare providers, physicians and third party payors will play a primary role in the recommendation and prescription of any products for which we obtain regulatory approval. Our future arrangements with third party payors, healthcare providers and physicians may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we conduct our operations, including how we research, market, sell and distribute any products for which we obtain regulatory approval. These include the following:

- **Anti-Kickback Statute**—The federal healthcare anti-kickback statute prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, order or recommendation or arranging of, any good or service, for which payment may be made under a federal healthcare program such as Medicare and Medicaid. A person or entity can be found guilty of violating the federal Anti-Kickback Statute without actual knowledge of the statute or specific intent to violate it in order to have committed a violation. In addition, the government may assert that a claim including items or services resulting from a violation of the Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal False Claims Act or federal civil money penalties statute;

- **False Claims Act**—The federal False Claims Act imposes criminal and civil penalties, including through civil whistleblower or qui tam actions, against individuals or entities for, among other things, knowingly presenting, or causing to be presented false or fraudulent claims for payment by a federal healthcare program; making a false statement or record material to a false or fraudulent claim or an obligation to pay money to the federal government; or avoiding, decreasing or concealing an obligation to pay money to the federal government. A claim that includes items or services resulting from a violation of the Anti-Kickback Statute constitutes a false or fraudulent claim under the False Claims Act.. Potential liability for violating the False Claims Act includes mandatory treble damages and significant per-claim penalties;

- **HIPAA**—The federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters. Similar to the Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. In addition, HIPAA and, as amended by the Health Information Technology for Economic and Clinical Health Act and its implementing regulations, also imposes obligations on covered entities and their business associates, including mandatory contractual terms and technical safeguards, with respect to maintaining the privacy, security and transmission of individually identifiable health information;

- **Transparency Requirements**—Federal laws require applicable manufacturers of covered drugs to report payments and other transfers of value to physicians, including doctors, dentists, optometrists,

podiatrists and chiropractors, and teaching hospitals, as well as information regarding ownership and investment interests held by the physicians described above and their immediate family members; and

- **Analogous State and Foreign Laws**—Analogous state and foreign fraud and abuse laws and regulations, such as state anti-kickback and false claims laws, can apply to our business practices, including but not limited to research, distribution, sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third party payors and are generally broad and are enforced by many different federal and state agencies as well as through private actions.

Some state laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government and require manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures and pricing information. State and foreign laws also govern the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not pre-empted by HIPAA, thus complicating compliance efforts.

Efforts to ensure that our business arrangements with third parties, and our business generally, will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations, agency guidance or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, imprisonment, exclusion from government funded healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations. Defending against any such actions can be costly, time-consuming and may require significant financial and personnel resources. Therefore, even if we are successful in defending against any such actions that may be brought against us, our business may be impaired. If any of the physicians or other healthcare providers or entities with whom we expect to do business is found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

The provision of benefits or advantages to physicians to induce or encourage the prescription, recommendation, endorsement, purchase, supply, order or use of medicinal products is generally not permitted in the countries that form part of the European Union. Some European Union Member States, like the United Kingdom, through the United Kingdom Bribery Act 2010, have enacted laws explicitly prohibiting the provision of these type of benefits and advantages. Infringements of these laws can result in substantial fines and imprisonment.

Payments made to physicians in certain European Union Member States (e.g., France or Belgium) must be publically disclosed. Moreover, agreements with physicians often must be the subject of prior notification and approval by the physician's employer, his or her competent professional organization and/or the regulatory authorities of the individual European Union Member States. These requirements are provided in the European Union Member State national laws, industry codes (e.g. the European Federation of Pharmaceutical Industries and Associations Disclosure and Healthcare Professionals Codes) or professional codes of conduct. Failure to comply with these requirements could result in reputational risk, public reprimands, administrative penalties, fines or imprisonment.

The collection and processing of personal data – including health data – in the European Union is currently governed by the provisions of the Data Protection Directive, as implemented into national laws by the European Union Member States. The new European Union-wide General Data Protection Regulation, or GDPR, entered into force in May 2016 and will become applicable on May 25, 2018, replacing the current data

protection laws of each European Union Member State. The GDPR will implement more stringent operational requirements for processors and controllers of personal data, including, for example, expanded disclosures about how personal information is to be used, limitations on retention of information, increased requirements pertaining to health data and pseudonymised (i.e., key-coded) data, mandatory data breach notification requirements and higher standards for controllers to demonstrate that they have obtained valid consent for certain data processing activities. The GDPR provides that European Union Member States may make their own further laws and regulations in relation to the processing of genetic, biometric or health data, which could result in differences between Member States, limit our ability to use and share personal data or could cause our costs to increase, and harm our business and financial condition. We are also subject to evolving and strict rules on the transfer of personal data out of the European Union to the United States. Failure to comply with European Union data protection laws may result in fines (for example, of up to €20,000,000 or up to 4% of the total worldwide annual turnover of the preceding financial year (whichever is higher) under the GDPR) and other administrative penalties, which may be onerous and adversely affect our business, financial condition, results of operations and prospects.

Current and future legislation may increase the difficulty and cost for us and any collaborators to obtain regulatory approval of and commercialize our product candidates and affect the prices we, or they, may obtain.

In the United States and foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay regulatory approval of our product candidates, restrict or regulate post-approval activities and affect our ability to profitably sell any product candidates for which we obtain regulatory approval. We expect that current laws, as well as other healthcare reform measures that may be adopted in the future, may result in additional reductions in Medicare and other healthcare funding, more rigorous coverage criteria, new payment methodologies and in additional downward pressure on the price that we, or any collaborators, may receive for any approved products.

In March 2010, President Obama signed into law the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or collectively the ACA. Among the provisions of the ACA of potential importance to our business and our product candidates are the following:

- an annual, non-deductible fee on any entity that manufactures or imports specified branded prescription products and biologic products;
- an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program;
- a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for products that are inhaled, infused, instilled, implanted or injected;
- expansion of healthcare fraud and abuse laws, including the civil False Claims Act and the federal Anti-Kickback Statute, new government investigative powers and enhanced penalties for noncompliance;
- a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts off negotiated prices of applicable brand products to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer’s outpatient products to be covered under Medicare Part D;
- extension of manufacturers’ Medicaid rebate liability to individuals enrolled in Medicaid managed care organizations;
- expansion of eligibility criteria for Medicaid programs;

- expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program;
- new requirements to report certain financial arrangements with physicians and teaching hospitals;
- a new requirement to annually report product samples that manufacturers and distributors provide to physicians;
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research;
- a new Independent Payment Advisory Board, or IPAB, which has authority to recommend certain changes to the Medicare program to reduce expenditures by the program that could result in reduced payments for prescription products; and
- established the Center for Medicare and Medicaid Innovation within CMS to test innovative payment and service delivery models.

In addition, other legislative changes have been proposed and adopted since the ACA was enacted. In August 2011, the Budget Control Act of 2011, among other things, included aggregate reductions to Medicare payments to providers of 2% per fiscal year, which went into effect in April 2013 and will remain in effect through 2025 unless additional Congressional action is taken. The American Taxpayer Relief Act of 2012, among other things, reduced Medicare payments to several providers and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These new laws may result in additional reductions in Medicare and other healthcare funding and otherwise affect the prices we may obtain for any of our product candidates for which we may obtain regulatory approval or the frequency with which any such product candidate is prescribed or used.

With the new Administration and Congress, there will likely be additional administrative or legislative changes, including modification, repeal, or replacement of all, or certain provisions of, the ACA. In January 2017, Congress voted to adopt a budget resolution for fiscal year 2017, or the Budget Resolution, that authorizes the implementation of legislation that would repeal portions of the ACA. The Budget Resolution is not a law, however, it is widely viewed as the first step toward the passage of legislation that would repeal certain aspects of the ACA. Further, on January 20, 2017, President Trump signed an Executive Order directing federal agencies with authorities and responsibilities under the ACA to waive, defer, grant exemptions from, or delay the implementation of any provision of the ACA that would impose a fiscal or regulatory burden on states, individuals, healthcare providers, health insurers, or manufacturers of pharmaceuticals or medical devices.

At the same time, Congress has focused on additional legislative changes, including in particular repeal and replacement of certain provisions of the ACA. It remains to be seen, however, whether new legislation reforming, repealing or replacing the ACA will be enacted and, if so, precisely what the new legislation will provide and what impact it will have on the availability of healthcare and containing or lowering the cost of healthcare. It is possible that these reform, repeal and replacement initiatives, if enacted into law, could ultimately result in fewer individuals having health insurance coverage or in individuals having insurance coverage with less generous benefits. It is also possible that some ACA provisions that generally are not favorable for the research-based pharmaceutical industry could also be repealed along with ACA coverage expansion provisions. At this point, healthcare reform and its impacts on us are highly uncertain in many respects.

The costs of prescription pharmaceuticals in the United States has also been the subject of considerable discussion in the United States, and members of Congress and the Administration have stated that they will address such costs through new legislative and administrative measures. There have been several U.S.

Congressional inquiries and proposed bills designed to, among other things, bring more transparency to drug pricing, reduce the cost of prescription drugs under Medicare, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drugs.

In addition, individual states have also become increasingly active in passing legislation and implementing regulations designed to control pharmaceutical product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access, and to encourage importation from other countries and bulk purchasing.

The pricing of prescription pharmaceuticals is also subject to governmental control outside the United States. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of regulatory approval for a product. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our product candidates to other available therapies. If reimbursement of our products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our ability to generate revenues and become profitable could be impaired.

Governments outside the United States may impose strict price controls, which may adversely affect our revenues, if any.

In some countries, including Member States of the European Union, the pricing of prescription drugs is subject to governmental control. Additional countries may adopt similar approaches to the pricing of prescription drugs. In such countries, pricing negotiations with governmental authorities can take considerable time after receipt of regulatory approval for a product. In addition, there can be considerable pressure by governments and other stakeholders on prices and reimbursement levels, including as part of cost containment measures. Political, economic and regulatory developments may further complicate pricing negotiations, and pricing negotiations may continue after coverage and reimbursement have been obtained. Reference pricing used by various countries and parallel distribution, or arbitrage between low-priced and high-priced countries, can further reduce prices. In some countries, we may be required to conduct a clinical study or other studies that compare the cost-effectiveness of any of our product candidates to other available therapies in order to obtain or maintain reimbursement or pricing approval, which is time-consuming and costly. We cannot be sure that such prices and reimbursement will be acceptable to us or our strategic partners. Publication of discounts by third-party payors or authorities may lead to further pressure on the prices or reimbursement levels within the country of publication and other countries. If pricing is set at unsatisfactory levels or if reimbursement of our products is unavailable or limited in scope or amount, our revenues from sales by us or our strategic partners and the potential profitability of any of our product candidates in those countries would be negatively affected.

Laws and regulations governing any international operations we may have in the future may preclude us from developing, manufacturing and selling certain products outside of the United States and require us to develop and implement costly compliance programs.

If we further expand our operations outside of the United States, we must dedicate additional resources to comply with numerous laws and regulations in each jurisdiction in which we plan to operate. The Foreign Corrupt Practices Act, or FCPA, prohibits any U.S. individual or business from paying, offering, authorizing payment or offering of anything of value, directly or indirectly, to any foreign official, political party or candidate for the purpose of influencing any act or decision of the foreign entity in order to assist the individual or business in obtaining or retaining business. The FCPA also obligates companies whose securities are listed in the United States to comply with certain accounting provisions requiring us to maintain books and records that accurately and fairly reflect all transactions of the corporation, including international subsidiaries, and to devise and maintain an adequate system of internal accounting controls for international operations.

Compliance with the FCPA is expensive and difficult, particularly in countries in which corruption is a recognized problem. In addition, the FCPA presents particular challenges in the pharmaceutical industry,

because, in many countries, hospitals are operated by the government, and doctors and other hospital employees are considered foreign officials. Certain payments to hospitals in connection with clinical trials and other work have been deemed to be improper payments to government officials and have led to FCPA enforcement actions.

Various laws, regulations and executive orders also restrict the use and dissemination outside of the United States, or the sharing with certain non-U.S. nationals, of information classified for national security purposes, as well as certain products and technical data relating to those products. If we expand our presence outside of the United States, it will require us to dedicate additional resources to comply with these laws, and these laws may preclude us from developing, manufacturing, or selling certain products and product candidates outside of the United States, which could limit our growth potential and increase our development costs.

The failure to comply with laws governing international business practices may result in substantial civil and criminal penalties and suspension or debarment from government contracting. The Securities and Exchange Commission, or SEC, also may suspend or bar issuers from trading securities on U.S. exchanges for violations of the FCPA's accounting provisions.

If we fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could harm our business.

We are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. From time to time and in the future, our operations may involve the use of hazardous and flammable materials, including chemicals and biological materials, and may also produce hazardous waste products. Even if we contract with third parties for the disposal of these materials and waste products, we cannot completely eliminate the risk of contamination or injury resulting from these materials. In the event of contamination or injury resulting from the use or disposal of our hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties for failure to comply with such laws and regulations.

We maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees, but this insurance may not provide adequate coverage against potential liabilities. However, we do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us.

In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. Current or future environmental laws and regulations may impair our research, development or production efforts. In addition, failure to comply with these laws and regulations may result in substantial fines, penalties or other sanctions.

Risks Related to Our Intellectual Property

Our commercial success depends on our ability to protect our intellectual property and proprietary technology.

Our commercial success depends in large part on our ability to obtain and maintain intellectual property rights protection through patents, trademarks, and trade secrets in the United States and other countries with respect to our proprietary product candidates. If we do not adequately protect our intellectual property rights, competitors may be able to erode, negate or preempt any competitive advantage we may have, which could harm our business and ability to achieve profitability. To protect our proprietary position, we have patent applications and may file other patent applications in the United States or abroad related to our product candidates that are important to our business; we may also license or purchase patent applications filed by others. The patent application and approval process is expensive and time-consuming. We may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner.

Agreements through which we license patent rights may not give us control over patent prosecution or maintenance, so that we may not be able to control which claims or arguments are presented, how claims are amended, and may not be able to secure, maintain, or successfully enforce necessary or desirable patent protection from those patent rights. We have not had and do not have primary control over patent prosecution and maintenance for certain of the patents and patent applications we license, and therefore cannot guarantee that these patents and applications will be prosecuted or maintained in a manner consistent with the best interests of our business. We cannot be certain that patent prosecution and maintenance activities by our licensors have been or will be conducted in compliance with applicable laws and regulations or will result in valid and enforceable patents.

If the scope of the patent protection we or our licensors obtain is not sufficiently broad, we may not be able to prevent others from developing and commercializing technology and products similar or identical to ours. The degree of patent protection we require to successfully compete in the marketplace may be unavailable or severely limited in some cases and may not adequately protect our rights or permit us to gain or keep any competitive advantage. We cannot provide any assurances that any of our licensed patents have, or that any of our pending owned or licensed patent applications that mature into issued patents will include, claims with a scope sufficient to protect our proprietary platform or otherwise provide any competitive advantage, nor can we assure you that our licenses are or will remain in force. Other parties have developed or may develop technologies that may be related or competitive with our approach, and may have filed or may file patent applications and may have been issued or may be issued patents with claims that overlap or conflict with our patent applications, either by claiming the same compounds, formulations or methods or by claiming subject matter that could dominate our patent position. In addition, the laws of foreign countries may not protect our rights to the same extent as the laws of the United States. Furthermore, patents have a limited lifespan. In the United States, the natural expiration of a patent is generally twenty years after it is filed. Various extensions may be available; however, the life of a patent, and the protection it affords, is limited. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our patent portfolio may not provide us with adequate and continuing patent protection sufficient to exclude others from commercializing products similar to our product candidates. In addition, the patent portfolio licensed to us is, or may be, licensed to third parties, such as outside our field, and such third parties may have certain enforcement rights. Thus, patents licensed to us could be put at risk of being invalidated or interpreted narrowly in litigation filed by or against another licensee or in administrative proceedings brought by or against another licensee in response to such litigation or for other reasons.

Even if they are unchallenged, our owned and licensed patents and pending patent applications, if issued, may not provide us with any meaningful protection or prevent competitors from designing around our patent claims to circumvent our patents by developing similar or alternative technologies or therapeutics in a non-infringing manner. For example, a third party may develop a competitive therapy that provides benefits similar to one or more of our product candidates but falls outside the scope of our patent protection or license rights. If the patent protection provided by the patents and patent applications we hold or pursue with respect to our product candidates is not sufficiently broad to impede such competition, our ability to successfully commercialize our product candidates could be negatively affected, which would harm our business. Currently, a significant portion of our patents and patent applications are in-licensed, though similar risks would apply to any patents or patent applications that we now own or may own or in-license in the future.

We, or any future partners, collaborators, or licensees, may fail to identify patentable aspects of inventions made in the course of development and commercialization activities before it is too late to obtain patent protection on them. Therefore, we may miss potential opportunities to strengthen our patent position.

It is possible that defects of form in the preparation or filing of our patents or patent applications may exist, or may arise in the future, for example with respect to proper priority claims, inventorship, claim scope, or requests for patent term adjustments. If we or our partners, collaborators, licensees, or licensors, whether current

or future, fail to establish, maintain or protect such patents and other intellectual property rights, such rights may be reduced or eliminated. If our partners, collaborators, licensees, or licensors, are not fully cooperative or disagree with us as to the prosecution, maintenance or enforcement of any patent rights, such patent rights could be compromised. If there are material defects in the form, preparation, prosecution, or enforcement of our patents or patent applications, such patents may be invalid and/or unenforceable, and such applications may never result in valid, enforceable patents. Any of these outcomes could impair our ability to prevent competition from third parties, which may have an adverse impact on our business.

The patent position of biotechnology and pharmaceutical companies carries uncertainty. In addition, the determination of patent rights with respect to pharmaceutical compounds commonly involves complex legal and factual questions, which are dependent upon the current legal and intellectual property context, extant legal precedent and interpretations of the law by individuals. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights are characterized by uncertainty.

Pending patent applications cannot be enforced against third parties practicing the technology claimed in such applications unless and until a patent issues from such applications. Assuming the other requirements for patentability are met, currently, the first to file a patent application is generally entitled to the patent. However, prior to March 16, 2013, in the United States, the first to invent was entitled to the patent. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are not published until 18 months after filing, or in some cases not at all. Therefore, we cannot be certain that we were the first to make the inventions claimed in our patents or pending patent applications, or that we were the first to file for patent protection of such inventions. Similarly, we cannot be certain that parties from whom we do or may license or purchase patent rights were the first to make relevant claimed inventions, or were the first to file for patent protection for them. If third parties have filed prior patent applications on inventions claimed in our patents or applications that were filed on or before March 15, 2013, an interference proceeding in the United States can be initiated by such third parties to determine who was the first to invent any of the subject matter covered by the patent claims of our applications. If third parties have filed such prior applications after March 15, 2013, a derivation proceeding in the United States can be initiated by such third parties to determine whether our invention was derived from theirs.

Moreover, because the issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, our patents or pending patent applications may be challenged in the courts or patent offices in the United States and abroad. There is no assurance that all of the potentially relevant prior art relating to our patents and patent applications has been found. If such prior art exists, it may be used to invalidate a patent, or may prevent a patent from issuing from a pending patent application. For example, such patent filings may be subject to a third-party submission of prior art to the U.S. Patent and Trademark Office, or USPTO, or to other patent offices around the world. Alternately or additionally, we may become involved in post-grant review procedures, oppositions, derivation proceedings, *ex parte* reexaminations, *inter partes* review, supplemental examinations, or interference proceedings or challenges in district court, in the United States or in various foreign patent offices, including both national and regional, challenging patents or patent applications in which we have rights, including patents on which we rely to protect our business. An adverse determination in any such challenges may result in loss of the patent or in patent or patent application claims being narrowed, invalidated or held unenforceable, in whole or in part, or in denial of the patent application or loss or reduction in the scope of one or more claims of the patent or patent application, any of which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of our technology and products. In addition, given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized.

Pending and future patent applications may not result in patents being issued that protect our business, in whole or in part, or which effectively prevent others from commercializing competitive products. Competitors may also be able to design around our patents. Changes in either the patent laws or interpretation of the patent

laws in the United States and other countries may diminish the value of our patents or narrow the scope of our patent protection. In addition, the laws of foreign countries may not protect our rights to the same extent or in the same manner as the laws of the United States. For example, patent laws in various jurisdictions, including significant commercial markets such as Europe, restrict the patentability of methods of treatment of the human body more than United States law does. If these developments were to occur, they could have a material adverse effect on our ability to generate revenue.

The patent application process is subject to numerous risks and uncertainties, and there can be no assurance that we or any of our future development partners will be successful in protecting our product candidates by obtaining and defending patents. These risks and uncertainties include the following:

- the USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other provisions during the patent process. There are situations in which noncompliance can result in abandonment or lapse of a patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, competitors might be able to enter the market earlier than would otherwise have been the case;

- patent applications may not result in any patents being issued;

- patents that may be issued or in-licensed may be challenged, invalidated, modified, revoked, circumvented, found to be unenforceable or otherwise may not provide any competitive advantage;

- our competitors, many of whom have substantially greater resources and many of whom have made significant investments in competing technologies, may seek or may have already obtained patents that will limit, interfere with or eliminate our ability to make, use, and sell our potential product candidates;

- there may be significant pressure on the U.S. government and international governmental bodies to limit the scope of patent protection both inside and outside the United States for disease treatments that prove successful, as a matter of public policy regarding worldwide health concerns; and

- countries other than the United States may have patent laws less favorable to patentees than those upheld by U.S. courts, allowing foreign competitors a better opportunity to create, develop and market competing product candidates.

Issued patents that we have or may obtain or license may not provide us with any meaningful protection, prevent competitors from competing with us or otherwise provide us with any competitive advantage. Our competitors may be able to circumvent our patents by developing similar or alternative technologies or products in a non-infringing manner. Our competitors may also seek approval to market their own products similar to or otherwise competitive with our products. Alternatively, our competitors may seek to market generic versions of any approved products by submitting ANDAs to the FDA in which they claim that patents owned or licensed by us are invalid, unenforceable or not infringed. In these circumstances, we may need to defend or assert our patents, or both, including by filing lawsuits alleging patent infringement. In any of these types of proceedings, a court or other agency with jurisdiction may find our patents invalid or unenforceable, or that our competitors are competing in a non-infringing manner. Thus, even if we have valid and enforceable patents, these patents still may not provide protection against competing products or processes sufficient to achieve our business objectives.

In addition, we rely on the protection of our trade secrets and proprietary, unpatented know-how. Although we have taken steps to protect our trade secrets and unpatented know-how, including entering into confidentiality agreements with third parties, and confidential information and invention assignment agreements with employees, consultants, collaborators, vendors, and advisors, we cannot provide any assurances that all such

agreements have been duly executed, and third parties may still obtain this information or may come upon this or similar information independently. It is possible that technology relevant to our business will be independently developed by a person who is not a party to such a confidentiality or invention assignment agreement. We may not be able to prevent the unauthorized disclosure or use of our technical knowledge or trade secrets by consultants, collaborators, vendors, advisors, former employees and current employees. Furthermore, if the parties to our confidentiality agreements breach or violate the terms of these agreement, we may not have adequate remedies for any such breach or violation, and we could lose our trade secrets as a consequence of such breaches or violations. Our trade secrets could otherwise become known or be independently discovered by our competitors. Additionally, if the steps taken to maintain our trade secrets are deemed inadequate, we may have insufficient recourse against third parties for misappropriating our trade secrets. If any of these events occurs or if we otherwise lose protection for our trade secrets or proprietary know-how, our business may be harmed.

We depend on intellectual property licensed from third parties and termination of any of these licenses could result in the loss of significant rights, which would harm our business.

In March 2017, we entered into a license agreement with Novartis, or the Novartis License, pursuant to which we were granted an exclusive, field-restricted, worldwide license to certain intellectual property rights owned or controlled by Novartis, including patents, patent applications, proprietary information, know-how and other intellectual property, to develop, commercialize and sell one or more therapeutic products comprising RTB101 or RTB101 and everolimus in a fixed dose combination.

We are dependent on these patents, know-how and proprietary technology, licensed from Novartis. Any termination of this license, or a finding that such intellectual property lacks legal effect, could result in the loss of significant rights and could harm our ability to commercialize any product candidates. See the section entitled “Business—Intellectual Property” for additional information regarding our license agreements.

Disputes may also arise between us and our licensor, our licensor and its licensors, or us and third parties that co-own intellectual property with our licensor or its licensors, regarding intellectual property subject to a license agreement, including those relating to:

- the scope of rights, if any, granted under the license agreement and other interpretation-related issues;
- whether and the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the license agreement;
- whether our licensor or its licensor had the right to grant the license agreement;
- whether third parties are entitled to compensation or equitable relief, such as an injunction, for our use of the intellectual property without their authorization;
- our right to sublicense patent and other rights to third parties under collaborative development relationships;
- whether we are complying with our obligations with respect to the use of the licensed technology in relation to our development and commercialization of product candidates;
- our involvement in the prosecution of the licensed patents and our licensors’ overall patent enforcement strategy;
- the allocation of ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and by us and our partners; and
- the amounts of royalties, milestones or other payments due under the license agreement.

If disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on acceptable terms, or are insufficient to provide us the necessary rights to use the intellectual property, we may be unable to successfully develop and commercialize the affected product candidates. If we or any such licensors fail to adequately protect this intellectual property, our ability to commercialize our products could suffer.

Novartis may partially terminate the license agreement with respect to everolimus if we fail or cease for three years to use commercially reasonable efforts to research, develop and commercialize a product using everolimus, provided that our license related to RTB101 and Novartis's license to our improvements related to everolimus will continue. Additionally, either party may terminate the Novartis License if the other party commits a material breach and fails to cure such breach within 60 days after written notice. If Novartis unilaterally terminates the Novartis License, the research and development of RTB101 or RTB101 and everolimus in a fixed dose combination would be suspended, and we may be unable to research, develop and license future product candidates.

We may be required to pay certain milestones and royalties under our license agreements with third-party licensors.

Under our current and future license agreements, we may be required to pay milestones and royalties based on our revenues from sales of our products utilizing the technologies licensed or sublicensed from Novartis or other licensors and these royalty payments could adversely affect the overall profitability for us of any products that we may seek to commercialize. In order to maintain our license rights under current and future license agreements, we may need to meet certain specified milestones, subject to certain cure provisions, in the development of our product candidates and in the raising of funding. In addition, these agreements may contain diligence milestones and we may not be successful in meeting all of the milestones in the future on a timely basis or at all, which could result in termination of our rights under such agreements. We may need to outsource and rely on third parties for many aspects of the clinical development, sales and marketing of our products covered under our current and future license agreements. Delay or failure by these third parties could adversely affect the continuation of our license agreements with their third-party licensors.

It is difficult and costly to protect our intellectual property and our proprietary technologies, and we may not be able to ensure their protection.

Our commercial success will depend in part on obtaining and maintaining patent protection and trade secret protection for the use, formulation and structure of our products and product candidates, the methods used to manufacture them, the related therapeutic targets and associated methods of treatment as well as on successfully defending these patents against potential third-party challenges. Our ability to protect our products and product candidates from unauthorized making, using, selling, offering to sell or importing by third parties is dependent on the extent to which we have rights under valid and enforceable patents that cover these activities.

The patent positions of pharmaceutical, biotechnology and other life sciences companies can be highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. Changes in either the patent laws or in interpretations of patent laws in the United States and other countries may diminish the value of our intellectual property. Further, the determination that a patent application or patent claim meets all of the requirements for patentability is a subjective determination based on the application of law and jurisprudence. The ultimate determination by the USPTO or by a court or other trier of fact in the United States, or corresponding foreign national patent offices or courts, on whether a claim meets all requirements of patentability cannot be assured. Although we have conducted searches for third-party publications, patents and other information that may affect the patentability of claims in our various patent applications and patents, we cannot be certain that all relevant information has been identified. Accordingly, we cannot predict the breadth of claims that may be allowed or enforced in our owned patents or patent applications, in our licensed patents or patent applications or in third-party patents.

We cannot provide assurances that any of our patent applications will be found to be patentable, including over our own or our licensors' prior art publications or patent literature, or will issue as patents. Neither can we make assurances as to the scope of any claims that may issue from our pending and future patent applications nor to the outcome of any proceedings by any potential third parties that could challenge the patentability, validity or enforceability of our patents and patent applications in the United States or foreign jurisdictions. Any such challenge, if successful, could limit patent protection for our products and product candidates and/or materially harm our business.

The degree of future protection for our proprietary rights is uncertain because legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep our competitive advantage. For example:

- we may not be able to generate sufficient data to support full patent applications that protect the entire breadth of developments in one or more of our programs;
- it is possible that one or more of our pending patent applications will not become an issued patent or, if issued, that the patent(s) claims will have sufficient scope to protect our technology, provide us with a basis for commercially viable products or provide us with any competitive advantages;
- if our pending applications issue as patents, they may be challenged by third parties as not infringed, invalid or unenforceable under United States or foreign laws;
- if issued, the patents under which we hold rights may not be valid or enforceable;
- we may not successfully commercialize RTB101, alone or in combination with everolimus, if approved, before our relevant patents expire;
- we may not be the first to make the inventions covered by each of our patents and pending patent applications; or
- we may not develop additional proprietary technologies or product candidates that are separately patentable.

In addition, to the extent that we are unable to obtain and maintain patent protection for one of our products or product candidates or in the event that such patent protection expires, it may no longer be cost-effective to extend our portfolio by pursuing additional development of a product or product candidate for follow-on indications.

We also may rely on trade secrets to protect our technologies or products, especially where we do not believe patent protection is appropriate or obtainable. Also, we cannot provide any assurances that any of our licensed patents have claims with a scope sufficient to protect our technology or otherwise provide any competitive advantage, nor can we assure you that our licenses are or will remain in full force or effect, in which case we would similarly rely on trade secrets. However, trade secrets are difficult to protect. Although we use reasonable efforts to protect our trade secrets, our employees, consultants, contractors, outside scientific collaborators and other advisers may unintentionally or willfully disclose our information to competitors. Enforcing a claim that a third-party entity illegally obtained and is using any of our trade secrets is expensive and time-consuming, and the outcome is unpredictable. In addition, courts outside the United States are sometimes less willing to protect trade secrets. Moreover, our competitors may independently develop equivalent knowledge, methods and know-how. Notably, proprietary technology protected by a trade secret does not preempt the patenting of independently developed equivalent technology, even if such equivalent technology is invented subsequent to the technology protected by a trade secret.

Obtaining and maintaining patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and applications are required to be paid to the USPTO and various governmental patent agencies outside of the United States in several stages over the lifetime of the patents and applications. The USPTO and various non-U.S. governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process and after a patent has issued. There are situations in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such a circumstance, competitors may be able to enter the market earlier than otherwise would be the case. Under the terms of some of our current and future licenses, we may not have the ability to maintain patents or prosecute patent applications in the portfolio, and may therefore have to rely on third parties to comply with these requirements.

Patent terms may be inadequate to protect our competitive position on our products for an adequate amount of time.

Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. We expect to seek extensions of patent terms in the United States and, if available, in other countries where we are prosecuting patents. In the United States, the Drug Price Competition and Patent Term Restoration Act of 1984 permits a patent term extension of up to five years beyond the normal expiration of the patent, which is limited to the approved indication (or any additional indications approved during the period of extension). We might not be granted an extension because of, for example, failure to apply within applicable periods, failure to apply prior to the expiration of relevant patents or otherwise failure to satisfy any of the numerous applicable requirements. Moreover, the applicable authorities, including the FDA and the USPTO in the United States, and any equivalent regulatory authority in other countries, may not agree with our assessment of whether such extensions are available, and may refuse to grant extensions to our patents, or may grant more limited extensions than we request. If this occurs, our competitors may be able to obtain approval of competing products following our patent expiration by referencing our clinical and preclinical data and launch their product earlier than might otherwise be the case. If this were to occur, it could have a material adverse effect on our ability to generate revenue.

Changes to patent law in the United States and other jurisdictions could diminish the value of patents in general, thereby impairing our ability to protect our products.

As is the case with other biopharmaceutical companies, our commercial success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biopharmaceutical industry involves both technological and legal complexity and is therefore costly, time consuming and inherently uncertain. Recent wide-ranging patent reform legislation in the United States, including the Leahy-Smith America Invents Act, or the America Invents Act, could increase those uncertainties and costs. The America Invents Act was signed into law on September 16, 2011, and many of the substantive changes became effective on March 16, 2013. The America Invents Act reforms United States patent law in part by changing the U.S. patent system from a “first to invent” system to a “first inventor to file” system, expanding the definition of prior art, and developing a post-grant review system. This legislation changes United States patent law in a way that may weaken our ability to obtain patent protection in the United States for those applications filed after March 16, 2013.

Further, the America Invents Act created new procedures to challenge the validity of issued patents in the United States, including post-grant review and *inter partes* review proceedings, which some third parties have been using to cause the cancellation of selected or all claims of issued patents of competitors. For a patent with

an effective filing date of March 16, 2013 or later, a petition for post-grant review can be filed by a third party in a nine month window from issuance of the patent. A petition for *inter partes* review can be filed immediately following the issuance of a patent if the patent has an effective filing date prior to March 16, 2013. A petition for *inter partes* review can be filed after the nine month period for filing a post-grant review petition has expired for a patent with an effective filing date of March 16, 2013 or later. Post-grant review proceedings can be brought on any ground of invalidity, whereas *inter partes* review proceedings can only raise an invalidity challenge based on published prior art and patents. These adversarial actions at the USPTO review patent claims without the presumption of validity afforded to U.S. patents in lawsuits in U.S. federal courts, and use a lower burden of proof than used in litigation in U.S. federal courts. Therefore, it is generally considered easier for a competitor or third party to have a U.S. patent invalidated in a USPTO post-grant review or *inter partes* review proceeding than invalidated in a litigation in a U.S. federal court. If any of our patents are challenged by a third party in such a USPTO proceeding, there is no guarantee that we or our licensors or collaborators will be successful in defending the patent, which may result in a loss of the challenged patent right to us.

In addition, recent court rulings in cases such as *Association for Molecular Pathology v. Myriad Genetics, Inc., BRCA1- & BRCA2-Based Hereditary Cancer Test Patent Litigation, and Promega Corp. v. Life Technologies Corp.* have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents once obtained. Depending on future actions by the U.S. Congress, the U.S. courts, the USPTO and the relevant law-making bodies in other countries, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future.

We may not be able to enforce our intellectual property rights throughout the world.

Filing, prosecuting, enforcing and defending patents on our product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. The requirements for patentability may differ in certain countries, particularly in developing countries; thus, even in countries where we do pursue patent protection, there can be no assurance that any patents will issue with claims that cover our products.

Moreover, our ability to protect and enforce our intellectual property rights may be adversely affected by unforeseen changes in foreign intellectual property laws. Additionally, laws of some countries outside of the United States and Europe do not afford intellectual property protection to the same extent as the laws of the United States and Europe. Many companies have encountered significant problems in protecting and defending intellectual property rights in certain foreign jurisdictions. The legal systems of some countries, including India, China and other developing countries, do not favor the enforcement of patents and other intellectual property rights. This could make it difficult for us to stop the infringement of our patents or the misappropriation of our other intellectual property rights. For example, many foreign countries have compulsory licensing laws under which a patent owner must grant licenses to third parties. Consequently, we may not be able to prevent third parties from practicing our inventions in certain countries outside the United States and Europe or from selling or importing products made from our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop and market their own products and, further, may export otherwise infringing products to territories where we have patent protection, if our ability to enforce our patents to stop infringing activities is inadequate. These products may compete with our products, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Agreements through which we license patent rights may not give us sufficient rights to permit us to pursue enforcement of our licensed patents or defense of any claims asserting the invalidity of these patents (or control of such enforcement or defense) of such patent rights in all relevant jurisdictions as requirements may vary.

Proceedings to enforce our patent rights, whether or not successful, could result in substantial costs and divert our efforts and resources from other aspects of our business. Moreover, such proceedings could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Furthermore, while we intend to protect our intellectual property rights in major markets for our products, we cannot ensure that we will be able to initiate or maintain similar efforts in all jurisdictions in which we may wish to market our products, if approved. Accordingly, our efforts to protect our intellectual property rights in such countries may be inadequate.

Others may challenge inventorship or claim an ownership interest in our intellectual property which could expose it to litigation and have a significant adverse effect on its prospects.

A third party or former employee or collaborator may claim an ownership interest in one or more of our or our licensors' patents or other proprietary or intellectual property rights. A third party could bring legal actions against us and seek monetary damages and/or enjoin clinical testing, manufacturing and marketing of the affected product or products. While we are presently unaware of any claims or assertions by third-parties with respect to our patents or other intellectual property, we cannot guarantee that a third party will not assert a claim or an interest in any of such patents or intellectual property. If we become involved in any litigation, it could consume a substantial portion of our resources, and cause a significant diversion of effort by our technical and management personnel.

If we are sued for infringing intellectual property rights of third parties, such litigation could be costly and time consuming and could prevent or delay us from developing or commercializing our product candidates.

Our commercial success depends, in part, on our ability to develop, manufacture, market and sell our product candidates without infringing the intellectual property and other proprietary rights of third parties. Third parties may have U.S. and non-U.S. issued patents and pending patent applications relating to compounds, methods of manufacturing compounds and/or methods of use for the treatment of the disease indications for which we are developing our product candidates. If any third-party patents or patent applications are found to cover our product candidates or their methods of use or manufacture, we may not be free to manufacture or market our product candidates as planned without obtaining a license, which may not be available on commercially reasonable terms, or at all.

There is a substantial amount of intellectual property litigation in the biotechnology and pharmaceutical industries, and we may become party to, or threatened with, litigation or other adversarial proceedings regarding intellectual property rights with respect to our products candidates, including interference and post-grant proceedings before the USPTO. There may be third-party patents or patent applications with claims to materials, formulations, methods of manufacture or methods for treatment related to the composition, use or manufacture of our product candidates. We cannot guarantee that any of our patent searches or analyses including, but not limited to, the identification of relevant patents, the scope of patent claims or the expiration of relevant patents are complete or thorough, nor can we be certain that we have identified each and every patent and pending application in the United States and abroad that is relevant to or necessary for the commercialization of our product candidates in any jurisdiction. Because patent applications can take many years to issue, there may be currently pending patent applications which may later result in issued patents that our product candidates may be accused of infringing. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. Accordingly, third parties may assert infringement claims against us based on intellectual property rights that exist now or arise in the future. The outcome of intellectual property litigation is subject to uncertainties that cannot be adequately quantified in advance. The pharmaceutical and biotechnology industries have produced a significant number of patents, and it may not always be clear to industry participants, including us, which patents cover various types of products or methods of use or manufacture. The scope of protection afforded by a patent is subject to interpretation by the courts, and the interpretation is not always uniform. If we were sued for patent infringement, we would need to demonstrate that

our product candidates, products or methods either do not infringe the patent claims of the relevant patent or that the patent claims are invalid or unenforceable, and we may not be able to do this. Proving invalidity is difficult. For example, in the United States, proving invalidity requires a showing of clear and convincing evidence to overcome the presumption of validity enjoyed by issued patents. Even if we are successful in these proceedings, we may incur substantial costs and the time and attention of our management and scientific personnel could be diverted in pursuing these proceedings, which could significantly harm our business and operating results. In addition, we may not have sufficient resources to bring these actions to a successful conclusion.

If we are found to infringe a third party's intellectual property rights, we could be forced, including by court order, to cease developing, manufacturing or commercializing the infringing product candidate or product. Alternatively, we may be required to obtain a license from such third party in order to use the infringing technology and continue developing, manufacturing or marketing the infringing product candidate or product. If we were required to obtain a license to continue to manufacture or market the affected product, we may be required to pay substantial royalties or grant cross-licenses to our patents. We cannot, however, assure you that any such license will be available on acceptable terms, if at all. Ultimately, we could be prevented from commercializing a product, or be forced to cease some aspect of our business operations as a result of claims of patent infringement or violation of other intellectual property rights, Further, the outcome of intellectual property litigation is subject to uncertainties that cannot be adequately quantified in advance, including the demeanor and credibility of witnesses and the identity of any adverse party. This is especially true in intellectual property cases that may turn on the testimony of experts as to technical facts upon which experts may reasonably disagree. Furthermore, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors access to the same technologies licensed to us; alternatively or additionally it could include terms that impede or destroy our ability to compete successfully in the commercial marketplace. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees if we are found to have willfully infringed a patent. A finding of infringement could prevent us from commercializing our product candidates or force us to cease some of our business operations, which could harm our business. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business.

We may be subject to claims by third parties asserting that our employees or we have misappropriated their intellectual property, or claiming ownership of what we regard as our own intellectual property.

Many of our current and former employees and our licensors' current and former employees, including our senior management, were previously employed at universities or at other biotechnology or pharmaceutical companies, including some which may be competitors or potential competitors. Some of these employees, including members of our senior management, may have executed proprietary rights, non-disclosure and non-competition agreements, or similar agreements, in connection with such previous employment. Although we try to ensure that our employees do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or these employees have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such third party. Litigation may be necessary to defend against such claims. If we fail in defending any such claims, in addition to paying monetary damages, we may sustain damages or lose key personnel, valuable intellectual property rights or the personnel's work product, which could hamper or prevent commercialization of our technology, which could materially affect our commercial development efforts. Such intellectual property rights could be awarded to a third party, and we could be required to obtain a license from such third party to commercialize our technology or products. Such a license may not be available on commercially reasonable terms or at all. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management.

In addition, while we typically require our employees, consultants and contractors who may be involved in the development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who in fact develops intellectual property that we regard as our own, which may result in claims by or against us related to the ownership of such

intellectual property. If we fail in prosecuting or defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights. Even if we are successful in prosecuting or defending against such claims, litigation could result in substantial costs and be a distraction to our senior management and scientific personnel.

We may become involved in lawsuits to protect or enforce our patents or other intellectual property, which could be expensive, time consuming and unsuccessful.

Competitors may infringe our patents, trademarks, copyrights or other intellectual property. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time consuming and divert the time and attention of our management and scientific personnel. Any claims we assert against perceived infringers could provoke these parties to assert counterclaims against us alleging that we infringe their patents, in addition to counterclaims asserting that our patents are invalid or unenforceable, or both. In any patent infringement proceeding, there is a risk that a court will decide that a patent of ours is invalid or unenforceable, in whole or in part, and that we do not have the right to stop the other party from using the invention at issue. There is also a risk that, even if the validity of such patents is upheld, the court will construe the patent's claims narrowly or decide that we do not have the right to stop the other party from using the invention at issue on the grounds that our patent claims do not cover the invention. An adverse outcome in a litigation or proceeding involving one or more of our patents could limit our ability to assert those patents against those parties or other competitors, and may curtail or preclude our ability to exclude third parties from making and selling similar or competitive products. Similarly, if we assert trademark infringement claims, a court may determine that the marks we have asserted are invalid or unenforceable, or that the party against whom we have asserted trademark infringement has superior rights to the trademarks in question. In this case, we could ultimately be forced to cease use of such trademarks.

Even if we establish infringement, the court may decide not to grant an injunction against further infringing activity and instead award only monetary damages, which may or may not be an adequate remedy. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during litigation. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could adversely affect the price of shares of our common stock. Moreover, there can be no assurance that we will have sufficient financial or other resources to file and pursue such infringement claims, which typically last for years before they are concluded. Even if we ultimately prevail in such claims, the monetary cost of such litigation and the diversion of the attention of our management and scientific personnel could outweigh any benefit we receive as a result of the proceedings.

Additionally, for certain of our existing and future in-licensed patent rights, we may not have the right to bring suit for infringement and may have to rely on third parties to enforce these rights for us. If we cannot or choose not to take action against those we believe infringe our intellectual property rights, we may have difficulty competing in certain markets where such potential infringers conduct their business, and our commercialization efforts may suffer as a result.

If our trademarks and trade names are not adequately protected, then we may not be able to build name recognition in our trademarks of interest and our business may be adversely affected.

Our trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. We rely on both registration and common law protection for our trademarks. We may not be able to protect our rights to these trademarks and trade names or may be forced to stop using these names, which we need for name recognition by potential partners or customers in our markets of interest. During trademark registration proceedings, we may receive rejections. Although we would be given an opportunity to respond to those rejections, we may be unable to overcome such rejections. In addition, in the

USPTO and in comparable agencies in many foreign jurisdictions, third parties are given an opportunity to oppose pending trademark applications and to seek to cancel registered trademarks. Opposition or cancellation proceedings may be filed against our trademarks, and our trademarks may not survive such proceedings. Moreover, any name we propose to use for our products in the United States must be approved by the FDA, regardless of whether we have registered it, or applied to register it, as a trademark. The FDA typically conducts a review of proposed product names, including an evaluation of potential for confusion with other product names. If the FDA objects to any of our proposed product names, we may be required to expend significant additional resources in an effort to identify a usable substitute name that would qualify under applicable trademark laws, not infringe the existing rights of third parties and be acceptable to the FDA. If we are unable to establish name recognition based on our trademarks and trade names, we may not be able to compete effectively and our business may be adversely affected.

Risks Related to Our Dependence on Third Parties

We rely on third parties to assist in conducting our clinical trials. If they do not perform satisfactorily, we may not be able to obtain regulatory approval or commercialize our product candidates, or such approval or commercialization may be delayed, and our business could be substantially harmed.

We do not independently conduct clinical trials of any of our product candidates. We have relied upon and plan to continue to rely on third parties, such as contract research organizations, clinical data management organizations, medical institutions and clinical investigators, to conduct these clinical trials and expect to rely on these third parties to conduct clinical trials of any other product candidate that we develop. Any of these third parties may terminate their engagements with us under certain circumstances. We may not be able to enter into alternative arrangements or do so on commercially reasonable terms. In addition, there is a natural transition period when a new CRO begins work. As a result, delays may occur, which could negatively impact our ability to meet our expected clinical development timelines and harm our business, financial condition and prospects.

Further, although our reliance on these third parties for clinical development activities limits our control over these activities, we remain responsible for ensuring that each of our trials is conducted in accordance with the applicable protocol, legal and regulatory requirements and scientific standards. For example, notwithstanding the obligations of a CRO for a trial of one of our product candidates, we remain responsible for ensuring that each of our clinical trials is conducted in accordance with the general investigational plan and protocols for the trial. Moreover, the FDA requires us to comply with requirements, commonly referred to as Good Clinical Practices, or GCPs, for conducting, recording and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity and confidentiality of trial participants are protected. The FDA enforces these GCPs through periodic inspections of trial sponsors, principal investigators, clinical trial sites and IRBs. If we or our third-party contractors fail to comply with applicable GCPs, the clinical data generated in our clinical trials may be deemed unreliable and the FDA may require us to perform additional clinical trials before approving our product candidates, which would delay the regulatory approval process. We cannot be certain that, upon inspection, the FDA will determine that any of our clinical trials comply with GCPs. We are also required to register certain clinical trials and post the results of completed clinical trials on a government-sponsored database, ClinicalTrials.gov, within certain timeframes. Failure to do so can result in fines, adverse publicity and civil and criminal sanctions.

Furthermore, the third parties conducting clinical trials on our behalf are not our employees, and except for remedies available to us under our agreements with such contractors, we cannot control whether or not they devote sufficient time, skill and resources to our ongoing development programs. These contractors may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical trials or other drug development activities, which could impede their ability to devote appropriate time to our clinical programs. If these third parties, including clinical investigators, do not successfully carry out their contractual duties, meet expected deadlines or conduct our clinical trials in accordance with regulatory requirements or our stated protocols, we may not be able to obtain, or may be delayed

in obtaining, regulatory approvals for our product candidates. If that occurs, we will not be able to, or may be delayed in our efforts to, successfully commercialize our product candidates. In such an event, our financial results and the commercial prospects for any product candidates that we seek to develop could be harmed, our costs could increase and our ability to generate revenues could be delayed, impaired or foreclosed.

We also rely on other third parties to store and distribute drug supplies for our clinical trials. Any performance failure on the part of our distributors could delay clinical development or regulatory approval of our product candidates or commercialization of any resulting products, producing additional losses and depriving us of potential product revenue.

Our use of third parties to manufacture our product candidates and products which we are studying in combination with our product candidates may increase the risk that we will not have sufficient quantities of our product candidates, products, or necessary quantities of such materials on time or at an acceptable cost.

We do not own or operate manufacturing facilities for the production of clinical or commercial quantities of our product candidates, and we lack the resources and the capabilities to do so. As a result, we currently rely on third parties for the manufacture and supply of the active pharmaceutical ingredients, or API, in our product candidates. Our current strategy is to outsource all manufacturing of our product candidates to third parties.

We currently engage one third-party manufacturer to provide the active pharmaceutical ingredient, or API, and four other third-party manufacturers to provide services for the final drug product formulation of RTB101 that is being used in our clinical trials. Although we believe that there are several potential alternative manufacturers who could manufacture RTB101 and everolimus, we may incur added costs and delays in identifying and qualifying any such replacement. In addition, we typically order raw materials and services on a purchase order basis and do not enter into long-term dedicated capacity or minimum supply arrangements with any commercial manufacturer. There is no assurance that we will be able to timely secure needed supply arrangements on satisfactory terms, or at all. Our failure to secure these arrangements as needed could have a material adverse effect on our ability to complete the development of our product candidates or, to commercialize them, if approved. We may be unable to conclude agreements for commercial supply with third-party manufacturers, or may be unable to do so on acceptable terms. There may be difficulties in scaling up to commercial quantities and formulation of RTB101, alone or in combination with everolimus, and the costs of manufacturing could be prohibitive.

Even if we are able to establish and maintain arrangements with third-party manufacturers, reliance on third-party manufacturers entails additional risks, including:

- the failure of the third-party manufacturer to comply with applicable regulatory requirements and reliance on third-parties for manufacturing process development, regulatory compliance and quality assurance;
- manufacturing delays if our third-party manufacturers give greater priority to the supply of other products over our product candidates or otherwise do not satisfactorily perform according to the terms of the agreement between us;
- limitations on supply availability resulting from capacity and scheduling constraints of third-parties;
- the possible breach of manufacturing agreements by third-parties because of factors beyond our control;
- the possible termination or non-renewal of the manufacturing agreements by the third-party, at a time that is costly or inconvenient to us; and

- the possible misappropriation of our proprietary information, including our trade secrets and know-how.

If we do not maintain our key manufacturing relationships, we may fail to find replacement manufacturers or develop our own manufacturing capabilities, which could delay or impair our ability to obtain regulatory approval for our products. If we do find replacement manufacturers, we may not be able to enter into agreements with them on terms and conditions favorable to us and there could be a substantial delay before new facilities could be qualified and registered with the FDA and other foreign regulatory authorities.

If any of our product candidates are approved by any regulatory agency, we intend to utilize arrangements with third-party contract manufacturers for the commercial production of those products. This process is difficult and time consuming and we may face competition for access to manufacturing facilities as there are a limited number of contract manufacturers operating under cGMPs that are capable of manufacturing our product candidates. Consequently, we may not be able to reach agreement with third-party manufacturers on satisfactory terms, which could delay our commercialization.

Our failure, or the failure of our third-party manufacturers, to comply with applicable regulations could result in sanctions being imposed on us, including clinical holds, fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, seizures or voluntary recalls of product candidates, operating restrictions and criminal prosecutions, any of which could significantly affect supplies of our product candidates. The facilities used by our contract manufacturers to manufacture our product candidates must be evaluated by the FDA pursuant to inspections that will be conducted after we submit our NDA to the FDA. We do not control the manufacturing process of, and are completely dependent on, our contract manufacturing partners for compliance with cGMPs. If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA or others, we may not be able to secure and/or maintain regulatory approval for our product manufactured at these facilities. In addition, we have no control over the ability of our contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA finds deficiencies or a comparable foreign regulatory authority does not approve these facilities for the manufacture of our product candidates or if it withdraws any such approval in the future, we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain regulatory approval for or market our product candidates, if approved. Contract manufacturers may face manufacturing or quality control problems causing drug substance production and shipment delays or a situation where the contractor may not be able to maintain compliance with the applicable cGMP requirements. Any failure to comply with cGMP requirements or other FDA, EMA and comparable foreign regulatory requirements could adversely affect our clinical research activities and our ability to develop our product candidates and market our products, if approved.

The FDA and other foreign regulatory authorities require manufacturers to register manufacturing facilities. The FDA and corresponding foreign regulators also inspect these facilities to confirm compliance with cGMPs. Contract manufacturers may face manufacturing or quality control problems causing drug substance production and shipment delays or a situation where the contractor may not be able to maintain compliance with the applicable cGMP requirements. Any failure to comply with cGMP requirements or other FDA, EMA and comparable foreign regulatory requirements could adversely affect our clinical research activities and our ability to develop our product candidates and market our products following approval.

If any third-party manufacturer of our product candidates is unable to increase the scale of its production of our product candidates, and/or increase the product yield of its manufacturing, then our costs to manufacture the product may increase and commercialization may be delayed.

In order to produce sufficient quantities to meet the demand for clinical trials and, if approved, subsequent commercialization of RTB101, alone or in combination with everolimus, or any other product candidates that we may develop, our third party manufacturer will be required to increase its production and

optimize its manufacturing processes while maintaining the quality of the product. The transition to larger scale production could prove difficult. In addition, if our third party manufacturer is not able to optimize its manufacturing process to increase the product yield for our product candidates, or if it is unable to produce increased amounts of our product candidates while maintaining the quality of the product, then we may not be able to meet the demands of clinical trials or market demands, which could decrease our ability to generate profits and have a material adverse impact on our business and results of operation.

We may need to maintain licenses for active ingredients from third parties to develop and commercialize some of our product candidates, which could increase our development costs and delay our ability to commercialize those product candidates.

Should we decide to use active pharmaceutical ingredients in any of our product candidates that are proprietary to one or more third parties, we would need to maintain licenses to those active ingredients from those third parties. If we are unable to gain or continue to access rights to these active ingredients prior to conducting preclinical toxicology studies intended to support clinical trials, we may need to develop alternate product candidates from these programs by either accessing or developing alternate active ingredients, resulting in increased development costs and delays in commercialization of these product candidates. If we are unable to gain or maintain continued access rights to the desired active ingredients on commercially reasonable terms or develop suitable alternate active ingredients, we may not be able to commercialize product candidates from these programs.

Use of third parties to conduct testing of our product candidates in tissues or animals may increase the risk that we will have unsuitable or invalidated data for regulatory submissions and approval.

We currently do not own or operate laboratory facilities in which to conduct preclinical testing of our product candidates in tissues or animals. Preclinical studies regulated by FDA, EMA and most other health authorities are governed by Good Laboratory Practices, or GLP. Additionally, studies involving animals may be subject to further regulation by institutional, private or government animal welfare authorities that may vary by territory. Studies involving human tissues may also be subject to institutional and government human subject privacy policies that may vary by territory. Third party vendors conducting tissue and/or animal studies on our behalf may be found to be in violation of one or more of these regulations or policies and may be subject to closure, censure or other penalties. In some cases, these penalties could materially impact the performance, availability, or validity of studies conducted on our behalf. Even in the absence of violations resulting in penalties, regulatory and other authorities may refuse to authorize the conduct or to accept the results of studies for regulatory or ethical reasons.

We enter into various contracts in the normal course of our business in which we indemnify the other party to the contract. In the event we have to perform under these indemnification provisions, it could have a material adverse effect on our business, financial condition and results of operations.

In the normal course of business, we periodically enter into academic, commercial, service, collaboration, licensing, consulting and other agreements that contain indemnification provisions. With respect to our academic and other research agreements, we typically indemnify the institution and related parties from losses arising from claims relating to the products, processes or services made, used, sold or performed pursuant to the agreements for which we have secured licenses, and from claims arising from our exercise of rights under the agreement. With respect to our commercial agreements, we indemnify our vendors from any third-party product liability claims that could result from the production, use or consumption of the product, as well as for alleged infringements of any patent or other intellectual property right by a third party.

Should our obligation under an indemnification provision exceed applicable insurance coverage or if we were denied insurance coverage, our business, financial condition and results of operations could be adversely affected. Similarly, if we are relying on a collaborator to indemnify us and the collaborator is denied insurance

coverage or the indemnification obligation exceeds the applicable insurance coverage and does not have other assets available to indemnify us, our business, financial condition and results of operations could be adversely affected.

We may seek to establish collaborations and, if we are not able to establish them on commercially reasonable terms, we may have to alter our development and commercialization plans.

We may seek one or more collaborators for the development and commercialization of one or more of our product candidates. Likely collaborators may include large and mid-size pharmaceutical companies, regional and national pharmaceutical companies and biotechnology companies. In addition, if we are able to obtain regulatory approval for product candidates from foreign regulatory authorities, we may enter into collaborations with international biotechnology or pharmaceutical companies for the commercialization of such product candidates.

We face significant competition in seeking appropriate collaborators. Whether we reach a definitive agreement for a collaboration will depend, among other things, upon our assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator's evaluation of a number of factors. Those factors may include the potential differentiation of our product candidate from competing product candidates, design or results of clinical trials, the likelihood of approval by the FDA, the EMA or comparable foreign regulatory authorities and the regulatory pathway for any such approval, the potential market for the product candidate, the costs and complexities of manufacturing and delivering the product to patients and the potential of competing products. The collaborator may also consider alternative product candidates or technologies for similar indications that may be available for collaboration and whether such a collaboration could be more attractive than the one with us for our product candidate. If we elect to increase our expenditures to fund development or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms or at all. If we do not have sufficient funds, we may not be able to further develop our product candidates or bring them to market and generate product revenue.

Collaborations are complex and time-consuming to negotiate and document. Further, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators. Any collaboration agreements that we enter into in the future may contain restrictions on our ability to enter into potential collaborations or to otherwise develop specified product candidates. We may not be able to negotiate collaborations on a timely basis, on acceptable terms, or at all. If we are unable to do so, we may have to curtail the development of the product candidate for which we are seeking to collaborate, reduce or delay its development program or one or more of our other development programs, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense.

If we enter into collaborations with third parties for the development and commercialization of our product candidates, our prospects with respect to those product candidates will depend in significant part on the success of those collaborations.

We may enter into collaborations for the development and commercialization of certain of our product candidates. If we enter into such collaborations, we will have limited control over the amount and timing of resources that our collaborators will dedicate to the development or commercialization of our product candidates. Our ability to generate revenues from these arrangements will depend on any future collaborators' abilities to successfully perform the functions assigned to them in these arrangements. In addition, any future collaborators may have the right to abandon research or development projects and terminate applicable agreements, including funding obligations, prior to or upon the expiration of the agreed upon terms.

Collaborations involving our product candidates pose a number of risks, including the following:

- collaborators have significant discretion in determining the efforts and resources that they will apply to these collaborations;
- collaborators may not perform their obligations as expected;
- collaborators may not pursue development and commercialization of our product candidates or may elect not to continue or renew development or commercialization programs, based on clinical trial results, changes in the collaborators' strategic focus or available funding or external factors, such as an acquisition, that divert resources or create competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our product candidates;
- a collaborator with marketing and distribution rights to one or more products may not commit sufficient resources to the marketing and distribution of such product or products;
- disagreements with collaborators, including disagreements over proprietary rights, including trade secrets and intellectual property rights, contract interpretation, or the preferred course of development might cause delays or termination of the research, development or commercialization of product candidates, might lead to additional responsibilities for us with respect to product candidates, or might result in litigation or arbitration, any of which would be time-consuming and expensive;
- collaborators may not properly maintain or defend our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential litigation;
- collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability; and
- collaborations may be terminated and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable product candidates.

Collaboration agreements may not lead to development or commercialization of product candidates in the most efficient manner or at all. If any future collaborator of ours is involved in a business combination, it could decide to delay, diminish or terminate the development or commercialization of any product candidate licensed to it by us.

We may have to alter our development and commercialization plans if we are not able to establish collaborations.

We will require additional funds to complete the development and potential commercialization of RTB101 alone or in combination with everolimus and other product candidates. For some of our product candidates, we may decide to collaborate with pharmaceutical and biotechnology companies for the development and potential commercialization of those product candidates.

We face significant competition in seeking and obtaining appropriate collaborators. Whether we reach a definitive agreement for a collaboration will depend, among other things, upon our assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator's evaluation of a number of factors. Those factors may include:

- the design or results of clinical trials;
- the likelihood of approval by the FDA or comparable foreign regulatory authorities;
- the potential market for the subject product candidate;
- the costs and complexities of manufacturing and delivering such product candidate to patients;
- the potential for competing products;
- our patent position protecting the product candidate, including any uncertainty with respect to our ownership of our technology or our licensor's ownership of technology we license from them, which can exist if there is a challenge to such ownership without regard to the merits of the challenge;
- the need to seek licenses or sub-licenses to third-party intellectual property; and
- industry and market conditions generally.

The collaborator may also consider alternative product candidates or technologies for similar indications that may be available for collaboration and whether such a collaboration could be more attractive than the one with us for our product candidate. We may also be restricted under future license agreements from entering into agreements on certain terms with potential collaborators. In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators.

If we are unable to reach agreements with suitable collaborators on a timely basis, on acceptable terms, or at all, we may have to curtail the development of a product candidate, reduce or delay its development program or one or more of our other development programs, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to fund and undertake development or commercialization activities on our own, we may need to obtain additional expertise and additional capital, which may not be available to us on acceptable terms or at all. If we fail to enter into collaborations and do not have sufficient funds or expertise to undertake the necessary development and commercialization activities, we may not be able to further develop our product candidates or bring them to market and our business may be materially and adversely affected.

Risks Related to Employee Matters and Managing Growth

We only have a limited number of employees to manage and operate our business.

As of January 16, 2018, we have seven full-time employees. Our focus on the development of RTB101, alone or in combination with everolimus, requires us to optimize cash utilization and to manage and operate our business in a highly efficient manner. We cannot assure you that we will be able to hire and/or retain adequate staffing levels to develop RTB101, alone or in combination with everolimus, or run our operations and/or to accomplish all of the objectives that we otherwise would seek to accomplish.

Cyber-attacks or other failures in our telecommunications or information technology systems, or those of our collaborators, contract research organizations, third-party logistics providers, distributors or other contractors or consultants, could result in information theft, data corruption and significant disruption of our business operations.

We, our collaborators, our CROs, third-party logistics providers, distributors and other contractors and consultants utilize information technology, or IT, systems and networks to process, transmit and store electronic information in connection with our business activities. As use of digital technologies has increased, cyber incidents, including deliberate attacks and attempts to gain unauthorized access to computer systems and networks, have increased in frequency and sophistication. These threats pose a risk to the security of our, our collaborators', our CROs', third-party logistics providers', distributors' and other contractors' and consultants' systems and networks, and the confidentiality, availability and integrity of our data. There can be no assurance that we will be successful in preventing cyber-attacks or successfully mitigating their effects. Similarly, there can be no assurance that our collaborators, CROs, third-party logistics providers, distributors and other contractors and consultants will be successful in protecting our clinical and other data that is stored on their systems. Any cyber-attack or destruction or loss of data could have a material adverse effect on our business and prospects. For example, the loss of clinical trial data from completed or ongoing clinical trials for any of our product candidates could result in delays in our development and regulatory approval efforts and significantly increase our costs to recover or reproduce the data. In addition, we may suffer reputational harm or face litigation or adverse regulatory action as a result of cyber-attacks or other data security breaches and may incur significant additional expense to implement further data protection measures.

We depend heavily on our executive officers, principal consultants and others and the loss of their services would materially harm our business.

Our success depends, and will likely continue to depend, upon our ability to hire, retain the services of our current executive officers, principal consultants and others, including Chen Schor, our president and chief executive officer, and Joan Mannick, our chief medical officer. We have entered into employment agreements with Mr. Schor and Dr. Mannick, but they may terminate their employment with us at any time. Although we do not have any reason to believe that we will lose the services of Mr. Schor and Dr. Mannick in the foreseeable future, the loss of their services might impede the achievement of our research, development and commercialization objectives.

Our ability to compete in the biotechnology and pharmaceuticals industries depends upon our ability to attract and retain highly qualified managerial, scientific and medical personnel. Our industry has experienced a high rate of turnover of management personnel in recent years. Replacing executive officers or other key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to develop, gain regulatory approval of and commercialize products successfully.

Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these additional key employees on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions.

We rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may be employed by other entities and may have commitments under consulting or advisory contracts with those entities that may limit their availability to us. If we are unable to continue to attract and retain highly qualified personnel, our ability to develop and commercialize our product candidates will be limited.

One of our shareholders, PureTech Health, currently provides us with strategic medical, clinical and scientific advice pursuant to a business services, personnel and information management agreement. In addition,

we currently share administrative resources and offices with PureTech Health, including legal, accounting and human resources support, computer and telecommunications systems and other office infrastructure pursuant to the agreement. While we intend to occupy our own office space and hire additional qualified personnel to provide certain of these functions internally in the future, we are currently dependent on PureTech Health for these services. If PureTech Health was unable or unwilling to continue to provide these shared resources, we may be unable to replace in a timely manner or on comparable terms the shared resources or other benefits that PureTech Health currently provides. Also, upon the termination of the shared resources provided under the services agreement, such services will be provided internally or by unaffiliated third parties, and we expect that in some instances, we will incur higher costs to obtain such services than we incurred under the terms of such agreement. If we are unable to transition the shared resources that PureTech Health provides to internal employees or unaffiliated third parties, or to do so in a cost effective and timely manner, we may not be able to operate our business effectively and our business and financial condition could be adversely affected.

Our employees, independent contractors, consultants, collaborators and contract research organizations may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements, which could cause significant liability for us and harm our reputation.

We are exposed to the risk that our employees, independent contractors, consultants, collaborators and contract research organizations may engage in fraudulent conduct or other illegal activity. Misconduct by those parties could include intentional, reckless and/or negligent conduct or disclosure of unauthorized activities to us that violates:

- FDA regulations or similar regulations of comparable non-U.S. regulatory authorities, including those laws requiring the reporting of true, complete and accurate information to such authorities;
- manufacturing standards;
- federal and state healthcare fraud and abuse laws and regulations and similar laws and regulations established and enforced by comparable non-U.S. regulatory authorities; and
- laws that require the reporting of financial information or data accurately.

Activities subject to these laws also involve the improper use or misrepresentation of information obtained in the course of clinical trials, creating fraudulent data in our preclinical studies or clinical trials or illegal misappropriation of product materials, which could result in regulatory sanctions and serious harm to our reputation. It is not always possible to identify and deter misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws, standards or regulations. Additionally, we are subject to the risk that a person or government could allege such fraud or other misconduct, even if none occurred. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business and results of operations, including the imposition of civil, criminal and administrative penalties, damages, monetary fines, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, and curtailment of our operations, any of which could have a material adverse effect on our ability to operate our business and our results of operations.

We expect to expand our organization, and as a result, we may encounter difficulties in managing our growth, which could disrupt our operations.

We expect to experience significant growth in the number of our employees and the scope of our operations, particularly in the areas of regulatory affairs and sales, marketing and distribution, as well as to

support our public company operations. To manage these growth activities, we must continue to implement and improve our managerial, operational and financial systems, expand our facilities and continue to recruit and train additional qualified personnel. Our management may need to devote a significant amount of its attention to managing these growth activities. Moreover, our expected growth could require us to relocate to a different geographic area of the country. Due to our limited financial resources and the limited experience of our management team in managing a company with such anticipated growth, we may not be able to effectively manage the expansion or relocation of our operations, retain key employees, or identify, recruit and train additional qualified personnel. Our inability to manage the expansion or relocation of our operations effectively may result in weaknesses in our infrastructure, give rise to operational mistakes, loss of business opportunities, loss of employees and reduced productivity among remaining employees. Our expected growth could also require significant capital expenditures and may divert financial resources from other projects, such as the development of additional product candidates. If we are unable to effectively manage our expected growth, our expenses may increase more than expected, our ability to generate revenues could be reduced and we may not be able to implement our business strategy, including the successful commercialization of our product candidates.

Our current operations are concentrated primarily in a single location and any events affecting our headquarters may have material adverse consequences.

Our current operations are primarily located in our principal office in Boston, Massachusetts. Any unplanned event, such as flood, fire, explosion, earthquake, extreme weather condition, medical epidemics, power shortage, telecommunication failure or other natural or manmade accidents or incidents that result in us being unable to fully utilize the office may have a material adverse effect on our ability to operate our business, and have significant negative consequences on our financial and operating conditions. Loss of access to this office may result in increased costs, delays in the development of our product candidates or interruption of our business operations. As part of our risk management policy, we maintain insurance coverage at levels that we believe are appropriate for our business. However, in the event of an accident or incident at our office, our insurance coverage may not be sufficient to satisfy all of our damages and losses. If our office is unable to operate because of an accident or incident or for any other reason, even for a short period of time, any or all of our research and development programs may be harmed.

Prior to this offering, we operated as a private company and therefore, have no experience operating as a public company and complying with public company obligations. Complying with these requirements will increase our costs, require additional management resources and qualified accounting and financial personnel, and we may fail to meet all of these obligations.

We will face increased legal, accounting, administrative and other costs and expenses as a public company. Compliance with the Sarbanes-Oxley Act of 2002, the Dodd-Frank Act of 2010 and the rules promulgated thereunder, as well as rules of the SEC and Nasdaq, for example, will result in significant initial cost to us as well as ongoing increases in our legal, audit and financial compliance costs, particularly after we are no longer an “emerging growth company.” The Securities Exchange Act of 1934, as amended, or the Exchange Act, requires, among other things, that we file certain periodic reports with respect to our business and financial condition. Our executive officers and other personnel need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance, and require us to incur substantial costs to maintain the same or similar coverage. We expect to incur significant expense and devote substantial management effort toward ensuring compliance with Section 404 of the Sarbanes-Oxley Act of 2002 once we lose our status as an “emerging growth company.” We currently do not have an internal audit group, and we will need to hire additional accounting and financial staff with appropriate public company experience and technical accounting knowledge, and it may be difficult to recruit and maintain such personnel. Implementing any appropriate changes to our internal controls may require specific compliance training for our directors, officers and employees, entail substantial costs to modify our existing accounting systems, and take a significant period of time to complete. Such changes may not, however, be effective in maintaining the adequacy of our internal controls, and any

failure to maintain that adequacy, or consequent inability to produce accurate financial statements or other reports on a timely basis, could increase our operating costs and could materially impair our ability to operate our business.

If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results or prevent fraud. As a result, stockholders could lose confidence in our financial and other public reporting, which would harm our business and the trading price of our common stock.

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports and, together with adequate disclosure controls and procedures, are designed to prevent fraud. Any failure to implement required new or improved controls, or difficulties encountered in their implementation could cause us to fail to meet our reporting obligations. In addition, any testing by us conducted in connection with Section 404 of the Sarbanes-Oxley Act of 2002, or any subsequent testing by our independent registered public accounting firm, may reveal deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses or that may require prospective or retroactive changes to our financial statements or identify other areas for further attention or improvement. Inferior internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our stock.

We will be required to disclose changes made in our internal controls and procedures on a quarterly basis and our management will be required to assess the effectiveness of these controls annually. However, for as long as we are an "emerging growth company" under the JOBS Act, our independent registered public accounting firm will not be required to attest to the effectiveness of our internal controls over financial reporting pursuant to Section 404. We could be an "emerging growth company" for up to five years. An independent assessment of the effectiveness of our internal controls over financial reporting could detect problems that our management's assessment might not. Undetected material weaknesses in our internal controls over financial reporting could lead to financial statement restatements and require us to incur the expense of remediation.

Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.

Upon completion of this offering, we will become subject to certain reporting requirements of the Exchange Act. Our disclosure controls and procedures are designed to reasonably assure that information required to be disclosed by us in reports we file or submit under the Exchange Act is accumulated and communicated to management, recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. We believe that any disclosure controls and procedures or internal controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements or insufficient disclosures due to error or fraud may occur and not be detected.

We have conducted and expect to continue to conduct our operations in jurisdictions outside of the United States, and such foreign operations subject us to additional risks.

A portion of our operations, including our clinical research and development efforts, have been undertaken outside of the United States, and we expect to continue to conduct a portion of our business in foreign countries. For example, we are conducting our ongoing Phase 2b clinical trial across two hemispheres. In addition, we may utilize third party contract organizations, some of which may be located in foreign jurisdictions, for the conduct of our clinical trials, the manufacturing of our product candidates and the

commercialization of our product candidates, if approved. Such operations subject us to additional risks related to international business operations, including:

- potentially reduced protection for intellectual property rights;
- price and currency exchange fluctuations;
- unexpected changes in tariffs, trade barriers and regulatory requirements;
- economic weakness, including inflation, or political instability in particular foreign economies and markets;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- difficulties in complying with tax, employment, immigration and labor laws for personnel living or traveling abroad;
- production shortages resulting from any events affecting a product candidate and/or finished drug product supply or manufacturing capabilities abroad;
- business interruptions resulting from geo-political actions, including war and terrorism, or natural disasters, including earthquakes, hurricanes, typhoons, floods and fires; and
- failure to comply with Office of Foreign Asset Control rules and regulations and the Foreign Corrupt Practices Act.

These and other risks may materially adversely affect our ability to conduct our business in international markets.

We may engage in acquisitions that could disrupt our business, cause dilution to our stockholders or reduce our financial resources.

In the future, we may enter into transactions to acquire other businesses, products or technologies. If we do identify suitable candidates, we may not be able to make such acquisitions on favorable terms, or at all. Any acquisitions we make may not strengthen our competitive position, and these transactions may be viewed negatively by customers or investors. We may decide to incur debt in connection with an acquisition or issue our common stock or other equity securities to the stockholders of the acquired company, which would reduce the percentage ownership of our existing stockholders. We could incur losses resulting from undiscovered liabilities of the acquired business that are not covered by the indemnification we may obtain from the seller. In addition, we may not be able to successfully integrate the acquired personnel, technologies and operations into our existing business in an effective, timely and nondisruptive manner. Acquisitions may also divert management attention from day-to-day responsibilities, increase our expenses and reduce our cash available for operations and other uses. We cannot predict the number, timing or size of future acquisitions or the effect that any such transactions might have on our operating results.

Risks Related to Our Common Stock and this Offering

An active trading market for our common stock may not develop or be sustainable. If an active trading market does not develop, investors may not be able to resell their shares at or above the initial public offering price and our ability to raise capital in the future may be impaired.

Prior to this offering, there has been no public market for our common stock. The initial public offering price for our common stock will be determined through negotiations with the underwriters. This price may not

reflect the price at which investors in the market will be willing to buy and sell our shares following this offering. Although we intend to list our common stock on The Nasdaq Global Market, an active trading market for our shares may never develop or, if developed, be maintained following this offering. If an active market for our common stock does not develop or is not maintained, it may be difficult for you to sell shares you purchase in this offering without depressing the market price for the shares or at all. An inactive trading market may also impair our ability to raise capital to continue to fund operations by selling shares and may impair our ability to acquire other companies or technologies by using our shares as consideration.

If you purchase shares of common stock in this offering, you will suffer immediate dilution in the net tangible book value of your investment.

The initial public offering price of our common stock is substantially higher than the net tangible book value per share of our common stock. Therefore, if you purchase shares of our common stock in this offering, you will pay a price per share that substantially exceeds our net tangible book value per share after this offering. Based on the assumed initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, you will experience immediate dilution of $10.05 per share, representing the difference between our pro forma net tangible book value per share after giving effect to this offering and the assumed initial public offering price. Purchasers of common stock in this offering will have contributed approximately 56.67% of the aggregate price paid by all purchasers of our capital stock and will own approximately 20.84% of our common stock outstanding after this offering, excluding any shares of our common stock that they may have acquired prior to this offering. Furthermore, if the underwriters exercise their over-allotment option or our previously issued options and other rights to acquire common stock at prices below the assumed initial public offering price are exercised, you will experience further dilution. For additional information on the dilution that you will experience immediately after this offering, see the section titled “Dilution.”

The trading price of our common stock is likely to be highly volatile, which could result in substantial losses for purchasers of our common stock in this offering. Securities class action or other litigation involving our company or members of our management team could also substantially harm our business, financial condition and results of operations.

Our stock price is likely to be highly volatile. The stock market in general and the market for smaller pharmaceutical and biotechnology companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, you may not be able to sell your common stock at or above the initial public offering price and you may lose some or all of your investment. The market price for our common stock may be influenced by many factors, including:

- the success of existing or new competitive products or technologies;
- regulatory actions with respect to our product candidates or our competitors’ products and product candidates;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures, collaborations or capital commitments;
- the timing and results of clinical trials of RTB101 alone or in combination with everolimus and any other product candidates;
- commencement or termination of collaborations for our development programs;
- failure or discontinuation of any of our development programs;
- results of clinical trials of product candidates of our competitors;

- regulatory or legal developments in the United States and other countries;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key personnel;
- the level of expenses related to any of our product candidates or clinical development programs;
- the results of our efforts to develop additional product candidates or products;
- actual or anticipated changes in estimates as to financial results or development timelines;
- announcement or expectation of additional financing efforts;
- sales of our common stock by us, our insiders or other stockholders;
- variations in our financial results or those of companies that are perceived to be similar to us;
- changes in estimates or recommendations by securities analysts, if any, that cover us;
- changes in the structure of healthcare payment systems;
- market conditions in the pharmaceutical and biotechnology sectors;
- general economic, industry and market conditions; and
- the other factors described in this "Risk Factors" section.

In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for biopharmaceutical companies, which have experienced significant stock price volatility in recent years.

We have broad discretion in the use of the net proceeds from this offering and may invest or spend the proceeds in ways with which you do not agree and in ways that may not yield a return on your investment.

Although we currently intend to use the net proceeds from this offering in the manner described in the section titled "Use of Proceeds" in this prospectus, our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our common stock. You will not have the opportunity to influence our decisions on how to use the net proceeds from this offering. The failure by our management to apply these funds effectively could result in financial losses that could harm our business, cause the price of our common stock to decline and delay the development of our product candidates. Pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value.

We are an "emerging growth company," and the reduced disclosure requirements applicable to emerging growth companies may make our common stock less attractive to investors.

We are an emerging growth company, and, for as long as we continue to be an emerging growth company, we may choose to take advantage of exemptions from various reporting requirements applicable to other public companies but not to "emerging growth companies." We could remain an "emerging growth company" for up to five years, or until the earliest of (1) the last day of the first fiscal year in which our annual gross revenue exceeds $1.07 billion, (2) the date that we become a "large accelerated filer" as defined in

Rule 12b-2 under the Securities Exchange Act of 1934, which would occur if the market value of our common stock that is held by non-affiliates exceeds $700.0 million as of the last business day of our most recently completed second fiscal quarter or (3) the date on which we have issued more than $1.0 billion in non-convertible debt during the preceding three-year period. So long as we remain an "emerging growth company," we expect to avail ourselves of the exemption from the requirement that our independent registered public accounting firm attest to the effectiveness of our internal control over financial reporting under Section 404 of the Sarbanes-Oxley Act of 2002, or Section 404. When our independent registered public accounting firm is required to undertake an assessment of our internal control over financial reporting, the cost of our compliance with Section 404 will correspondingly increase. Moreover, if we are not able to comply with the requirements of Section 404 applicable to us in a timely manner, or if we or our independent registered public accounting firm identifies deficiencies in our internal control over financial reporting that are deemed to be material weaknesses, the market price of our stock could decline and we could be subject to sanctions or investigations by the SEC or other regulatory authorities, which would require additional financial and management resources.

We will incur increased costs as a result of operating as a public company, and our management will be required to devote substantial time to new compliance initiatives and corporate governance practices.

As a public company, and particularly after we are no longer an "emerging growth company," we will incur significant legal, accounting and other expenses that we did not incur as a private company, including costs associated with public company reporting requirements. We also anticipate that we will incur costs associated with relatively recently adopted corporate governance requirements, including requirements of the Securities and Exchange Commission, or SEC, and The Nasdaq Global Market. We expect these rules and regulations to increase our legal and financial compliance costs and to make some activities more time-consuming and costly. We also expect that these rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance and we may be required to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. As a result, it may be more difficult for us to attract and retain qualified individuals to serve on our board of directors or as executive officers.

We are currently evaluating and monitoring developments with respect to these rules, and we cannot predict or estimate the amount of additional costs we may incur or the timing of such costs. These rules and regulations are often subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.

Pursuant to Section 404 of the Sarbanes-Oxley Act, or Section 404, we will be required to furnish a report by our management on our internal control over financial reporting beginning with our second filing of an Annual Report on Form 10-K with the Securities and Exchange Commission, or the SEC, after we become a public company. However, while we remain an emerging growth company, we will not be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. To achieve compliance with Section 404 within the prescribed period, we will be engaged in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we will need to continue to dedicate internal resources, potentially engage outside consultants and adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented and implement a continuous reporting and improvement process for internal control over financial reporting. Despite our efforts, there is a risk that we will not be able to conclude, within the prescribed timeframe or at all, that our internal control over financial reporting is effective as required by Section 404. If we identify one or more material weaknesses, it could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements.

A significant portion of our total outstanding shares is restricted from immediate resale but may be sold into the market in the near future, which could cause the market price of our common stock to decline significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares of common stock intend to sell shares, could reduce the market price of our common stock. Following this offering, we will have 27,196,315 shares of common stock outstanding based on 5,659,089 shares of our common stock outstanding as of December 31, 2017 and after giving effect to the conversion of all outstanding shares of our preferred stock into 15,870,559 shares of our common stock upon the closing of this offering. Of these shares, the 5,666,667 shares sold by us in this offering may be resold in the public market immediately, unless purchased by our affiliates. The remaining 21,529,648 shares are currently restricted under securities laws or as a result of lock-up or other agreements, but will be able to be sold after this offering as described in the "Shares Eligible for Future Sale" section of this prospectus. The representatives of the underwriters may release these stockholders from their lock-up agreements with the underwriters at any time and without notice, which would allow for earlier sales of shares in the public market.

Moreover, after this offering, holders of an aggregate of 15,870,559 shares of our common stock will have rights, subject to conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. We also plan to register all shares of common stock that we may issue under our equity compensation plans. Once we register these shares, they can be freely sold in the public market upon issuance and once vested, subject to volume limitations applicable to affiliates and the lock-up agreements. If these additional shares are sold, or if it is perceived that they will be sold, in the public market, the trading price of our common stock could decline.

We do not anticipate paying any cash dividends on our capital stock in the foreseeable future. Accordingly, stockholders must rely on capital appreciation, if any, for any return on their investment.

We have never declared nor paid cash dividends on our capital stock. We currently plan to retain all of our future earnings, if any, to finance the operation, development and growth of our business. In addition, the terms of any future debt or credit agreements may preclude us from paying dividends. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

Concentration of ownership of our common stock among our existing executive officers, directors and principal stockholders may prevent new investors from influencing significant corporate decisions.

Based upon shares outstanding as of December 31, 2017, and after giving effect to the conversion of all outstanding shares of preferred stock into shares of our common stock, upon the closing of this offering, our executive officers and directors, combined with our stockholders who owned more than 5% of our outstanding common stock before this offering and their affiliates, will, in the aggregate, beneficially own shares representing approximately 72.3% of our common stock. Certain of our existing stockholders, including certain affiliates of our directors, have indicated an interest in purchasing an aggregate of up to $35 million of shares of our common stock in this offering at the initial public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters may determine to sell more, less or no shares in this offering to any of these stockholders, or any of these stockholders may determine to purchase more, less or no shares in this offering. The foregoing discussion does not give effect to any potential purchases by these stockholders in this offering. As a result, if these stockholders were to choose to act together, they would be able to control all matters submitted to our stockholders for approval, as well as our management and affairs. For example, these persons, if they choose to act together, would control the election of directors and approval of any merger, consolidation or sale of all or substantially all of our assets. This concentration of ownership control may:

- delay, defer or prevent a change in control;

- entrench our management or the board of directors; or
- impede a merger, consolidation, takeover or other business combination involving us that other stockholders may desire.

Some of these persons or entities may have interests different than yours. For example, because many of these stockholders purchased their shares at prices substantially below the price at which shares are being sold in this offering and have held their shares for a longer period, they may be more interested in selling our company to an acquirer than other investors or they may want us to pursue strategies that deviate from the interests of other stockholders.

Provisions in our corporate charter documents and under Delaware law may prevent or frustrate attempts by our stockholders to change our management or hinder efforts to acquire a controlling interest in us.

Provisions in our corporate charter and our bylaws that will become effective upon the closing of this offering may discourage, delay or prevent a merger, acquisition or other change in control of us that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. In addition, because our board of directors is responsible for appointing the members of our management team, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors. Among other things, these provisions:

- establish a classified board of directors such that all members of the board are not elected at one time;
- allow the authorized number of our directors to be changed only by resolution of our board of directors;
- limit the manner in which stockholders can remove directors from the board;
- establish advance notice requirements for nominations for election to the board of directors or for proposing matters that can be acted on at stockholder meetings;
- require that stockholder actions must be effected at a duly called stockholder meeting and prohibit actions by our stockholders by written consent;
- limit who may call a special meeting of stockholders;
- authorize our board of directors to issue preferred stock without stockholder approval, which could be used to institute a “poison pill” that would work to dilute the stock ownership of a potential hostile acquirer, effectively preventing acquisitions that have not been approved by our board of directors; and
- require the approval of the holders of at least 66.7% of the votes that all our stockholders would be entitled to cast to amend or repeal certain provisions of our charter or bylaws.

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the General Corporation Law of the State of Delaware, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner. This could discourage, delay or prevent someone from

acquiring us or merging with us, whether or not it is desired by, or beneficial to, our stockholders. This could also have the effect of discouraging others from making tender offers for our common stock, including transactions that may be in your best interests. These provisions may also prevent changes in our management or limit the price that investors are willing to pay for our stock.

Our restated certificate of incorporation will provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for most legal actions between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, employees or agents.

Our restated certificate of incorporation, which will become effective upon the closing of this offering, specifies that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for most legal actions involving claims brought against us by stockholders. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and to have consented to the provisions of our restated certificate of incorporation described above.

We believe this provision benefits us by providing increased consistency in the application of Delaware law by chancellors particularly experienced in resolving corporate disputes, efficient administration of cases on a more expedited schedule relative to other forums and protection against the burdens of multi-forum litigation. However, the provision may have the effect of discouraging lawsuits against our directors, officers, employees and agents as it may limit any stockholder's ability to bring a claim in a judicial forum that such stockholder finds favorable for disputes with us or our directors, officers, employees or agents. The enforceability of similar choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that, in connection with any applicable action brought against us, a court could find the choice of forum provisions contained in our restated certificate of incorporation to be inapplicable or unenforceable in such action. If a court were to find the choice of forum provision contained in our restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could adversely affect our business, financial condition or results of operations.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our share price and trading volume could decline.

The trading market for our common stock will be influenced by the research and reports that industry or securities analysts publish about us or our business. We do not currently have and may never obtain research coverage by securities and industry analysts. If no or few securities or industry analysts commence coverage of us, or one or more of the analysts who cover us issues an adverse opinion about our company, our stock price would likely decline. If one or more of these analysts ceases research coverage of us or fails to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS AND INDUSTRY DATA

This prospectus contains forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical facts, contained in this prospectus, including statements regarding our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans and objectives of management and expected market growth are forward-looking statements. The words “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “should,” “target,” “would” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

These forward-looking statements include, among other things, statements about:

- our plans to develop and commercialize RTB101 alone or in combination with everolimus and other product candidates, including the therapeutic potential and clinical benefits thereof;
- our ongoing and future clinical trials for RTB101 alone or in combination with everolimus, whether conducted by us or by any future collaborators, including the timing of initiation of these trials and of the anticipated results;
- the timing of and our ability to obtain and maintain regulatory approvals for our product candidates;
- the rate and degree of market acceptance and clinical utility of any products for which we receive regulatory approval;
- our commercialization, marketing and manufacturing capabilities and strategy;
- our intellectual property position and strategy;
- our ability to identify additional product candidates with significant commercial potential;
- our plans to enter into collaborations for the development and commercialization of product candidates;
- the potential benefits of any future collaboration;
- our expectations related to the use of proceeds from this offering;
- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing;
- developments relating to our competitors and our industry; and
- the impact of government laws and regulations.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important factors in the cautionary statements included in this prospectus, particularly in the “Risk Factors” section, that could cause actual results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, collaborations, joint ventures or investments that we may make or enter into.

You should read this prospectus and the documents that we have filed as exhibits to the registration statement of which this prospectus is a part completely and with the understanding that our actual future results may be materially different from what we expect. We do not assume any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

This prospectus includes statistical and other industry and market data that we obtained from industry publications and research, surveys and studies conducted by third parties. Industry publications and third-party research, surveys and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information. We are responsible for all of the disclosure contained in this prospectus, and we believe these industry publications and third-party research, surveys and studies are reliable.

USE OF PROCEEDS

We estimate that the net proceeds from our issuance and sale of 5,666,667 shares of our common stock in this offering will be approximately $77.6 million, assuming an initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. If the underwriters exercise in full their option to purchase additional shares, we estimate that the net proceeds from this offering will be approximately $89.4 million.

A $1.00 increase or decrease in the assumed initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease our net proceeds from this offering by approximately $5.3 million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions. An increase or decrease of 1,000,000 shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase or decrease our net proceeds from this offering by approximately $14.0 million, assuming no change in the assumed initial public offering price per share and after deducting estimated underwriting discounts and commissions.

We currently estimate that we will use the net proceeds from this offering, together with our existing cash and cash equivalents, as follows:

- approximately $85 million to fund the development of RTB101, alone and in combination with everolimus, for RTIs, through the completion of our ongoing Phase 2b clinical trial of RTB101 alone or in combination with everolimus, the completion of a subsequent pivotal Phase 3 clinical program, assuming a successful outcome in our Phase 2b clinical trial of RTB101 alone or in combination with everolimus, and the filing of an NDA with the FDA, assuming a successful outcome in our Phase 3 clinical program;

- approximately $16 million to fund the development of RTB101, alone and in combination with other rapalogs such as everolimus, for other indications, through the completion of at least one additional proof of concept trial in an additional indication and to fund the development of our other TORC1 follow-on candidate and other pipeline candidates; and

- the remainder, if any, for working capital and other general corporate purposes, which may include funding for the costs of operating as a public company.

This expected use of the net proceeds from this offering and our existing cash represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. For example, we may use a portion of the net proceeds for the acquisition of businesses or technologies to continue to build our pipeline, our research and development capabilities and our intellectual property position, although we currently have no agreements, commitments or understandings with respect to any such transaction. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our development and commercialization efforts, the status of and results from clinical trials, any collaborations that we may enter into with third parties for our product candidates and any unforeseen cash needs. Moreover, our estimates of the costs to fund our trials are based on the current designs of the trials. If we were to modify the design of any of these trials, for instance, to increase the number of patients in the trials, our costs to fund the trials could increase. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering.

Based on our current plans, we believe that our existing cash and cash equivalents, together with the net proceeds from this offering, will be sufficient to enable us to fund our operating expenses and capital expenditure requirements at least through 2020, including the completion of our ongoing Phase 2b clinical trial of RTB101 alone or in combination with everolimus, the completion of a subsequent pivotal Phase 3 clinical program, assuming a successful outcome in our Phase 2b clinical trial of RTB101 alone or in combination with

everolimus, and the filing of an NDA with the FDA, assuming a successful outcome in our Phase 3 clinical program. We have based this estimate on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect. We do not have any committed external source of funds.

Pending our use of the net proceeds from this offering, we intend to invest the net proceeds in a variety of capital preservation investments, including short-term, investment-grade, interest-bearing instruments and U.S. government securities.

DIVIDEND POLICY

We have never declared nor paid cash dividends on our common stock. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. We do not intend to pay cash dividends in respect of our common stock in the foreseeable future.

CAPITALIZATION

The following table sets forth our cash and capitalization as of September 30, 2017:

- on an actual basis;
- on a pro forma basis to give effect to (i) the sale and issuance of 7,763,975 shares of our Series A preferred stock in October 2017 for aggregate net proceeds of $15.0 million, (ii) the sale and issuance of 4,792,716 shares of our Series B preferred stock in November 2017 for aggregate net proceeds of $39.9 million, (iii) the automatic conversion of all outstanding shares of our preferred stock into an aggregate of 15,870,559 shares of common stock upon the closing of this offering, and (iv) the filing and effectiveness of our amended and restated certificate of incorporation upon the closing of this offering; and
- on a pro forma as adjusted basis to give further effect to our issuance and sale of 5,666,667 shares of our common stock in this offering at an assumed initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

Our capitalization following the closing of this offering will depend on the actual initial public offering price and other terms of this offering determined at pricing. You should read this table together with our financial statements and the related notes appearing at the end of this prospectus and the sections of this prospectus titled “Selected Financial Data” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

	As of September 30, 2017		
	Actual	Pro Forma	Pro Forma As Adjusted
	(In thousands, except share and per share data)		
Cash	$ 3,965	$ 58,911	$ 136,461
Redeemable convertible preferred stock (Series A), $0.0001 par value; 10,351,968 shares authorized, 7,763,976 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	$ 9,764	$ —	$ —
Redeemable convertible preferred stock (Series B), $0.0001 par value; no shares authorized, issued or outstanding, actual, pro forma and pro forma as adjusted	—	—	—
Stockholders’ equity (deficit):			
Preferred stock, $0.0001 par value; no shares authorized, issued or outstanding, actual; 10,000,000 shares authorized and no shares issued or outstanding, pro forma and pro forma as adjusted	—	—	—
Common stock, $0.0001 par value; 19,000,000 shares authorized, 5,659,089 shares issued and outstanding, actual; 30,000,000 shares authorized, 21,529,648 shares issued and outstanding, pro forma; 150,000,000 shares authorized, 27,196,315 shares issued and outstanding, pro forma as adjusted	1	2	3
Additional paid-in capital	1,680	66,389	143,938
Accumulated deficit	(10,725)	(9,346)	(9,346)
Total stockholders’ (deficit) equity	(9,044)	57,045	134,595
Total capitalization	$ 720	$ 57,045	$ 134,595

A $1.00 increase or decrease in the assumed initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease the pro forma as adjusted amount of each of cash, additional paid-in capital, total stockholders' equity and total capitalization by $5.3 million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions. An increase or decrease of 1,000,000 shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase or decrease the pro forma as adjusted amount of each of cash, additional paid-in capital, total stockholders' equity and total capitalization by $14.0 million, assuming no change in the assumed initial public offering price per share and after deducting estimated underwriting discounts and commissions.

The table above does not include:

- 111,320 shares of our common stock issuable upon the exercise of stock options outstanding as of September 30, 2017, at a weighted average exercise price of $0.81 per share;
- 426,594 additional shares of our common stock available for future issuance as of September 30, 2017 under our 2017 stock incentive plan, and the subsequent increase by 92,748 and 1,235,347 shares available for future issuance in October and November 2017, respectively, which will no longer be available for future issuance following this offering; and
- 2,475,290 additional shares of our common stock that will become available for future issuance under our 2018 stock incentive plan and our 2018 employee stock purchase plan, each to be effective upon the effectiveness of the registration statement of which this prospectus forms a part, and from which we intend to grant options to purchase an aggregate of 331,310 shares of common stock to certain of our officers at the pricing of this offering.

DILUTION

If you invest in our common stock in this offering, your ownership interest will be diluted immediately to the extent of the difference between the public offering price per share of our common stock and the pro forma as adjusted net tangible book value per share of our common stock after this offering.

Our historical net tangible book value (deficit) as of September 30, 2017 was $(9.0) million, or $(1.60) per share of our common stock. Our historical net tangible book value (deficit) is the amount of our total tangible assets less our total liabilities and preferred stock, which is not included within stockholders' equity (deficit). Historical net tangible book value (deficit) per share represents our historical net tangible book value (deficit) divided by the 5,659,089 shares of our common stock outstanding as of September 30, 2017.

Our pro forma net tangible book value as of September 30, 2017 was $57.0 million, or $2.65 per share of our common stock. Pro forma net tangible book value represents the amount of our total tangible assets less our total liabilities, after giving effect to (i) the sale and issuance of 7,763,975 shares of our Series A preferred stock in October 2017 for aggregate gross proceeds of $15.0 million, (ii) the sale and issuance of 4,792,716 shares of our Series B preferred stock in November 2017 for aggregate net proceeds of $39.9 million and (iii) the automatic conversion of all outstanding shares of our preferred stock into an aggregate of 15,870,559 shares of our common stock upon the closing of this offering. Pro forma net tangible book value per share represents pro forma net tangible book value divided by the total number of shares outstanding as of September 30, 2017, after giving effect to the foregoing adjustments and the automatic conversion of all outstanding shares of our preferred stock into common stock upon the closing of this offering.

After giving further effect to our issuance and sale of 5,666,667 shares of our common stock in this offering at an assumed initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of September 30, 2017 would have been $134.6 million, or $4.95 per share. This represents an immediate increase in pro forma as adjusted net tangible book value per share of $2.30 to existing stockholders and immediate dilution of $10.05 in pro forma as adjusted net tangible book value per share to new investors purchasing common stock in this offering. Dilution per share to new investors is determined by subtracting pro forma as adjusted net tangible book value per share after this offering from the assumed initial public offering price per share paid by new investors. The following table illustrates this dilution on a per share basis:

Assumed initial public offering price per share		$15.00
Historical net tangible book value (deficit) per share as of September 30, 2017	$(1.60)	
Increase per share attributable to the automatic conversion of preferred stock upon the closing of this offering	4.25	
Pro forma net tangible book value per share as of September 30, 2017	2.65	
Increase in pro forma as adjusted net tangible book value per share attributable to new investors purchasing shares in this offering	2.30	
Pro forma as adjusted net tangible book value per share after this offering		4.95
Dilution per share to new investors purchasing shares in this offering		$10.05

A $1.00 increase or decrease in the assumed initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease our pro forma as adjusted net tangible book value by $5.3 million, our pro forma as adjusted net tangible book value per share after this offering by $0.19 and dilution per share to new investors purchasing shares in this offering by $0.81, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions. An increase of

1,000,000 shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase the pro forma as adjusted net tangible book value per share after this offering by $0.32 and decrease the dilution per share to new investors participating in this offering by $0.32, assuming no change in the assumed initial public offering price and after deducting estimated underwriting discounts and commissions. A decrease of 1,000,000 shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would decrease the pro forma as adjusted net tangible book value per share after this offering by $0.34 and increase the dilution per share to new investors participating in this offering by $0.34, assuming no change in the assumed initial public offering price and after deducting estimated underwriting discounts and commissions.

If the underwriters exercise their option to purchase additional shares in full, our pro forma as adjusted net tangible book value per share after this offering would be $5.22 per share, representing an immediate increase in pro forma as adjusted net tangible book value per share of $2.57 to existing stockholders and immediate dilution in pro forma as adjusted net tangible book value per share of $9.78 to new investors purchasing common stock in this offering, assuming an initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. If any shares are issued upon exercise of outstanding options, you will experience further dilution.

The following table summarizes, as of September 30, 2017, on the pro forma as adjusted basis described above, the differences between the number of shares of common stock purchased from us, the total consideration paid to us and the average price per share paid by existing stockholders and by new investors purchasing shares of common stock in this offering. The calculation below is based on an assumed initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, before deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us:

	Shares Purchased		Total Consideration		Average Price Per Share
	Number	Percent	Amount	Percent	
Existing stockholders	21,529,648	79.16%	$ 65,000,008	43.33%	$ 3.02
New investors	5,666,667	20.84	85,000,005	56.67	$ 15.00
Total	27,196,315	100.0%	$150,000,013	100.0%	

Certain of our existing stockholders, including certain affiliates of our directors, have indicated an interest in purchasing an aggregate of up to $35 million of shares of our common stock in this offering at the initial public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters may determine to sell more, less or no shares in this offering to any of these stockholders, or any of these stockholders may determine to purchase more, less or no shares in this offering. The table above does not reflect the potential purchases by such stockholders in this offering.

A $1.00 increase or decrease in the assumed initial public offering price of $15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease the total consideration paid by new investors by $5.3 million and, in the case of an increase, would increase the percentage of total consideration paid by new investors by 1.58 percentage points and, in the case of a decrease, would decrease the percentage of total consideration paid by new investors by 1.70 percentage points, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same. An increase or decrease of 1,000,000 shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase or decrease the total consideration paid by new investors by $15.0 million and, in the case of an increase, would increase the percentage of total consideration paid by new investors by 3.94 percentage points and, in the case of a decrease, would decrease the percentage of total consideration paid by new investors by 4.81 percentage points, assuming no change in the assumed initial public offering price.

The table above assumes no exercise of the underwriters' option to purchase additional shares in this offering. If the underwriters' option to purchase 850,000 additional shares is exercised in full, the number of

shares of our common stock held by existing stockholders would be reduced to 39.94% of the total number of shares of our common stock outstanding after this offering, and the number of shares of common stock held by new investors participating in the offering would be increased to 60.06% of the total number of shares of our common stock outstanding after this offering.

The number of shares purchased from us by existing stockholders is based on 5,659,089 shares of our common stock outstanding as of September 30, 2017, and gives effect to (i) the sale and issuance of 7,763,975 shares of our Series A preferred stock in October 2017, (ii) the sale and issuance of 4,792,716 shares of Series B preferred stock in November 2017 and (iii) the automatic conversion of all outstanding shares of our preferred stock into an aggregate of 15,870,559 shares of common stock upon the closing of this offering, and excludes:

- 111,320 shares of our common stock issuable upon the exercise of stock options outstanding as of September 30, 2017, at a weighted average exercise price of $0.81 per share;
- 426,594 additional shares of our common stock available for future issuance as of September 30, 2017 under our 2017 stock incentive plan, and the subsequent increase by 92,748 and 1,235,347 shares available for future issuance in October and November 2017, respectively which will no longer be available for future issuance following this offering; and
- 2,475,290 additional shares of our common stock that will become available for future issuance under our 2018 stock incentive plan and our 2018 employee stock purchase plan, each to be effective upon the effectiveness of the registration statement of which this prospectus forms a part, and from which we intend to grant options to purchase an aggregate of 331,310 shares of common stock to certain of our officers at the pricing of this offering.

SELECTED FINANCIAL DATA

The following tables summarize our financial data as of the dates and for the periods indicated. The selected statements of operations data for the period from July 5, 2016 (inception) through December 31, 2016 and the nine months ended September 30, 2017 and the balance sheet data as of December 31, 2016 and September 30, 2017 have been derived from our audited financial statements included elsewhere in this prospectus. The statement of operations data for the period from July 5, 2016 (inception) through September 30, 2016 have been derived from our unaudited financial statements included elsewhere in this prospectus and have been prepared on the same basis as the audited financial statements. In the opinion of management, the unaudited data reflects all adjustments, consisting only of normal, recurring adjustments, necessary for a fair statement of the financial information in those statements. Our historical results from any prior period are not necessarily indicative of results to be expected in any future period, and our interim period results are not necessarily indicative of results to be expected for a full year or any other interim period. The selected financial data below should be read in conjunction with the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and related notes included elsewhere in this prospectus.

	July 5, 2016 (inception) through December 31, 2016	July 5, 2016 (inception) through September 30, 2016	Nine Months Ended September 30, 2017
	(In thousands, except share and per share data)		
Statements of Operations Data:			
Operating expenses:			
Research and development	$ —	$ —	$ 10,047
General and administrative	1	1	1,312
Total operating expenses	1	1	11,359
Loss from operations	(1)	(1)	(11,359)
Other income, net	—	—	635
Net loss	$ (1)	$ (1)	$ (10,724)
Net loss per share, basic and diluted(1)	$ (0.00)	$ (0.00)	$ (2.79)
Weighted-average common shares used in computing net loss per share, basic and diluted(1)	1,978,137	1,919,841	3,839,306
Pro forma net loss per share, basic and diluted (unaudited)(1)			$ (1.30)
Weighted-average common shares used in computing pro forma net loss per share, basic and diluted (unaudited)(1)			8,230,457

(1) See Notes 2 and 12 in the notes to our financial statements included elsewhere in this prospectus for an explanation of the calculation of our basic and diluted net loss per share, the weighted-average common shares used in computing basic and diluted net loss per share, basic and diluted pro forma net loss per share and the weighted-average common shares used in computing basic and diluted pro forma net loss per share. The information presented in this table does not give effect to the sale and issuance of our Series A preferred stock in October 2017 and Series B preferred stock in November 2017.

	As of	
	December 31, 2016	September 30, 2017
	(In thousands)	
Balance Sheet Data:		
Cash	$ —	$ 3,965
Working capital(1)	—	684
Total assets	—	4,215
Total liabilities	—	3,495
Redeemable convertible preferred stock	—	9,764
Total stockholders' (deficit) equity	—	(9,044)

(1) We define working capital as current assets less current liabilities.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of our financial condition and results of operations together with the section entitled "Selected Financial Data" and our financial statements and related notes included elsewhere in this prospectus. This discussion and other parts of this prospectus contain forward-looking statements that involve risks and uncertainties, such as our plans, objectives, expectations, intentions and beliefs. Our actual results could differ materially from those discussed in these forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those identified below and those discussed in the section entitled "Risk Factors" included elsewhere in this prospectus.

Overview

We are a clinical-stage biopharmaceutical company focused on the development and commercialization of novel therapeutics for the treatment of aging-related diseases. Our lead program has demonstrated in several clinical trials, including a randomized, placebo-controlled trial, the potential to treat multiple diseases of aging for which there are no approved therapies. The decline in immune function that occurs during aging, or immunosenescence, increases susceptibility to a variety of diseases, including respiratory tract infections, or RTIs, that significantly contribute to morbidity and mortality in the elderly. Our approach focuses on the mechanistic target of rapamycin, or mTOR, pathway, an evolutionarily conserved pathway that regulates aging, and specifically on selective inhibition of the target of rapamycin complex 1, or TORC1. Our initial focus is on the development of RTB101, an orally administered, small molecule, potent TORC1 inhibitor, alone and in combination with other mTOR inhibitors such as everolimus—as a first-in-class immunotherapy program designed to improve immune function and thereby reduce the incidence of RTIs in the elderly regardless of the causative pathogen. We licensed the worldwide rights to our TORC1 program, including RTB101 alone or in combination with everolimus or other mTOR inhibitors, from Novartis International Pharmaceutical Ltd., or Novartis, in March 2017. We are evaluating RTB101 alone and in combination with everolimus in a Phase 2b clinical trial for the reduction of RTI incidence in the elderly and expect to report top-line data from this trial in the second half of 2018.

Since our inception in July 2016, we have devoted substantially all of our resources to: identifying, acquiring, and developing our product candidate portfolio; organizing and staffing our company; raising capital; developing manufacturing capabilities; conducting clinical trials; and providing general and administrative support for these operations. To date, we have primarily financed our operations through the issuance and sale of our redeemable convertible preferred stock. From our inception through September 30, 2017, we received gross proceeds of $10.0 million from the issuance and sale of our redeemable convertible preferred stock. In October 2017, we received an additional $15.0 million in gross proceeds from the issuance and sale of our redeemable convertible Series A preferred stock. In November 2017, we received an additional $40.0 million in gross proceeds from the issuance and sale of our redeemable convertible Series B preferred stock.

We have never generated revenue and have incurred significant net losses since inception. Our net losses were $1,000, $1,000 and $10.7 million, for the period from July 5, 2016 (inception) through December 31, 2016, the period from July 5, 2016 (inception) to September 30, 2016 and for the nine months ended September 30, 2017, respectively. As of September 30, 2017, we had an accumulated deficit of $10.7 million. Our net losses may fluctuate significantly from quarter to quarter and year to year. We expect to incur significant expenses and increasing operating losses for the foreseeable future. We anticipate that our expenses will increase substantially as we:

- invest significantly to further develop and seek regulatory approval for RTB101 alone or in combination with everolimus, including to continue our ongoing Phase 2b clinical trial;
- expand our pipeline of potential product candidates, including the initiation of at least one additional proof of concept trial in an additional indication;

- require the manufacture of larger quantities of our product candidates for clinical development and potentially commercialization;
- hire additional clinical, scientific, management and administrative personnel;
- ultimately establish a sales, marketing and distribution infrastructure or collaborate with third parties to commercialize any drugs for which we may obtain regulatory approval;
- maintain, expand and protect our intellectual property portfolio;
- acquire or in-license other assets and technologies; and
- add additional operational, financial and management information systems and processes to support our ongoing development efforts, any future manufacturing or commercialization efforts and our transition to operating as a public company.

We believe that our available funds subsequent to this offering will be sufficient to fund our operations through 2020. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect. We do not expect to generate revenue from product sales unless and until we successfully complete development and obtain regulatory approval for a product candidate or enter into collaborative agreements with third parties, which we expect will take a number of years and the outcome of which is subject to significant uncertainty. Additionally, we currently use third parties such as contract research organizations, or CROs, and contract manufacturing organizations, or CMOs, to carry out our preclinical and clinical development activities and we do not yet have a sales organization. If we obtain regulatory approval for our product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution. To fund our current and future operating plans, we will need additional capital, which we may obtain through one or more equity offerings, debt financings or other third-party funding, including potential strategic alliances and licensing or collaboration arrangements. We may, however, be unable to raise additional funds or enter into such other arrangements when needed on favorable terms or at all. Our failure to raise capital or enter into such other arrangements as and when needed would have a negative impact on our financial condition and our ability to develop our current product candidates, or any additional product candidates, if developed. The amount and timing of our future funding requirements will depend on many factors, including the pace and results of our preclinical and clinical development efforts. We cannot assure you that we will ever be profitable or generate positive cash flow from operating activities.

Novartis License Agreement

On March 23, 2017, we entered into a license agreement with Novartis, pursuant to which we were granted an exclusive, field-restricted, worldwide license to certain intellectual property rights owned or controlled by Novartis, including patents, patent applications, proprietary information, know-how and other intellectual property, to develop, commercialize and sell one or more therapeutic products comprising RTB101 or RTB101 and everolimus in a fixed dose combination. Under the license agreement, we have been licensed a patent portfolio of ten patent families directed to composition of matter of RTB101 and its salts, formulations of everolimus and methods of using RTB101 and everolimus to enhance the immune response among others. The exclusive field under the license agreement is for the treatment, prevention and diagnosis of diseases and other conditions in all indications in humans and animals.

As initial consideration for the license, we issued Novartis Institutes for Biomedical Research, Inc., or NIBR, 2,587,992 shares of our Series A Preferred Stock.

The agreement may be terminated by either party upon a material breach of obligation by the other party that is not cured with 60 days after written notice. We may terminate the agreement in its entirety or on a product-by-product or country-by-country basis with or without cause with 60 days' prior written notice.

Novartis may terminate the portion of the agreement related to everolimus if we fail to use commercially reasonable efforts to research, develop and commercialize a product utilizing everolimus for a period of three years. Novartis may terminate the license agreement upon our bankruptcy, insolvency, dissolution or winding up.

As additional consideration for the license, we are required to pay up to an aggregate of $4.3 million upon the satisfaction of clinical milestones, up to an aggregate of $24 million upon the satisfaction of regulatory milestones for the first indication approved, and up to an aggregate of $18 million upon the satisfaction of regulatory milestones for the second indication approved. In addition, we are required to pay up to an aggregate of $125 million upon the satisfaction of commercial milestones, based on the amount of annual net sales. We are also required to pay tiered royalties ranging from a mid-single digit percentage to a low-teen digit percentage on annual net sales of products. These royalty obligations last on a product-by-product and country-by-country basis until the latest of (i) the expiration of the last valid claim of a Novartis patent covering a subject product, (ii) the expiration of any regulatory exclusivity for the subject product in a country, or (iii) the 10th anniversary of the first commercial sale in the country, and are subject to a reduction after the expiration of the last valid claim of a Novartis patent or the introduction of a generic equivalent of a product in a country. In addition, if we sublicense the rights under the license agreement, we are required to pay a certain percentage of the sublicense revenue to Novartis. Novartis will no longer be entitled to sublicense revenue following the last visit of the 400th subject in any human clinical trial conducted by us or a sublicensee of ours, which we expect to occur by the end of our ongoing Phase 2b clinical trial.

Milestone payments to Novartis will be recorded as research and development expenses in our statements of operations once achievement of each associated milestone has occurred or the achievement is considered probable. In May 2017, we initiated a Phase 2b clinical trial for a first indication, triggering the first milestone payment under the agreement. Accordingly, we paid the related $0.3 million payment in May 2017. As of September 30, 2017, none of the remaining development milestones, regulatory milestones, sales milestones, or royalties had been reached or were probable of achievement. We also enter into contracts in the normal course of business with various third parties for preclinical research studies, clinical trials, testing and other services. These contracts generally provide for termination upon notice, and therefore we believe that our noncancelable obligations under these agreements are not material.

Financial Operations Overview

Revenue

We have not generated any revenue from the sale of our products, and we do not expect to generate any revenue unless and until we obtain regulatory approval of and commercialize RTB101, alone or in combination with everolimus.

Research and Development Expenses

Research and development expenses consist primarily of costs incurred for the development of our product candidates, which include:

- personnel costs, which include salaries, benefits and stock-based compensation expense;
- expenses incurred under agreements with consultants, third-party contract organizations and investigative clinical trial sites that conduct research and development activities on our behalf;
- costs related to production of preclinical and clinical materials, including fees paid to contract manufacturers;
- laboratory and vendor expenses related to the execution of preclinical studies and clinical trials; and
- lab supplies and equipment used for internal research and development activities.

We have not provided program costs since inception because historically we have not tracked or recorded our research and development expenses on a program-by-program basis. We use our personnel and infrastructure resources across multiple research and development programs directed toward developing our TORC1 program and for identifying and developing product candidates. We manage certain activities such as contract research and manufacturing of RTB101 alone or in combination with everolimus and our discovery programs through our third-party vendors, and do not track the costs of these activities on a program-by-program basis.

We expense all research and development costs in the periods in which they are incurred. Costs for certain development activities are recognized based on an evaluation of the progress to completion of specific tasks using information and data provided to us by our vendors and third-party service providers.

We expect our research and development expenses to increase substantially for the foreseeable future as we continue to invest in research and development activities related to developing our product candidates, including investments in manufacturing, as our programs advance into later stages of development and we continue to conduct clinical trials. The process of conducting the necessary clinical research to obtain regulatory approval is costly and time-consuming, and the successful development of our product candidates is highly uncertain. As a result, we are unable to determine the duration and completion costs of our research and development projects or when and to what extent we will generate revenue from the commercialization and sale of any of our product candidates.

Because of the numerous risks and uncertainties associated with product development, we cannot determine with certainty the duration and completion costs of the current or future preclinical studies and clinical trials or if, when, or to what extent we will generate revenues from the commercialization and sale of our product candidates. We may never succeed in achieving regulatory approval for our product candidates. The duration, costs and timing of preclinical studies and clinical trials and development of our product candidates will depend on a variety of factors, including:

- successful completion of preclinical studies and Investigational New Drug-enabling studies;
- successful enrollment in, and completion of, clinical trials;
- receipt of regulatory approvals from applicable regulatory authorities;
- establishing commercial manufacturing capabilities or making arrangements with third-party manufacturers;
- obtaining and maintaining patent and trade secret protection and non-patent exclusivity;
- launching commercial sales of our product candidates, if and when approved, whether alone or in collaboration with others;
- acceptance of our product candidates, if and when approved, by patients, the medical community and third-party payors;
- effectively competing with other therapies and treatment options;
- a continued acceptable safety profile following approval;
- enforcing and defending intellectual property and proprietary rights and claims; and
- achieving desirable medicinal properties for the intended indications.

A change in the outcome of any of these factors could mean a significant change in the costs and timing associated with the development of our current and future preclinical and clinical product candidates. For example, if the FDA, or another regulatory authority were to require us to conduct clinical trials beyond those that we currently anticipate will be required for the completion of clinical development, or if we experience significant delays in execution of or enrollment in any of our preclinical studies or clinical trials, we could be required to expend significant additional financial resources and time on the completion of preclinical and clinical development. We expect our research and development expenses to increase for the foreseeable future as we continue the development of product candidates.

General and Administrative Expenses

General and administrative expenses consist primarily of personnel costs, costs related to maintenance and filing of intellectual property, depreciation expense and other expenses for outside professional services, including legal, human resources, audit and accounting services. Personnel costs consist of salaries, benefits and stock-based compensation expense. We expect our general and administrative expenses to increase for the foreseeable future due to anticipated increases in headcount to advance our product candidates and as a result of operating as a public company, including expenses related to compliance with the rules and regulations of the Securities and Exchange Commission, The Nasdaq Global Market, additional insurance expenses, investor relations activities and other administration and professional services.

Other Income, Net

Other income, net, consists of non-cash changes in fair value of the tranche rights liability associated with the redeemable convertible preferred stock.

Critical Accounting Polices and Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our financial statements, which have been prepared in accordance with United States generally accepted accounting principles, or U.S. GAAP. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the expenses incurred during the reporting periods. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. We believe that the accounting policies discussed below are critical to understanding our historical and future performance, as these policies relate to the more significant areas involving management's judgments and estimates.

Accrued Research and Development Costs

We accrue for estimated costs of research and development activities conducted by third-party service providers, which include the conduct of preclinical studies and clinical trials, and contract manufacturing activities. We record the estimated costs of research and development activities based upon the estimated amount of services provided, and include these costs in accrued liabilities in our balance sheets and within research and development expense in our statements of operations. These costs are a significant component of our research and development expenses. We accrue for these costs based on factors such as estimates of the work completed and in accordance with agreements established with our third-party service providers. We make judgments and estimates in determining the accrued liabilities balance in each reporting period.

Research and Development Costs

Research and development costs are expensed as incurred and consist of personnel costs, lab supplies and other costs, as well as fees paid to third parties to conduct research and development activities on our behalf.

Amounts incurred in connection with license agreements are also included in research and development expenses. We record payments made to outside vendors for services performed or goods being delivered for use in research and development activities as either prepaid expenses or accrued expenses, depending on the timing of when services are performed or goods are delivered.

Determination of Fair Value of Common and Preferred Shares and Tranche Rights Liabilities

As there has been no public market for our equity securities to date, the estimated fair value of our common and preferred shares has been determined by the board of directors as of the grant date, with input from management, considering our most recently available third-party valuations of common shares and preferred shares and the board of directors' assessment of additional objective and subjective factors that it believed were relevant and which may have changed from the date of the most recent valuation through the date of the grant. These third party valuations were performed in accordance with the guidance outlined in the American Institute of Certified Public Accountants' Accounting and Valuation Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*, or the Practice Aid. Our common and preferred share valuations were prepared using either an option-pricing method, or OPM, or a probability-weighted expected return method, or PWERM, which uses a combination of market approaches and an income approach to estimate our enterprise value. The OPM treats common securities and preferred securities as call options on the total equity value of a company, with exercise prices based on the value thresholds at which the allocation among the various holders of a company's securities changes. Under this method, the common and preferred shares have value only if the funds available for distribution to stockholders are expected to exceed the value of the preferred security liquidation preference at the time of the liquidity event, such as a strategic sale or a merger. The PWERM is a scenario-based methodology that estimates the fair value of common and preferred shares based upon an analysis of future values for the enterprise, assuming various outcomes. The common and preferred share values are based on the probability-weighted present value of expected future investment returns considering each of the possible outcomes available as well as the rights of each class of common and preferred securities. The future value of the common and preferred shares under each outcome is discounted back to the valuation date at an appropriate risk-adjusted discount rate and probability weighted to arrive at an indication of value for the common and preferred shares. The estimated fair value of the tranche liability was determined using the difference between the total purchase price of our Series A Preferred Stock and the total fair value of the Series A Preferred Stock using a risk-adjusted forward contract model.

Stock-Based Compensation Expense

We recognize equity-based compensation expense for awards of equity instruments to employees and non-employees based on the grant date fair value of those awards in accordance with the Financial Accounting Standards Board, or FASB, Accounting Standards Codification, or ASC, Topic 718, *Stock Compensation*, or ASC 718. ASC 718 requires all equity-based compensation awards to employees and non-employee directors, including grants of restricted shares and stock options, to be recognized as expense in the Statements of Operations based on their grant date fair values. We estimate the fair value of stock options using the Black-Scholes option pricing model. We use the value of our common stock to determine the fair value of restricted shares.

We account for restricted stock and common stock options issued to nonemployees under FASB ASC Topic 505-50, *Equity-Based Payments to Non-Employees*, or ASC 505-50. As such, the value of such options is periodically remeasured and income or expense is recognized over their vesting terms. Compensation cost related to awards with service-based vesting schedules is recognized using the straight-line method. We determine the fair value of the restricted stock and common stock granted to nonemployees as either the fair value of the consideration received or the fair value of the equity instruments issued.

The Black-Scholes option pricing model requires the input of certain subjective assumptions, including (i) the expected volatility, (ii) the expected term of the award, (iii) the risk-free interest rate and (iv) the expected

dividend yield. Due to the lack of a public market for the trading of our common stock and a lack of company-specific historical and implied volatility data, we have based our estimate of expected volatility on the historical volatility of a group of similar companies that are publicly traded. The historical volatility is calculated based on a period of time commensurate with the expected term assumption. The group of representative companies has characteristics similar to us, including stage of product development and focus on the life science industry. We use the simplified method, which is the average of the final vesting tranche date and the contractual term, to calculate the expected term for options granted to employees as we do not have sufficient historical exercise data to provide a reasonable basis upon which to estimate the expected term. For options granted to nonemployees, we utilize the contractual term of the arrangement as the basis for the expected term assumption. The risk-free interest rate is based on a treasury instrument whose term is consistent with the expected term of the stock options. We use an assumed dividend yield of zero as we have never paid dividends and have no current plans to pay any dividends on our common stock.

There were no stock options granted during the period from July 5, 2016 (inception) to December 31, 2016. The following table presents the assumptions used to estimate the fair value of options granted during the nine months ended September 30, 2017:

	Nine Months Ended September 30, 2017
Employees:	
Fair value of common stock	$ 0.79
Expected volatility	74.4%
Expected term (in years)	6.1
Risk-free interest rate	1.9%
Expected dividend yield	0.0%
Nonemployees:	
Fair value of common stock	$ 0.79 - $1.00
Expected volatility	74.6% - 76.9%
Expected term (in years)	10.0
Risk-free interest rate	2.3%
Expected dividend yield	0.0%

For the period from July 5, 2016 (inception) through December 31, 2016, the nine months ended September 30, 2017, and the period from July 5, 2016 (inception) through September 30, 2016, stock-based compensation expense was $0, $0.3 million, and $0, respectively. As of September 30, 2017, we had $1.0 million of total unrecognized stock-based compensation expense, which we expect to recognize over a weighted-average period of 2.84 years.

The following table presents the grant dates of common shares, stock options, and awards that we granted from July 5, 2016 (inception) through September 30, 2017 along with the corresponding purchase or exercise price for each grant and our estimate of the fair value per share of our common stock on each grant date, which we utilized to calculate stock-based compensation expense:

Grant Date	Type of Award	Number of Shares	Purchase or Exercise Price per Share	Estimate of Common Stock Fair Value per Share on Grant Date
7/11/2016	Restricted common shares	3,772,726	$ 0.0001	$ 0.0001
3/1/2017	Common shares	1,886,363	$ 0.0001	$ 0.0001
6/12/2017	Options	101,948	$ 0.79	$ 0.79
9/14/2017	Options	9,372	$ 1.00	$ 1.00
12/05/2017	Options	84,348	$ 9.33	$ 9.33
1/12/2018	Options	111,320	$ 13.17	$ 13.17

Determination of the Fair Value of Common Stock on Grant Dates

Historically, for all periods prior to this offering, the fair values of the shares of common stock underlying our share-based awards were estimated on each grant date by our board of directors. The restricted common shares were granted to non-employees and subsequently were marked to market at each reporting date. On April 4, 2017, the non-employees became employees of our company and the fair value of the remaining unvested shares was fixed at $0.79 per share. In order to determine the fair value of our common stock our board of directors considered, among other things, contemporaneous valuations of our common stock prepared by an independent third-party valuation specialist in accordance with the guidance provide by the Practice Aid.

Given the absence of a public trading market for our common stock, our board of directors exercised their judgment and considered a number of objective and subjective factors to determine the best estimate of the fair value of our common stock, including our stage of development; progress of our research and development efforts; the rights, preferences and privileges of our preferred stock relative to those of our common stock; equity market conditions affecting comparable public companies; the lack of marketability of our common stock; and valuations obtained from issuance of our preferred stock to unrelated parties.

We performed common stock valuations, with the assistance of an independent third-party valuation specialist, as of March 23, 2017, September 8, 2017, November 30, 2017 and December 31, 2017, which resulted in valuations of our common stock of $0.79, $1.00, $9.33 and $13.17, respectively. In conducting the valuations, the independent third-party valuation specialist considered all objective and subjective factors that it believed to be relevant for each valuation conducted in accordance with the Practice Aid, including our best estimate of our business condition, prospects and operating performance at each valuation date. Other significant factors included:

- the prices of our preferred stock sold to outside investors in arm’s length transactions, and the rights, preferences and privileges of our preferred stock as compared to those of our common stock, including the liquidation preferences of our preferred stock;
- our stage of development and business strategy and the material risks related to our business and industry;
- the valuation of publicly traded companies in the life sciences and biotechnology sectors, as well as recently completed mergers and acquisitions of guideline companies;
- our results of operations and financial position;
- the composition of, and changes to, our management team and board of directors;
- the lack of liquidity of our common stock;
- any external market conditions affecting the life sciences and biotechnology industry sectors;
- the likelihood of achieving a liquidity event for the holders of our common stock and stock options, such as an initial public offering, or IPO, or a sale of our company, given prevailing market conditions; and
- the state of the IPO market for similarly situated privately held life sciences companies.

The dates of our contemporaneous valuations have not always coincided with the dates of our stock option grants. In determining the exercise prices of the stock options set forth in the table above, our board of directors considered, among other things, the most recent valuation of our common stock and their assessment of additional objective and subjective factors that were relevant as of the grant dates. The additional factors

considered when determining whether any changes in the fair value of our common stock had occurred between the most recent valuation and the grant dates included our stage of research and development, our operating and financial performance and current business conditions.

The estimates of fair value of our common stock are highly complex and subjective. There are significant judgments and estimates inherent in the determination of the fair value of our common stock. These judgments and estimates include assumptions regarding our future operating performance, the time to completing an IPO or other liquidity event, the related valuations associated with these events, and the determinations of the appropriate valuation methods at each valuation date. The assumptions underlying these valuations represent management's best estimates, which involve inherent uncertainties and the application of management judgment. If we had made different assumptions, our stock-based compensation expense, net loss and net loss per share applicable to common stockholders could have been materially different.

For valuations after the completion of this offering, our board of directors will determine the fair value of each share of underlying common stock based on the closing price of our common stock as reported on the date of grant.

Determination of Estimated Offering Price

We and our underwriters determined the estimated price range set forth on the cover of this preliminary prospectus, which is $14.00 to $16.00 per share. In comparison, our estimate of the fair value of our common stock was $0.79 per share at June 12, 2017, which was determined by our board of directors with the assistance of a third-party valuation of our common stock as of March 23, 2017, $1.00 per share at September 14, 2017, which was determined by our board of directors with the assistance of a third-party valuation of our common stock as of September 8, 2017, $9.33 per share at December 5, 2017, which was determined by our board of directors with the assistance of a third-party valuation of our common stock as of November 30, 2017 and $13.17 per share at January 12, 2018, which was determined by our board of directors with the assistance of a third-party valuation of our common stock as of December 31, 2017. With the exception of the December 31, 2017 valuation, all valuations were predicated on arm's length capital raises that transpired at each valuation date. The December 31, 2017 valuation was predicated on the estimated price range set forth on the cover of this preliminary prospectus, adjusted for risk and lack of marketability. These valuations utilized the option pricing method, or OPM, to allocate value amongst the various ownership classes. The valuation for our June 2017 option grants attributed a 50% probability to an initial public offering, or IPO, and a 50% probability of a non-IPO liquidity event, and reflected a probability weighted average incremental discount for lack of marketability of 49.3% applied to the non-IPO scenario. The valuation for our September 2017 option grants attributed a 60% probability to an initial public offering and a 40% probability of a non-IPO liquidity event and reflected a probability weighted average incremental discount for lack of marketability of 49.4% applied to the non-IPO scenario. The valuation for our December 2017 option grants attributed a 75% probability to an initial public offering and a 25% probability of a non-IPO liquidity event, and reflected a probability weighted average incremental discount for lack of marketability of 20% applied to the non-IPO scenario. The valuation for our January 2018 option grants attributed a 90% probability to an initial public offering and a 10% probability of a non-IPO liquidity event, and reflected a probability weighted average discount for lack of marketability of 12%. In addition to quantitative analysis from third-party valuations of our common stock, we also considered macro-economic and market conditions, including our subjective assessment of market conditions for initial public offerings of companies similarly situated to ours and our subjective assessment as to the likelihood of successfully executing an initial public offering in the coming months, among other factors.

We note that, as is typical in initial public offerings, the estimated price range for this offering was not derived using a formal determination of fair value, but was determined based upon discussions between us and the underwriters. Among the factors considered in setting the estimated range were prevailing market conditions, estimates of our business potential, progress in our clinical trials and developments in our business, the general condition of the securities market and the market prices of, and demand for, publicly-traded common stock of generally comparable companies.

Results of Operations

Comparison of the periods from July 5, 2016 (Inception) to December 31, 2016, the Nine Months Ended September 30, 2017, and the period from July 5, 2016 (Inception) to September 30, 2016

	July 5, 2016 (inception) through December 31, 2016	July 5, 2016 (inception) through September 30, 2016	Nine Months Ended September 30, 2017
		(In thousands)	
Operating expenses:			
Research and development	$ —	$ —	$ 10,047
General and administrative	1	1	1,312
Total operating expenses	1	1	11,359
Loss from operations	(1)	(1)	(11,359)
Other income, net	—	—	635
Net loss	$ (1)	$ (1)	$ (10,724)

Research and Development

Research and development expenses were $0 for the periods from July 5, 2016 (inception) through December 31, 2016 and from July 5, 2016 (inception) through September 30, 2016, as our primary operations did not commence until March 23, 2017, when we acquired our license to develop, make, use, and sell products incorporating RTB101 alone or in combination with everolimus. Research and development expenses increased to $10.0 million for the nine months ended September 30, 2017, and were primarily attributable to $3.9 million of costs associated with our license agreement, including the license of the intellectual property in exchange for Series A preferred stock, $1.0 million of costs related to contract research and supplies, $4.0 million of costs related to clinical trials, including the ongoing Phase 2b clinical trial, $0.5 million of costs related to external consulting incurred to supplement our research and development personnel, and $0.6 million of personnel costs.

General and Administrative

General and administrative expenses were $1,000 for the periods from July 5, 2016 (inception) through December 31, 2016 and from July 5, 2016 (inception) through September 30, 2016, and consisted entirely of registration and filing fees related to our incorporation. General and administrative expenses increased to $1.3 million for the nine months ended September 30, 2017, and were primarily attributable to $0.5 million of personnel, and $0.8 million of professional services fees, including costs related to intellectual property, legal and filing costs, accounting costs, and external consulting costs incurred to supplement our personnel.

Other Income, Net

Other income, net was $0 for the periods from July 5, 2016 (inception) through December 31, 2016 and from July 5, 2016 (inception) through September 30, 2016. Other income, net was $0.6 million for the nine months ended September 30, 2017, and entirely consisted of the change in fair value of our tranche liability related to our redeemable convertible preferred stock.

Liquidity, Capital Resources and Plan of Operations

Since inception through September 30, 2017, our operations have been financed solely by net proceeds of $10.0 million from the issuance and sale of shares of our redeemable convertible preferred stock. As of September 30, 2017, we had $4.0 million in cash and an accumulated deficit of $10.7 million. In October 2017, we received an additional $15.0 million in gross proceeds from the issuance and sale of our redeemable

convertible Series A preferred stock, or the Series A preferred stock, at the final closing of our Series A financing, as well as $40.0 million in gross proceeds from the issuance and sale of our redeemable convertible Series B preferred stock, or the Series B preferred stock.

Our primary use of cash has been to fund operating expenses, which consist of research and development and general and administrative expenditures. Cash used to fund operating expenses is impacted by the timing of when we pay these expenses, as reflected in the change in our outstanding accounts payable and accrued expenses.

Based upon our current operating plan, we believe that the net proceeds from this offering, together with our existing cash will enable us to fund our operating expenses and capital expenditure requirements through our ongoing Phase 2b clinical trial of RTB101 alone or in combination with everolimus, the completion of a subsequent pivotal Phase 3 clinical program, assuming a successful outcome in our Phase 2b clinical trial of RTB101 alone or in combination with everolimus, and the filing of an NDA with the FDA, assuming a successful outcome in our Phase 3 clinical program. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect. We will continue to require additional financing to advance our current product candidate through clinical development, to develop, acquire or in-license other potential product candidates and to fund operations for the foreseeable future. We will continue to seek funds through equity or debt financings, collaborative or other arrangements, or through other sources of financing. Adequate additional funding may not be available to us on acceptable terms, or at all. Any failure to raise capital as and when needed could have a negative impact on our financial condition and on our ability to pursue our business plans and strategies.

Further, our operating plans may change, and we may need additional funds to meet operational needs and capital requirements for clinical trials and other research and development activities. We currently have no credit facility or committed sources of capital. Because of the numerous risks and uncertainties associated with the development and commercialization of our product candidates, we are unable to estimate the amounts of increased capital outlays and operating expenditures associated with our current and anticipated product development programs.

If we need to raise additional capital to fund our operations, funding may not be available to us on acceptable terms, or at all. If we are unable to obtain adequate financing when needed, we may have to delay, reduce the scope of or suspend one or more of our clinical trials, research and development programs or commercialization efforts. We may seek to raise any necessary additional capital through a combination of public or private equity offerings, debt financings, and collaborations or licensing arrangements. If we do raise additional capital through public or private equity offerings, the ownership interest of our existing stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect our stockholders' rights. If we raise additional capital through debt financing, we may be subject to covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If additional funding is required, there can be no assurance that additional funds will be available to us on acceptable terms on a timely basis, if at all. If we are unable to raise capital, we will need to curtail planned activities to reduce costs. Doing so will likely have an unfavorable effect on our ability to execute our business plans.

The following table summarizes our cash flows for the periods indicated:

	July 5, 2016 (inception) through December 31, 2016	July 5, 2016 (inception) through September 30, 2016	Nine Months Ended September 30, 2017
		(In thousands)	
Net cash used in operating activities	$ —	$ —	$ (5,996)
Net cash used in investing activities	—	—	(39)
Net cash provided by financing activities	—	—	10,000
Net increase in cash	$ —	$ —	$ 3,965

Cash Flows from Operating Activities

No cash was used in operating activities for the periods from July 5, 2016 (inception) through December 31, 2016 and from July 5, 2016 (inception) through September 30, 2016. Cash used in operating activities for the nine months ended September 30, 2017 was $6.0 million, consisting of a net loss of $10.7 million adjusted for noncash items primarily including stock-based compensation expense of $0.3 million and expense related to the acquisition of intellectual property of $3.2 million partially offset by gains resulting from the change in fair value of the tranche liability of $0.6 million. The change in our net operating assets and liabilities were due primarily to an increase in accounts payable of $1.1 million as a result of payment timing and an increase in accrued liabilities of $1.0 million primarily due to increased clinical activities, which were partially offset by an increase in prepaid expenses and other current assets of $0.2 million due to prepayments for our research and development activities.

Cash Flows from Investing Activities

No cash was used in investing activities for the periods from July 5, 2016 (inception) through December 31, 2016 and from July 5, 2016 (inception) through September 30, 2016. Cash used in investing activities for the nine months ended September 30, 2017 was $39,000 and consisted of the purchases of property and equipment.

Cash Flows from Financing Activities

No cash was provided by financing activities for the periods from July 5, 2016 (inception) through December 31, 2016 and from July 5, 2016 (inception) through September 30, 2016. Cash provided by financing activities for the nine months ended September 30, 2017 was $10.0 million from the issuance of redeemable convertible preferred stock.

Contractual Obligations and Other Commitments

The following table summarizes our outstanding contractual obligations as of payment due date by period at September 30, 2017.

Total	Less than 1 Year	1 to 3 Years	3 to 5 Years	More than 5 Years
$—	$—	$—	$—	$—

In March 2017, we entered into a license Agreement with Novartis. See “—Overview—Novartis License Agreement.” Amounts owed under this license agreement are not included in the table above as they were considered a contingent payment as of September 30, 2017.

In January 2018, we entered into a multi-year agreement to lease office space in Boston, Massachusetts under an operating lease agreement. Our contractual commitments under the lease total approximately $0.7 million. Payments under the contract are expected to commence in March 2018.

Net Operating Loss Carryforwards.

As of September 30, 2017, we had federal and state net operating loss carryforwards of $7.5 million and $7.4 million, respectively, which begin to expire in various amounts in 2036. As of September 30, 2017, we also had federal research and development tax credit carryforwards of $0.1 million, which begin to expire in 2037. These net operating loss and tax credit carryforwards could expire unused and be unavailable to offset future income tax liabilities. In addition, in general, under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, or the Code, a corporation that undergoes an “ownership change” is subject to limitations on its ability to utilize its pre-change net operating losses or tax credits, or NOLs or credits, to offset future taxable income or taxes. For these purposes, an ownership change generally occurs where the aggregate stock ownership of one or more stockholders or groups of stockholders who own at least 5% of a corporation’s stock increases its ownership by more than 50 percentage points over its lowest ownership percentage within a specified testing

period. Our existing NOLs or credits may be subject to limitations arising from previous ownership changes, and if we undergo an ownership change in connection with or after this offering, our ability to utilize NOLs or credits could be further limited by Sections 382 and 383 of the Code. In addition, future changes in our stock ownership, many of which are outside of our control, could result in an ownership change under Sections 382 and 383 of the Code. Our NOLs or credits may also be impaired under state law. Accordingly, we may not be able to utilize a material portion of our NOLs or credits. If we determine that an ownership change has occurred and our ability to use our historical NOLs or credits is materially limited, it would harm our future operating results by effectively increasing our future tax obligations. We have not performed an ownership change analysis.

Furthermore, our ability to utilize our NOLs or credits is conditioned upon our attaining profitability and generating U. S. federal and state taxable income. As described above under "Risk Factors—Risks Related to our Financial Position and Need for Additional Capital," we have incurred significant net losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future; and therefore, we do not know whether or when we will generate the U.S. federal or state taxable income necessary to utilize our NOL or credit carryforwards that are subject to limitation by Sections 382 and 383 of the Code.

Off-Balance Sheet Arrangements

We have not entered into any off-balance sheet arrangements and do not have any holdings in variable interest entities.

Quantitative and Qualitative Disclosures about Market Risk

We are exposed to market risks in the ordinary course of our business. We had no cash equivalents, investments or outstanding debt as of December 31, 2016 and September 30, 2017 and, as such, minimal exposure to market risk. At December 31, 2016 and September 30, 2017, we had cash in an operating account of $0 and $4.0 million, respectively.

JOBS Act Accounting Election

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. We are considering whether to "opt out" of this provision and thereby comply with new or revised accounting standards as required when they are adopted. If we do decide to "opt out," this decision to "opt out" of the extended transition period under the JOBS Act is irrevocable.

We are in the process of evaluating the benefits of relying on other exemptions and reduced reporting requirements under the JOBS Act. Subject to certain conditions, as an emerging growth company, we may rely on certain of these exemptions, including without limitation, providing an auditor's attestation report on our system of internal controls over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act. We would cease to be an emerging growth company upon the earliest of: (1) the last day of the fiscal year ending after the fifth anniversary of our initial public offering; (2) the last day of the fiscal year in which we have more than $1.07 billion in annual revenue; (3) the date we qualify as a "large accelerated filer," with at least $700.0 million of equity securities held by non-affiliates; or (4) the issuance, in any three-year period, by our company of more than $1.0 billion in non-convertible debt securities held by non-affiliates.

Recently Issued and Adopted Accounting Pronouncements

In August 2014, the FASB issued ASU 2014-15, *Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern*, or ASU 2014-15. ASU 2014-15 requires management to evaluate relevant conditions, events, and certain management plans that are known or reasonably knowable that, when considered

in the aggregate, raise substantial doubt about the entity's ability to continue as a going concern within one year after the date that the financial statements are issued, for both annual and interim periods. ASU 2014-15 also requires certain disclosures around management's plans and evaluation, as well as the plans, if any, that are intended to mitigate those conditions or events that will alleviate the substantial doubt. ASU 2014-15 is effective for fiscal years ending after December 15, 2016. We adopted this guidance on July 5, 2016 (inception).

In March 2016, the FASB issued ASU No. 2016-09, Compensation—*Stock Compensation (Topic 718)*, or ASU 2016-09. The guidance changes how companies account for certain aspects of equity-based payments to employees. Entities will be required to recognize income tax effects of awards in the income statement when the awards vest or are settled. The guidance also allows an employer to repurchase more of an employee's shares than it can under current guidance for tax withholding purposes providing for withholding at the employee's maximum rate as opposed to the minimum rate without triggering liability accounting and to make a policy election to account for forfeitures as they occur. The updated guidance is effective for annual periods beginning after December 15, 2017. Early adoption is permitted. We adopted this guidance on July 5, 2016 (inception) and made the policy election to account for forfeitures as they occur. No awards have been forfeited as of September 30, 2017.

In November 2016, the FASB issued ASU 2016-18, *Statement of Cash Flows*, or ASU 2016-18, which requires that amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. ASU 2016-18 is effective for fiscal years beginning after December 15, 2018 and should be applied using a retrospective transition method to each period presented. Early adoption is permitted. We do not expect the impact of ASU 2016-18 to be material to our financial statements.

In May 2017, the FASB issued ASU 2017-09, *Compensation—Stock Compensation* (Topic 718): Scope of Modification Accounting, or ASU 2017-09. ASC 2017-09 provides guidance about which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting in Topic 718. The guidance is effective for annual periods beginning after December 15, 2017, with early adoption permitted, including adoption in any interim period for which financial statements have not yet been issued. We are currently evaluating the potential effects of adopting the provisions of ASU 2017-09.

In July 2017, the FASB issued ASU 2017-11, *Accounting for Certain Financial Instruments with Down Round Features*, or ASU 2017-11, which updates the guidance related to the classification analysis of certain equity-linked financial instruments (or embedded features) with down round features. Under ASU 2017-11, a down round feature no longer precludes equity classification when assessing whether the instrument is indexed to an entity's own stock. As a result, a freestanding equity-linked financial instrument (or embedded conversion option) no longer would be accounted for as a derivative liability at fair value as a result of the existence of a down round feature. For freestanding equity classified financial instruments, the amendments require entities that present earnings per share (EPS) in accordance with Topic 260 to recognize the effect of the down round feature when it is triggered. That effect is treated as a dividend and as a reduction of income available to common shareholders in basic EPS. ASU 2017-11 is effective for public entities for all annual and interim periods beginning after December 15, 2019. Early adoption is permitted. We are currently evaluating the impact that the adoption of ASU 2017-11 will have on our financial statements.

BUSINESS

Overview

We are a clinical-stage biopharmaceutical company focused on the development and commercialization of novel therapeutics for the treatment of aging-related diseases. Our lead program has demonstrated in several clinical trials, including a randomized, placebo-controlled trial, the potential to treat multiple diseases of aging for which there are no approved therapies. The decline in immune function that occurs during aging, or immunosenescence, increases susceptibility to a variety of diseases, including respiratory tract infections, or RTIs, that significantly contribute to morbidity and mortality in the elderly. Our approach focuses on the mechanistic target of rapamycin, or mTOR, pathway, an evolutionarily conserved pathway that regulates aging, and specifically on selective inhibition of the target of rapamycin complex 1, or TORC1. Our initial focus is on the development of RTB101, an orally administered, small molecule, potent TORC1 inhibitor, alone and in combination with other mTOR inhibitors such as everolimus—as a first-in-class immunotherapy program designed to improve immune function and thereby reduce the incidence of RTIs in the elderly regardless of the causative pathogen. We licensed the worldwide rights to our TORC1 program, including RTB101 alone or in combination with everolimus or other mTOR inhibitors, from Novartis International Pharmaceutical Ltd., or Novartis, in March 2017.

Our TORC1 immunotherapy approach is supported by a randomized, placebo-controlled Phase 2a clinical trial in 264 elderly subjects that provided statistically significant and clinically meaningful results. This trial demonstrated that treatment with RTB101 alone and in combination with everolimus can enhance the ability of the aging immune system to fight infectious pathogens and consequently reduce the incidence of all infections, including RTIs in elderly subjects. Six weeks of treatment with RTB101 alone and in combination with everolimus met a prespecified endpoint of reducing the incidence of infections by 33% ($p=0.008$) and 38% ($p=0.001$), respectively, during a period of one year following initiation of therapy. We are evaluating RTB101 alone and in combination with everolimus in a Phase 2b clinical trial for the reduction in the incidence of RTIs in the elderly and expect to report top-line data from this trial in the second half of 2018. We expect market exclusivity for RTB101 alone and in combination with everolimus until at least 2031 in the United States 2032 in major European markets, and 2030 in Japan, and additional pending patent applications may prolong the exclusivity of these product candidates up to 2036.

Recent scientific findings, including those published in the scientific journals Cell, Nature and Science, suggest that aging and aging-related conditions, such as immunosenescence, are attributable not only to random cellular wear and tear, but also to specific intra-cellular signaling pathways, including the mTOR pathway. mTOR is a protein kinase that signals via two multiprotein complexes, known as TORC1 and TORC2. TORC1 inhibition has been observed to prolong lifespan, enhance immune function, ameliorate heart failure, enhance memory and mobility, decrease adiposity and delay the onset of aging-related diseases in multiple animal studies. Specifically with respect to enhanced immune function, TORC1 inhibition was observed in preclinical studies to rejuvenate blood, or hematopoietic, stem cell function, increase infection-fighting white blood cell production and enhance antibody-mediated, or adaptive, immunity. On the other hand, TORC2 inhibition has been observed to decrease lifespan in preclinical studies and cause unwanted side effects of hyperlipidemia and hyperglycemia in certain animals and humans. Therefore, based on these observations and data from the Phase 2a clinical trial, we believe our TORC1 program is well-suited to improve immune function and counteract immunosenescence in the elderly.

The reduced ability of elderly patients to effectively detect and fight infections is most commonly manifested in their susceptibility to RTIs and the negative effects such infections have on their overall health. According to the U.S. Census Bureau, RTIs are the fifth leading cause of death in people age 85 and over and the seventh leading cause of death in people age 65 and over, and result in high healthcare burdens and costs for the elderly population and the healthcare system. The majority of RTIs are caused by viruses for which there are no approved therapies. Despite this, antibiotics, which are ineffective against viruses, are often prescribed

indiscriminately to treat RTIs, which may cause side effects related to antibiotic use and contribute to the growing global problem of antibiotic resistance. As the elderly represent the fastest growing population in the world as a whole, we believe there is significant unmet medical need for innovative therapeutic options for reducing the incidence of RTIs by enhancing the function of the aging immune system.

We believe our approach to addressing RTIs in the elderly possesses several clinical and commercial advantages. Our TORC1 program offers an immunotherapy approach that has the potential to address a broad range of viral, and bacterial, pathogens. Statistically significant and clinically meaningful reductions in RTI incidence were observed in the Phase 2a clinical trial that evaluated RTB101 alone and in combination with everolimus. We believe the risk-to-benefit ratio of our program is well-suited to the elderly due to the following observations: our oral product candidates were well-tolerated in elderly subjects and none of the participants in the active treatment arms experienced a serious adverse event that was related to the study drug, and the doses being investigated in our ongoing Phase 2b clinical trial are 60 to 240 times lower than maximum tolerated doses established in prior clinical trials for other indications. Based on communications including those during a high-level policy meeting with the U.S. Food and Drug Administration, or FDA, to date, we believe a reduction in the incidence of RTIs has the potential to be a clinically relevant endpoint. Subject to receiving positive results from our ongoing Phase 2b clinical trial with respect to reduction in RTI incidence, we plan to conduct a Phase 3 pivotal program and to seek regulatory approval for commercialization of RTB101 alone or in combination with everolimus in the United States, Europe and Japan. In some markets, we may collaborate with third parties for the development and commercialization of our product candidates.

We were founded by Chen Schor, who serves as our President and Chief Executive Officer, Joan Mannick, M.D., who serves as our Chief Medical Officer, and PureTech Health LLC, or PureTech Health, an affiliate of PureTech Health plc, an advanced clinical-stage biopharma company. Dr. Mannick led the TORC1 clinical program at Novartis Institutes for Biomedical Research, Inc., or NIBR, prior to our in-licensing of the program. PureTech Health currently provides us with certain business services pursuant to a business services, personnel and information management agreement. In addition, we currently share administrative resources with PureTech Health, including legal, accounting and human resources support, computer and telecommunications systems and other office infrastructure pursuant to the agreement. PureTech Health has also assisted with our market research efforts, including conducting a market survey in the United States prior to our initiation of our ongoing Phase 2b clinical trial of RTB101 alone and in combination with everolimus. We were a subsidiary of PureTech Health until the closing of our Series B financing. Based on the number of shares outstanding as of December 31, 2017 and after giving effect to the sale of 5,666,667 shares in this offering (without giving effect to any potential purchases by PureTech Health of shares of our common stock in this offering), PureTech Health will beneficially own shares representing approximately 35.2% of our outstanding common stock. In addition, PureTech Health has appointed two directors to our board of directors.

Our management team includes veterans in drug development and discovery, with executive experience in leading global pharmaceutical companies. We are supported by investors that include both private equity venture capital funds and public healthcare investment funds. Our investors include OrbiMed Advisors, Fidelity Management & Research Company, Rock Springs Capital, Quan Capital and Nest Bio.

Our Strategy

Our goal is to be a leading biopharmaceutical company focused on treating aging-related diseases. We strive to maintain a leadership position in the TORC1 inhibitor class of pharmaceutical products. The key elements of our strategy to achieve this goal include:

- *Rapidly advance our TORC1 program as immunotherapy for reducing the incidence of RTIs in elderly subjects.* We initiated our Phase 2b clinical trial of RTB101 alone and in combination with everolimus in elderly subjects at increased risk of mortality and morbidity due to RTIs in the second quarter of 2017, and we expect to report top-line data from this trial in the second half of 2018. If

the results of our Phase 2b clinical trial are positive, we plan to initiate a Phase 3 clinical trial in 2019 with a goal to submit a new drug application, or NDA, to the FDA for regulatory approval of RTB101 alone or in combination with everolimus in the United States in 2020.

- *Develop our TORC1 program for additional indications.* We also intend to develop RTB101, alone or in combination with everolimus, for the treatment of additional aging-related diseases based on preclinical and clinical evidence on the effects of TORC1 inhibition. We believe that there is strong rationale to support the investigation of RTB101, alone or in combination with everolimus, for the treatment of additional aging-related indications, such as urinary tract infections, heart failure and neurodegenerative diseases.

- *Commercialize our product candidates in the United States and potentially collaborate with others globally to maximize their commercial value.* We plan to directly commercialize our product candidates in the United States with a sales force targeting top-prescribing physicians with high flow of elderly patients and may consider collaborating with third parties to broaden the distribution of our product candidates in the United States. In other markets for which commercialization may be less capital efficient for us, we may selectively pursue strategic collaborations with third parties in order to maximize the commercial potential of our product candidates. We believe there are significant opportunities to market RTB101, if approved, in Europe and Japan, which we may choose to pursue in collaboration with others.

- *Maintain and grow a robust intellectual property portfolio in the field of TORC1 inhibition for aging-related diseases.* We have an exclusive license to ten patent families directed to compositions of matter, methods and formulations covering RTB101 alone or in combination with everolimus. We intend to aggressively pursue and maintain broad intellectual property protection for RTB101 alone or in combination with everolimus or other compounds for the prevention of RTIs and the prevention or treatment of other aging-related diseases through U.S. and international patents.

- *Develop, acquire or in-license product candidates that enhance our global leadership position.* We have additional TORC1 inhibitor compounds in discovery that we may develop, and we may acquire or in-license other product candidates targeting TORC1 and other pathways that regulate aging to support our goal to be the leading biopharmaceutical company focused on the treatment of aging-related diseases with significant unmet medical need.

Our Product Pipeline

The following table summarizes key information about our product candidates.

* Other infections include those that the elderly are at increased risk of contracting, such as urinary tract infections.
** For heart failure with preserved ejection fraction, autophagy-related neurodegenerative diseases and certain other infections, we may be required to file an investigational new drug application, or IND, prior to initiating Phase 2 clinical trials. We expect to have the ability to initiate these Phase 2 clinical trials without the need to conduct prior Phase 1 clinical trials.

We also have a follow-on TORC1 inhibitor program at discovery stage.

Aging and its Regulation by the mTOR Pathway

Advances in the scientific understanding of aging have until recently been limited, despite high growth in the elderly population

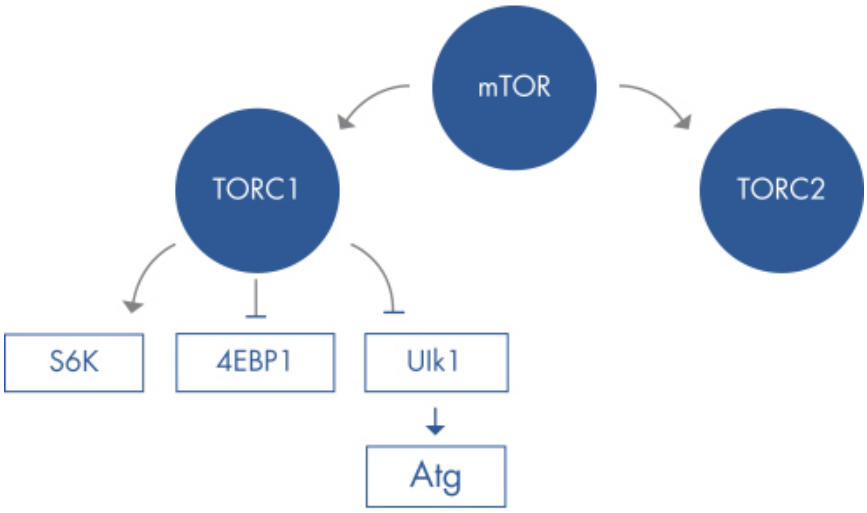
The elderly are the fastest growing population around the globe. According to the U.S. Census Bureau, the population age 65 and older in the United States is expected to double by 2050 compared to 2012 estimates. According to global census data, there are nearly 150 million people age 65 and older, and approximately 20 million people age 85 years and older in the United States, the major European countries and Japan. Despite age being the major risk factor for multiple chronic diseases, we believe few therapies are being developed to target the aging immune system, and none have been approved.

mTOR is an evolutionarily conserved pathway that regulates aging

mTOR is a serine/threonine protein kinase that regulates the process of aging and aging-related diseases and conditions. Inhibition of the mTOR pathway has been observed to prolong lifespan in multiple animals. These data support the potential for drugs that target the mTOR pathway to have therapeutic benefits for aging and aging-related conditions in humans.

In preclinical studies, the mTOR pathway has been observed to be hyperactivated in some cell types, including hematopoietic stem cells, or HSCs, at an advanced age. It was observed that suppressing mTOR activity in these cell types to levels found at younger ages may enhance cell function, including their ability to generate white blood cells. Furthermore, preclinical studies found that mTOR activity stimulates protein synthesis and cell growth, but inhibits protective processes such as autophagy in which damaged proteins and organelles are broken down and recycled. Therefore, these studies suggest that increased mTOR activity is beneficial during years of growth and reproduction but may be harmful during post-reproductive years when cells accumulate damage and require protective mechanisms such as autophagy to prevent and repair damage.

mTOR signals via two multiprotein complexes, known as TORC1 and TORC2. TORC1 inhibition has been observed to prolong lifespan, enhance immune responses, ameliorate heart failure, enhance memory and mobility, decrease adiposity, and delay onset of aging-related diseases in multiple animal studies. On the other hand, TORC2 inhibition has been observed to decrease lifespan and cause hyperlipidemia and hyperglycemia in certain animals and humans. Therefore, we believe the optimal approach for the treatment of aging-related conditions through mTOR inhibition is a regimen that inhibits TORC1 without inhibiting TORC2. mTOR within the TORC1 complex introduces phosphates to, or phosphorylates, multiple proteins including S6K, 4EBP1 and Ulk1, as shown in the figure below. More complete inhibition of TORC1, as measured by decreased phosphorylation of multiple proteins downstream of TORC1, may also be more beneficial compared to partial inhibition of TORC1 for the treatment of aging-related diseases.



We believe TORC1 inhibition may have therapeutic benefit in multiple aging-related diseases. Preclinical studies suggest that key mechanisms involved in the anti-aging effects of TORC1 inhibition include improved stem cell function, increased autophagy, increased expression of mitochondrial proteins that are important for energy production, decreased adiposity and increased expression of proteins that are responsible for cellular maintenance and repair. Based on preclinical data, these biological effects have the potential to improve multiple aging-related pathologies:

1. *Decreased immune function and increased risk of infections.* The immune system has several important functions, including protection against harmful pathogens, cancer immunosurveillance and clearance of senescent cells. Innate immunity is the body's first line of defense against a wide range of pathogens, while adaptive immunity is a more pathogen-specific immune response that develops over time. Immune cells are produced by HSCs in the bone marrow, which can lose functionality with age. In preclinical studies, aged dendritic cells, a type of innate immune cell, demonstrated defective Type 1 interferon production, a central component of anti-viral immunity, in response to a virus. This response is consistent with the observation that dendritic cells from older subjects produced less interferon upon stimulation with a virus than those from younger subjects. Adaptive immunity also declines with age. The number and functionality of certain white blood cells known as lymphocytes, including antibody-producing B lymphocytes, have been observed to be decreased in elderly human subjects. We believe that this decline in immune function contributes to the higher incidence of common infections such as respiratory and urinary tract infections in the elderly.

2. *Decreased mitochondrial function and organ dysfunction.* During aging, mitochondrial function, which is important for metabolism and energy production in cells, is diminished. This diminution is

linked to a switch from more efficient fatty acid oxidation to less efficient glucose oxidation in aging organs. The detrimental nature of this metabolic change has been extensively described in animal and human studies of aging-related conditions, including heart failure.

3. *Decreased autophagy and accumulation of damaged proteins*. Autophagy is the process in which a cell breaks down and recycles damaged cellular components, including damaged and aggregated proteins. Preclinical data suggests that an aging-associated decrease in autophagy leads to the accumulation of toxic proteins and may result in aging-associated pathologies such as neurodegeneration.

Immunosenescence and Respiratory Tract Infections in the Elderly

Potential for TORC1 inhibition to address decreased immune function associated with aging

TORC1 inhibition has been observed to enhance immune function in at least three independent preclinical studies to date, conducted by laboratories at the University of Michigan, Emory University and St. Jude Children's Research Hospital, where administration of mTOR inhibitors improved immune response to influenza vaccination. Further, findings from these preclinical studies suggest that short-term treatment of aged animals with a TORC1 inhibitor can rejuvenate HSC function, increase the number of infection-fighting white blood cells, and increase longevity. We believe these findings suggest that TORC1 inhibition has the potential to improve immune function in elderly humans.

Respiratory tract infections in the elderly

The reduced ability of the aging immune system to effectively detect and fight infections results in increased susceptibility of the elderly to RTIs, which, in turn negatively impacts such patients' overall health and quality of life. We believe that decreasing the incidence of RTIs is a large unmet medical need in the elderly, particularly in subjects at an increased risk of RTI-related morbidity and mortality. We believe there is a significant unmet medical need for an innovative therapy to reduce the incidence of RTIs in the elderly for the following reasons:

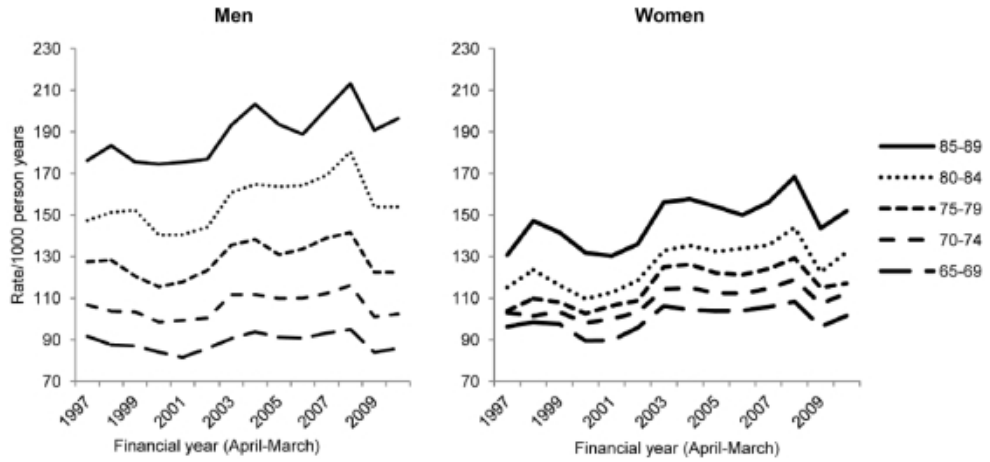
- *The large and growing elderly population is particularly susceptible to morbidity and mortality from RTIs*. The elderly represent the fastest growing population across the globe. In the United States, RTIs are the fifth leading cause of death in people age 85 and over and the seventh leading cause of death in people age 65 and over. Mortality among people age 75 and over is highest each year during winter cold and flu season. Age is a risk factor for RTIs, with men aged 85-89 experiencing lower RTIs at twice the rate of men aged 65-69. As a result, RTIs, which are typically not serious in healthy adults, are exacerbated in the elderly. Elderly patients with comorbidities may also be at a higher risk of morbidity and mortality due to RTIs as compared to healthy elderly subjects. Comorbidities among the elderly aged 65 and older are common, with approximately 14% having chronic obstructive pulmonary disease, or COPD, 7% having asthma, 20% having type 2 diabetes mellitus, or T2DM, and 13% having congestive heart failure, or CHF. Prior to initiating the Phase 2b clinical trial, PureTech Health conducted market research with five payers and 55 physicians in the United States. The results of the research provided further support that the efficacy demonstrated in the Phase 2a clinical trial is clinically meaningful and that there is unmet medical need in the elderly, particularly in the elderly at high risk of mortality from RTIs. Specifically, a reduction in the incidence of RTIs of similar or lower magnitude to that observed in the Phase 2a trial was described as a clinically meaningful improvement by the majority of respondents in a survey of 50 physicians. Further, 84% of the physicians who participated in the survey perceived that there is unmet need for either prophylactics or treatment options, or both, for viral respiratory infections. Phone interviews with payers also illustrated that, subject to FDA approval, payers may be able to include a product with our efficacy and safety profile into a preferred tier on their formularies and may request a modest rebate. The following figures highlight the number of elderly people in the United States, major European countries and Japan, along with their comorbidities, based on global census data and our market research performed in the U.S., and the historical rates of lower RTIs in the elderly population in the U.K.

Estimated Size of Population Susceptible to RTI-related Morbidity and Mortality

	U.S.	EU5	JP
Elderly people (65-74 years old): *With comorbidities (COPD, asthma, T2DM, CHF)*	11M	13M	7M
Elderly people (75-84 years old): *With comorbidities (COPD, asthma, T2DM, CHF)*	7M	11M	6M
Elderly people (85+ years old):	6M	9M	5M
# Elderly people (2016)	**24M**	**33M**	**18M**
Average Annual Growth Rate	3%	2%	1%

An estimated 75 million elderly people in 2016 were at increased risk of RTI-related morbidity and mortality in U.S., the major European countries and Japan

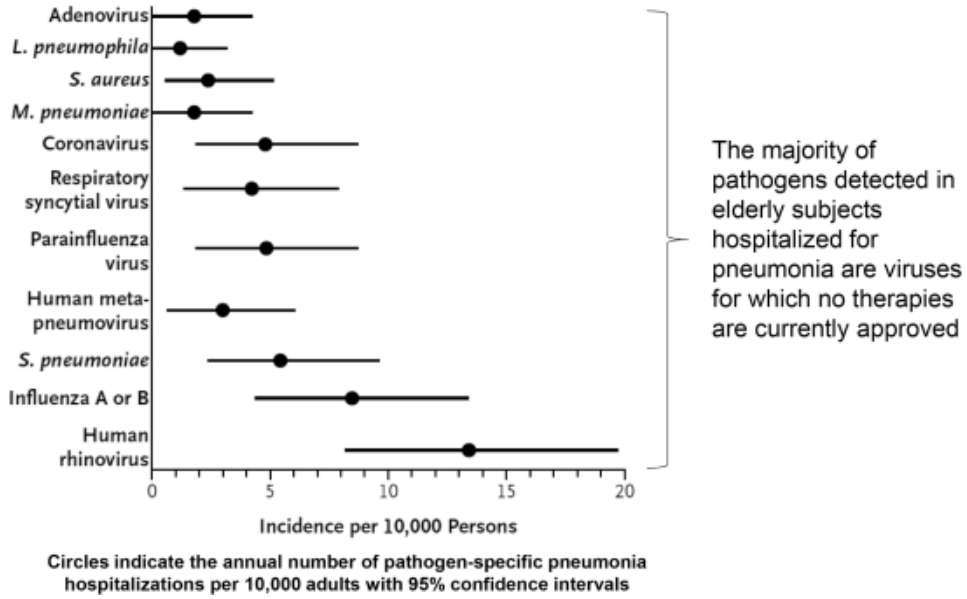
Lower Respiratory Tract Infection Rates Increase with Age



- *RTIs contribute to high healthcare burden and costs*. At least 11%, 56% and 80% of CHF exacerbations, COPD exacerbations requiring hospitalization and asthma exacerbations, respectively, are associated with RTIs, and 7% of people aged 85 years and over go to the emergency room with RTIs each year. In addition, two-thirds of people aged 85 and over who go to the emergency room for infection-related reasons are hospitalized, and once hospitalized, one-third of people aged 85 and over are admitted to a nursing home. These figures illustrate the large economic impact of RTIs on the healthcare system in the United States.

- *The majority of RTIs are caused by viruses for which no available therapy exists*. The majority of RTIs are caused by viruses, most of which lack approved prophylactics or therapies, leaving physicians with few treatment options. Based on Center for Disease Control, or CDC, guidelines, vaccines are given to prevent influenza and pneumococcal infections. However, even if vaccinated, the elderly are less likely to develop sufficient protective immunity against influenza and pneumococcal infections due to immunosenescence. In addition, vaccines against most of the viral

pathogens that cause RTIs are not currently available. The following figure illustrates the specific pathogens detected in patients 80 years or older hospitalized with community-acquired pneumonia.



Circles indicate the annual number of pathogen-specific pneumonia hospitalizations per 10,000 adults with 95% confidence intervals

- *Antibiotics are often prescribed indiscriminately to treat RTIs, leading to potential side effects and contributing to growing antibiotic resistance*. Antibiotics, which are ineffective against viruses, are often prescribed indiscriminately to treat RTIs, which may cause side effects related to antibiotic use and contribute to the growing global problem of antibiotic resistance. As antibiotic use is a primary driver of antibiotic resistance, we believe that reducing the incidence of RTIs in the elderly could also indirectly limit the rise of antibiotic-resistant bacteria. Furthermore, the elderly are at increased risk of antibiotic-related adverse events due to increased organ sensitivity, increased exposure due to changes in pharmacokinetics, and polypharmacy. According to a study conducted by McGill University, antibiotics have been linked to 17% of adverse drug-related events in the elderly who visit emergency departments. Antibiotic use can also lead to lethal superinfections such as *C. difficile* infections.

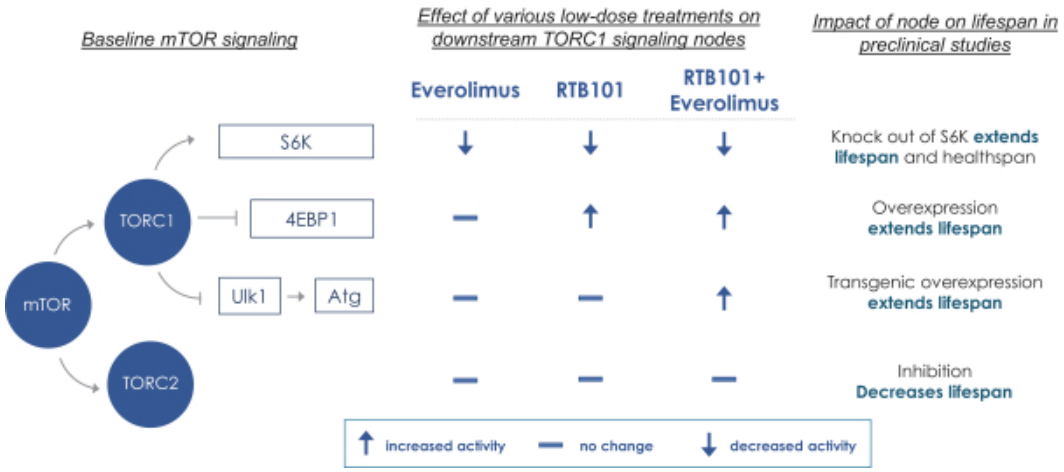
- *Lack of immunotherapy drugs to address RTIs*. Immunotherapies ideally enhance both innate and adaptive immunity to provide broad, acute and long-lasting protection against pathogens. Currently, however, there are no approved immunotherapies to enhance either innate or adaptive immunity in the elderly. We believe RTB101 alone or in combination with everolimus represent immunotherapies aimed at enhancing either innate or innate and adaptive immunity in the elderly, and thereby decreasing the incidence of RTIs caused by a broad spectrum of pathogens, particularly viral pathogens. In addition, beyond an individual level, we believe immunotherapies may benefit the wider population through indirect protection that occurs when a large percentage of the population has become immune to a disease, thereby preventing or limiting the spread of infection and providing a measure of protection for individuals who are not immune, a phenomenon known as herd immunity.

Our TORC1 Program

Overview

In March 2017, we obtained a license from Novartis to the worldwide rights to RTB101 for all indications, and the rights to use everolimus in combination with RTB101 for all aging-related indications. RTB101 is an orally administered, small molecule, potent TORC1 inhibitor that binds to the active site of mTOR on the TORC1 complex, a mechanism known as catalytic inhibition. In contrast, everolimus, also an orally administered small molecule, inhibits mTOR activity by changing the shape of TORC1, a mechanism known as allosteric inhibition, that is distinct from and synergistic with catalytic inhibition.

The downstream signaling cascade of TORC1 that we believe occurs in scenarios of baseline, RTB101 alone and RTB101 in combination with everolimus are pictured in the following figure.



Our TORC1 program includes evaluation of RTB101 alone because we believe RTB101 monotherapy can effectively inhibit phosphorylation of multiple downstream signaling nodes of TORC1, specifically S6K and 4EBP1, that are key drivers of TORC1 downstream activity. Decreased phosphorylation of S6K leads to decreased activity, while decreased phosphorylation of 4EBP1 and Ulk1 leads to increased activity. We believe RTB101 alone consistently inhibits more downstream signaling nodes of TORC1 than a rapalog, such as everolimus, alone. Furthermore, we believe RTB101 at the low doses that we are evaluating in our clinical studies can achieve these effects without inhibiting TORC2. RTB101 at higher doses, while able to more completely inhibit TORC1, may also inhibit TORC2, which may lead to undesirable side effects.

Our TORC1 program also includes evaluation of RTB101 in combination with everolimus, as the combination of catalytic and allosteric inhibitors may yield complete inhibition of all nodes downstream of TORC1, including 4EBP1 and Ulk1, without affecting TORC2. It was observed in preclinical in vitro studies that RTB101 and everolimus at the comparable doses that we are evaluating in our clinical trials synergistically inhibit 4EBP1. The synergy of RTB101 and everolimus, as measured by Loewe additivity, was up to 43% in those studies. Loewe additivity in excess of 30% is considered to be high. We believe everolimus may induce a conformation change in TORC1 that allows lower concentrations of RTB101 to inhibit TORC1 without inhibiting TORC2. Preclinical and clinical data suggest that for some indications, RTB101 monotherapy may be adequate to yield clinically meaningful benefit to patients, while for other indications, the combination of RTB101 and everolimus may be more beneficial. Accordingly, our TORC1 program includes evaluation of both RTB101 alone and in combination with everolimus.

Clinical Development of RTB101 Alone and in Combination with Everolimus

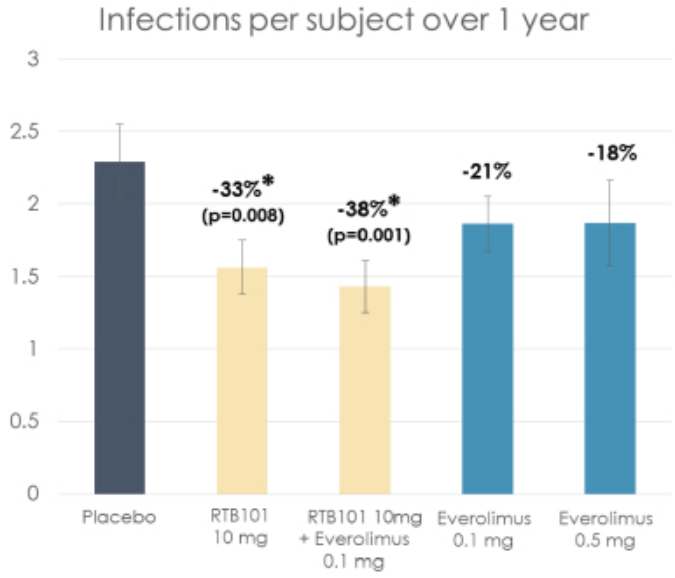
We consider data from a Phase 2a clinical trial conducted by our licensor, Novartis, which became available in 2016 to be the most directly relevant dataset for our near-term development of RTB101 alone and in combination with everolimus, including the design of our ongoing Phase 2b trial evaluating the safety, tolerability and efficacy of our product candidates to reduce the incidence of RTIs in the elderly. If results from our ongoing Phase 2b clinical trial are positive, we intend to initiate a Phase 3 program for RTB101 alone or in combination with everolimus in 2019. We believe that safety data of high-dose RTB101 alone and in combination with everolimus, at similar or higher doses than those tested in our Phase 2b clinical trial, that was generated by our licensor, Novartis, in clinical trials conducted from 2006 to 2016, provide additional support for the clinical development of our program. The potential for TORC1 inhibition to ameliorate immunosenescence was also demonstrated in a previous Phase 2a clinical trial of everolimus monotherapy conducted by Novartis and published in Science Translational Medicine in December 2014.

Phase 2a Clinical Development

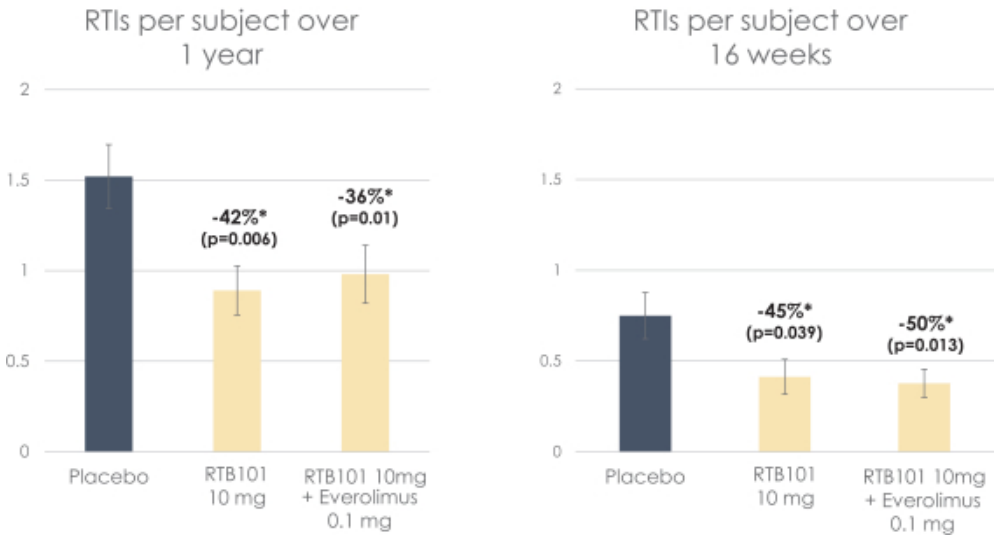
The primary objectives of the RTB101 and RTB101+ everolimus Phase 2a clinical trial were to assess the safety, tolerability and efficacy of RTB101 alone and in combination with everolimus compared to placebo in enhancing the immune response to vaccination in elderly subjects, as determined by the subjects' immune response to the seasonal influenza vaccine. A pre-specified exploratory endpoint assessed the effect of a six-week course of RTB101 alone or in combination with everolimus on infection rates during the year following initiation of study drug treatment. The trial was a double-blinded, placebo-controlled, randomized clinical trial that enrolled a total of 264 male and female subjects at least 65 years of age without underlying unstable medical conditions, and was conducted across 12 trial centers in the southern hemisphere. Subjects were randomized to one of five treatment arms, in which they were administered daily oral doses of everolimus 0.1 mg, everolimus 0.5 mg, RTB101 10 mg, RTB101 10 mg+everolimus 0.1 mg, or placebo. The trial met its primary endpoint and the pre-specified exploratory infection rate endpoint.

Subjects were treated for six weeks with the study drug and, after a two week drug-free interval, were given the seasonal influenza vaccine. The subjects were followed for one year following initiation of study drug treatment. The overall infection rate in each treatment group was assessed by having subjects record any infections they experienced during the year following the initiation of study drug treatment in a diary. The sites reviewed the infection diary at each study visit. In addition, sites administered infection questionnaires during phone calls with subjects that occurred weekly during the six-week study drug dosing period and then monthly for the remainder of the trial. Investigators reviewed and approved the information contained in the telephone questionnaire reports within 24 hours. The infection data in the diaries and telephone reports were reconciled by sites prior to entering infections in the clinical trial database.

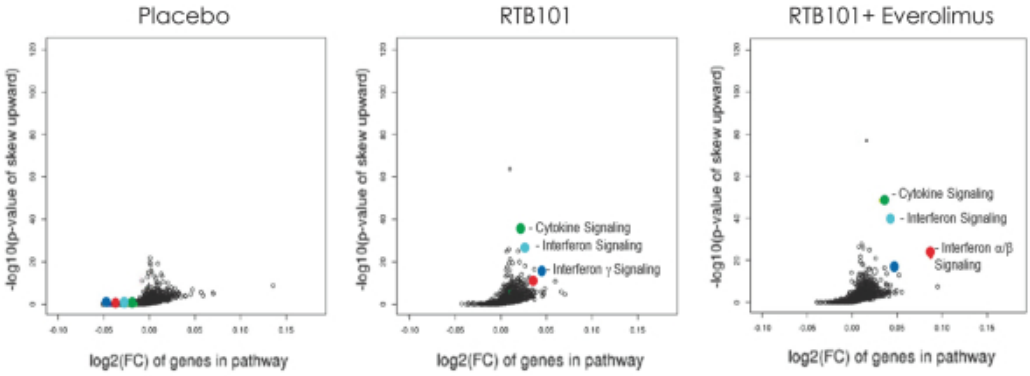
In the RTB101 monotherapy and RTB101+everolimus combination treatment arms in the intent-to-treat population, statistically significant and clinically meaningful reductions in the annual rate of infections of 33% (p=0.008) and 38% (p=0.001), respectively, compared to placebo, were observed. The FDA utilizes the reported statistical measures when evaluating the results of a clinical trial, including statistical significance as measured by p-value as an evidentiary standard of efficacy, to evaluate the reported evidence of a product candidate's safety and efficacy. If not otherwise specified, we used a conventional 5% or lower p-value ($p < 0.05$) to define statistical significance for the clinical trials and data presented in this prospectus. A lesser, non-statistically significant effect was observed with everolimus monotherapy.



Since the most common infections that occurred during the trial were RTIs, a post-hoc analysis was performed to determine whether a reduction in RTIs contributed to the significant reduction in infections at one year following initiation of study drug treatment in the RTB101 monotherapy and RTB101+everolimus combination treatment arms. As shown in the figure below, both RTB101 monotherapy and the RTB101+everolimus combination therapy were observed to reduce the incidence of RTIs at one year by 42% (p=0.006) and 36% (p=0.01), respectively, in the intent-to-treat population. Greater reductions in the incidence of RTIs were observed during the six-week dosing period in the RTB101 monotherapy and RTB101+everolimus combination arms. Given that the magnitude of the reduction in RTI incidence was greater at six weeks than at one year, these findings suggest that the reduction in RTI rates was greatest during the period when subjects were receiving the study drug. The typical duration of the peak cold and flu season is approximately 16 weeks. As shown in the figure below, analysis of the Phase 2a clinical data also revealed reductions of 45% (p=0.039) and 50% (p=0.013) in RTIs from treatment with RTB101 alone and in combination with everolimus, respectively, during the 16 weeks following initiation of therapy despite only six weeks of treatment.



To assess possible molecular mechanisms underlying the decrease in infection rates in the RTB101 monotherapy and RTB101+everolimus combination treatment groups, mRNA sequencing analysis of whole blood from subjects at baseline and after six weeks of study drug treatment was conducted. Analysis of whole-blood gene expression data revealed a highly statistically significant up-regulation of pathways related to interferon signaling in the RTB101 monotherapy and RTB101+everolimus combination treatment arms but not in the placebo arm, as shown in the figures below. Genes that were up-regulated the most, including MX1, OAS3, ISG15 and IFIT1, encode a subset of Type 1 interferon-induced proteins that play a critical role in the acute, innate immune response to viruses, suggesting that RTB101 alone and in combination with everolimus may enhance innate immunity. Pathways, or groups of genes, related to cytokine signaling and interferon signaling were significantly upregulated, with p-values ranging between 10^{-45} to 10^{-10}.



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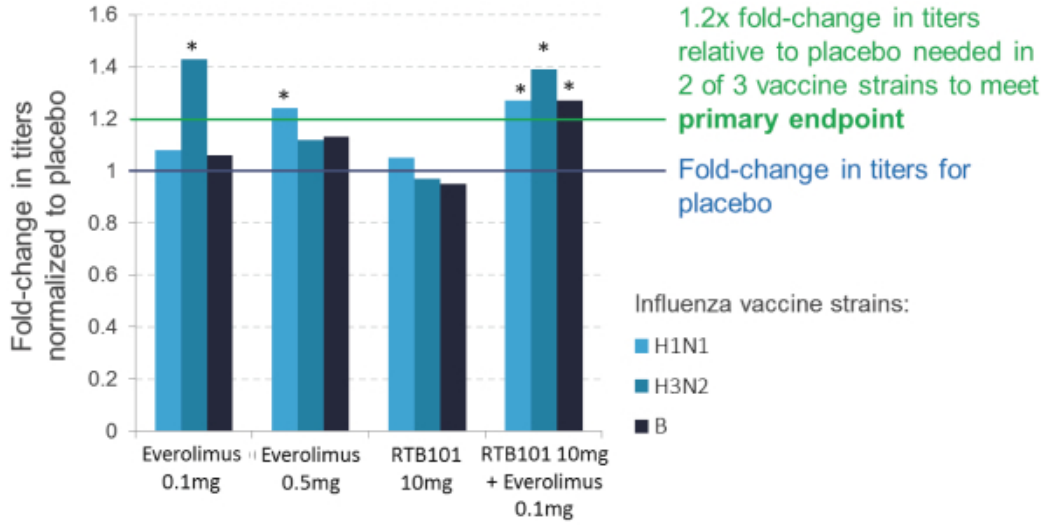
While the effects of RTB101 monotherapy and RTB101+everolimus combination therapy on reducing RTIs incidence in the elderly and up-regulating innate immunity genes were comparable, only the combination therapy met the primary endpoint of the Phase 2a clinical trial of enhancing influenza vaccination response, defined as a greater than 20% increase in antibody concentrations, or titers, to at least two of the three tested influenza vaccine strains as compared to placebo, measured at 12 weeks following initial dosing of the study drug. We believe these results suggest that the RTB101+everolimus combination therapy may also enhance the adaptive immune system, in addition to enhancing the innate immune system, given that the RTB101+everolimus combination resulted in broader TORC1 inhibition. The adaptive immune response to influenza vaccination across all treatment arms is shown in the figure below, where asterisks indicate a 100% probability that titers are greater than those observed in the placebo group.

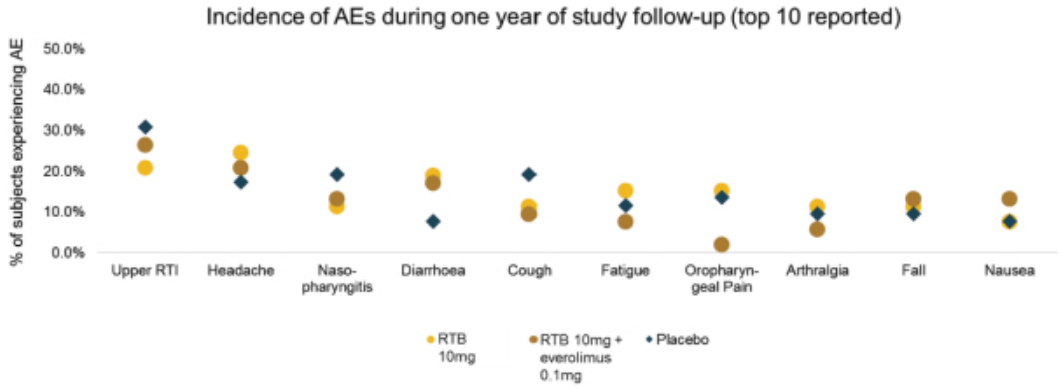


Overall, all treatment regimens were well tolerated. None of the participants in the active treatment arms experienced a serious adverse event, or SAE, that was related to the study drug. The following table summarizes the SAEs experienced by trial subjects during the year they were followed in the trial.

	Everolimus 0.1mg	Everolimus 0.5mg	RTB101 10mg	RTB101 10mg + Everolimus 0.1mg	Placebo
Total SAEs	4	9	9	6	8
Subjects with SAEs	3	8	6	3	5
% of subjects with SAEs*	5.8	14.8	11.3	5.7	9.6

* Percentages are based on the total number of subjects in each arm that received at least part of one dose of study drug

The ten most prevalent adverse events, or AEs, during the 12 months that patients were followed in the trial is summarized in the figure below. Diarrhea was the most frequently reported AE that occurred more often in the study drug treatment groups than the placebo groups and was generally mild or moderate in severity, transient and resolved with no treatment. Of note, the rate of upper RTI, nasopharyngitis and cough was lower for RTB101 monotherapy and RTB101+everolimus combination than for placebo, suggesting greater freedom from respiratory symptoms in the treatment groups as compared to the placebo groups. Furthermore, rates of hyperglycemia and hypercholesterolemia, which are AEs associated with TORC2 inhibition, were less than 5% in all treatment groups and were the same or lower in the mTOR inhibitor treatment groups than the placebo groups, suggesting that these low dose mTOR inhibitor treatment regimens did not inhibit TORC2.



We believe that the Phase 2a clinical trial results provide proof of concept for the potential therapeutic benefit of RTB101 alone or in combination with everolimus as immunotherapy to reduce the incidence of RTIs in elderly patients, given the statistically significant and clinically meaningful reduction in RTI rates, the increased expression of innate anti-viral genes and the enhanced immune response to vaccination observed across the treatment groups.

Ongoing Phase 2b Clinical Development

We are conducting a randomized, double-blinded, placebo-controlled Phase 2b clinical trial to assess the safety, tolerability and efficacy of 16 weeks of treatment with RTB101 alone or in combination with everolimus as compared to placebo in elderly patients without unstable medical conditions but who are at increased risk of RTI-related morbidity or mortality. Elderly patients at increased risk of RTI-associated morbidity and mortality are defined as subjects who are 85 years of age or older or subjects 65 years of age or older with asthma, chronic obstructive pulmonary disease, chronic bronchitis, Type 2 diabetes mellitus, congestive heart failure, an emergency room visit or hospitalization for an RTI within the past 12 months, or who are current smokers. We are conducting the trial in two parts across two hemispheres. The first part was conducted during the winter cold and flu season in the southern hemisphere. Following an interim analysis that we conducted in October 2017, we commenced the second part during the winter cold and flu season in the United States in the fourth quarter of 2017. We expect to report top-line data from this trial in the second half of 2018. The primary endpoint of the trial is to determine if RTB101 alone or in combination with everolimus decreases the percentage of subjects with RTIs compared to placebo during the 16-week administration period.

In the first part of the trial, 179 patients were randomized to receive RTB101 10 mg daily, RTB101 5 mg daily or placebo daily. We selected RTB101 10 mg daily as a dose because in the Phase 2a clinical trial, the same dose was well-tolerated and was observed to significantly decrease the rate of all infections as well as the rate of RTIs, and was associated with upregulation of antiviral gene expression in whole blood. To determine the minimal efficacious dose of RTB101, we also evaluated RTB101 5 mg daily in the Phase 2b trial.

An interim analysis on data from the first part of the trial was completed in October 2017 by an independent data monitoring committee, or DMC. The DMC reviewed the safety and efficacy data from the first part of the trial and selected the doses of RTB101 and RTB101 in combination with everolimus to be tested in the second part of the trial in the United States.

We commenced the second part of the Phase 2b clinical trial in the fourth quarter of 2017. Based on the DMC recommendation, we expect to randomize at least 424 patients to receive placebo or one or more of the following TORC1 inhibitor treatment regimens: RTB101 10 mg once daily, RTB101 10 mg twice daily and RTB101 10 mg in combination with everolimus 0.1 mg.

We are studying the combination of RTB101 and everolimus 0.1mg because in the Phase 2a clinical trial, this combination not only reduced the incidence of infections similar to RTB101 monotherapy, but also led to a greater improvement in influenza vaccination response than either RTB101 or everolimus monotherapy.

The Phase 2b clinical trial has a greater than 80% power to detect a statistically significant reduction in the percentage of subjects with RTIs, assuming an effect size of 40% reduction. The effect size of 40% was conservatively estimated based on the reduction observed in the Phase 2a RTI rates at 16 weeks, which is the duration specified for the Phase 2b primary endpoint, of 45% (p=0.039) and 50% (p=0.013) in the RTB101 monotherapy and RTB101+everolimus combination arms respectively.

Based on communications with the FDA, including those during a high-level policy meeting, to date, we believe a reduction in the incidence of RTIs has the potential to be a clinically relevant endpoint. We completed a pre-investigational new drug, or pre-IND meeting, with the FDA in July 2017 and subsequently submitted an investigational new drug application, or IND, for RTB101 alone and in combination with everolimus as immunotherapy designed to reduce the incidence of RTIs in elderly patients at increased risk of RTI-related morbidity or mortality.

Phase 3 Clinical Development Plan

If the results from the ongoing Phase 2b clinical trial are positive, we intend to conduct two Phase 3 pivotal clinical trials across two hemispheres. The Phase 3 clinical program is expected to start in the southern hemisphere in the first half of 2019 at the beginning of the winter cold and flu season and run through the second quarter of 2020. If our Phase 3 clinical trials are successful, we anticipate filing an NDA with the FDA in 2020, and an MAA with the EMA in 2021.

If the results from the ongoing Phase 2b clinical trial are favorable for RTB101 monotherapy, we expect to randomize approximately 600 elderly subjects at increased risk of RTI-associated morbidity and mortality to receive daily oral administration of RTB101 monotherapy or placebo for 16 weeks in each of the proposed Phase 3 clinical trials. The primary endpoint would be the reduction in RTI incidence over the dosing period.

If the results from the ongoing Phase 2b are not positive for RTB101 monotherapy but are positive for the RTB101+everolimus combination therapy, we expect to initiate a Phase 3 program with the combination of RTB101+everolimus and may include enhanced immune response to vaccination as an additional co-primary endpoint.

Safety Data from Clinical and Preclinical Development at High Doses of RTB101 Alone and in Combination with Everolimus

Originally, RTB101 was developed for oncology indications. In preclinical studies, at doses higher than those we are developing, RTB101 was found to prevent cellular proliferation and tumor progression. Clinical trials in humans were conducted under two open INDs for RTB101 filed with the FDA Division of Oncology Products. More than 440 oncology patients have been treated with RTB101 alone in doses up to 1,600 mg per

day, or in combination with other drugs including 200 mg of RTB101 in combination with 2.5 mg of everolimus per day. RTB101 has also been administered to more than 60 healthy volunteers in pharmacokinetic, or PK, studies at doses of up to 1,000 mg per day. To date, the majority of the reported adverse events, or AEs, were mild or moderate and include gastrointestinal disturbances, fatigue, decreased appetite, rash and thrombocytopenia, which are consistent with those that have been reported for marketed mTOR inhibitors such as rapamycin and everolimus. No dose-limiting toxicities occurred at doses less than 800 mg per day, and the maximum tolerated dose for RTB101 as a monotherapy was established at 1,200 mg per day. We are developing RTB101 at daily doses of 5 mg to 20 mg, 60 to 240 times lower than the established maximum tolerated dose, and therefore expect the RTB101 to have an acceptable tolerability profile for the indications that we plan to pursue.

Standard preclinical safety and good laboratory practice, or GLP, toxicology studies, up to six months in rats and dogs, have been completed for RTB101, which we believe support the clinical development of the program.

Other Potential Indications for Our TORC1 Program

We may evaluate RTB101 alone or in combination with everolimus or other drugs for the treatment of additional indications, such as heart failure with preserved ejection fraction, urinary tract infections, Huntington's disease and Parkinson's disease. We plan to initiate at least one Phase 2 proof of concept study in 2018. We expect to select indications based on strong scientific rationale, preclinical or clinical data, unmet medical need and other relevant considerations.

Prevention of recurrent urinary tract infections

Urinary tract infections, or UTIs, are the most common bacterial infection in the elderly, with the incidence higher in women than men. According to studies of 959 and 395 women published in 2000 and 2010, respectively, nearly 10% of women older than 65 years of age and nearly 30% of women over the age of 85 reported having a UTI within the 12—month period preceding the study. The incidence of UTIs also increases substantially in men over the age of 85 years. Elderly subjects who have had a prior UTI are at increased risk of a recurrent UTI. Urinary tract infections are most commonly bacterial, and E. coli is the organism most frequently responsible for UTIs. Hence, empiric treatment of UTIs with antibiotics is common, and UTIs are the most common reason for antibiotic prescriptions in older adults.

In the Phase 2a clinical trial, a decrease in the rate of UTIs was observed in the RTB101 10 mg monotherapy and RTB101 10 mg+everolimus 0.1 mg combination arms as compared to placebo. We believe these data suggest that RTB101 alone or in combination with everolimus may have therapeutic benefit for reducing the rate of UTIs in the elderly, particularly elderly at risk for recurrent UTIs.

Treatment of viral respiratory tract infections

In the Phase 2a clinical trial, an increase of antiviral gene expression was observed in the RTB101 10 mg monotherapy and RTB101 10 mg+everolimus 0.1 mg combination arms. We plan to conduct a biomarker study to assess the speed at which antiviral genes are upregulated after elderly subjects are treated with RTB101 alone or in combination with everolimus. If we observe a rapid increase of antiviral gene expression, we believe RTB101 alone or in combination with everolimus may have therapeutic benefit for the treatment of viral RTIs.

Heart failure with preserved ejection fraction

Heart failure is one of the most common causes of hospitalizations in people age 65 and older, and heart failure with preserved ejection fraction, or HFpEF, affects about 2.25 million people in the United States, and a combined 6.24 million in the United States, Europe and Japan. HFpEF predominantly affects elderly subjects,

particularly older women, in whom 90% of new heart failure cases are HFpEF. Patients with HFpEF experience the clinical symptoms of heart failure, despite having the percentage of total blood in the left ventricle of the heart that is pushed out with each heartbeat, known as ejection fractions, in the normal range. These symptoms are attributable in part to stiffened heart muscle that limits blood flow into the heart, known as diastolic dysfunction. Outcomes following hospitalization for decompensated HFpEF are poor. Approximately one third of patients are rehospitalized or die within 90 days of discharge. To date, there are no FDA approved therapies to reduce hospitalization or mortality for HFpEF.

According to scientific literature published by research groups at the Harvard Stem Cell Institute and the University of Washington, aging mice develop stiffened heart muscle and diastolic dysfunction similar to elderly humans with HFpEF. Preclinical studies have shown that a 10 week course of mTOR inhibitor therapy reverses diastolic dysfunction in aging mice. This beneficial effect is likely partly due to an increase in proteins involved in mitochondrial function and fatty acid oxidation. Fatty acids are the predominant substrate used in mitochondrial energy production in healthy adults, but are replaced by glucose as the preferred substrate in heart failure. The shift to glucose as a substrate results in less ATP production by mitochondria. Since ATP is the main cellular fuel, a decrease in ATP production may contribute to heart failure. mTOR inhibitors shift mitochondria back to using fatty acids as a substrate and as a result may increase ATP production in the heart and improve heart function. These findings suggest that RTB101 alone or in combination with everolimus may have therapeutic benefit for the treatment of HFpEF in humans.

Huntington's disease

Huntington's disease, or HD, is a disease that affects neurons in the brain and causes movement, psychiatric and cognitive impairment. HD is caused by mutations in a gene encoding protein called huntingtin. Mutant huntingtin forms aggregate in neurons and cause the neurons to degenerate. The mutant huntingtin aggregates can be cleared from neurons by a process called autophagy in which cells remove and recycle intracellular debris including protein aggregates. Preclinical data from brain slices in a HD mouse model has shown that RTB101 in combination with everolimus synergize to prevent neurodegeneration, likely by inducing autophagy and clearing mutant huntingtin aggregates. We believe these findings support the potential that RTB101 in combination with everolimus to have therapeutic benefit for the treatment of HD.

Parkinson's disease

Parkinson's disease, or PD, is a progressive neurodegenerative disease that affects approximately 7.5 million people worldwide. The incidence of PD increases rapidly in people 60 years of age and older, with a mean age at diagnosis of 70.5 years. Patients with PD develop shaking, rigidity, slowness of movement and difficulty walking. Similar to HD, PD may be attributed in part to neuronal damage caused by the accumulation within neurons of abnormal aggregates containing the protein a-synuclein. Preclinical studies in mouse models of PD have shown that mTOR inhibition can induce autophagy, reduce a-synuclein accumulation and decrease neuronal cell death. Therefore, induction of autophagy with RTB101 in combination with everolimus may have therapeutic benefit for patients with PD.

Intellectual Property

We strive to protect the proprietary technologies that we believe are important to our business, including seeking and maintaining patent protection intended to cover the composition of matter of our product candidates, including RTB101, their methods of use, related technology, and other inventions that are important to our business. We licensed a patent portfolio of ten patent families from Novartis. See "—License Agreement with Novartis." As of October 31, 2017, one family within this patent portfolio covering compositions of matter was issued in 42 countries and is pending in five. This patent family is expected to expire in 2026 before patent term extensions. We expect market exclusivity for RTB101, alone and in combination with everolimus, until at least 2031 in the United States, 2032 in major European markets, and 2030 in Japan, and additional pending patent

applications covering methods of enhancing immunity, reducing incidence of RTIs and other infections, and other indications, may prolong the exclusivity of these product candidates up to 2036. In October 2017, we filed an additional patent application directed to compositions of matter for novel mTOR inhibitors.

In addition to patent protection, we rely on trade secrets and confidentiality agreements to protect our technology, know-how and other aspects of our business that are not amenable to, or that we do not consider appropriate for, patent protection.

Our success will depend significantly on our ability to obtain and maintain patent and other proprietary protection for commercially important technology, inventions, and know-how related to our business, defend and enforce the patents we own or control, maintain our licenses to use intellectual property owned by third parties, preserve the confidentiality of our trade secrets, and operate without infringing the valid and enforceable patents and other proprietary rights of third parties.

The patent positions of biopharmaceutical companies like us are generally uncertain and involve complex legal, scientific and factual questions. In addition, the coverage claimed in a patent application can be significantly reduced before the patent is issued, and its scope can be reinterpreted after issuance. Consequently, we do not know whether any of our product candidates will be protectable or remain protected by enforceable patents. We cannot predict whether the patent applications we are currently pursuing will issue as patents in any particular jurisdiction or whether the claims of any issued patents will provide sufficient proprietary protection from competitors. Any patents that we hold or control may be challenged, circumvented or invalidated by third parties.

License Agreement with Novartis

In March 2017, we entered into a license agreement with Novartis, pursuant to which we were granted an exclusive, field-restricted, worldwide license to certain intellectual property rights owned or controlled by Novartis, including patents, patent applications, proprietary information, know-how and other intellectual property, to develop, commercialize and sell one or more therapeutic products comprising RTB101 alone or RTB101 and everolimus in a fixed dose combination. Under the license agreement, we have been licensed a patent portfolio of ten patent families directed to composition of matter of RTB101 and its salts, formulations of everolimus and methods of using RTB101 and everolimus to enhance the immune response among others. These families include certain granted patents and pending patent applications in the United States and foreign jurisdictions, including Canada, the United Kingdom, Germany, France, Italy, Spain, Russia, Japan, Korea and China. Patents in these families will begin expiring in 2026, subject to possible patent term extensions. We believe that patent term extension and the potential grant of certain pending patent application may provide exclusivity for RTB101 and RTB101+everolimus combination until 2036 in the United States and the major European markets.

The exclusive field for RTB101 is for the treatment, prevention and diagnosis of diseases and other conditions in all indications in humans and animals. With respect to the fixed dose combination of RTB101 and everolimus, the exclusive field of use is for any indication in humans related to the improvement in immune function or immunosenescence in the elderly, the reduction of infection frequency, severity, duration, health care resource utilization, hospitalization, morbidity or mortality, or the treatment of infections, the reduction of pulmonary disease exacerbation frequency, severity, or related hospitalization, the enhancement of therapeutic or prophylactic benefits of vaccines, or any aging-related disease, excluding in each case the application of everolimus in connection with organ transplantation, oncology, immune-oncology or in the cardiac stent field. Novartis has agreed not to enforce any rights to improvements related to RTB101 developed after the effective date in connection with the exercise of our rights under this agreement. In addition, we have agreed to grant back to Novartis for use outside of the exclusive fields any improvements related to everolimus that we develop after the effective date.

We are required to use commercially reasonable efforts to develop and commercialize at least one product in the field in at least one major market, which includes the United States, Japan and certain identified countries in Europe.

As initial consideration for the license, we issued NIBR 2,587,992 shares of our Series A preferred stock.

As additional consideration for the license, we are required to pay up to an aggregate of $4.3 million upon the satisfaction of clinical milestones, up to an aggregate of $24 million upon the satisfaction of regulatory milestones for the first indication approved, and up to an aggregate of $18 million upon the satisfaction of regulatory milestones for the second indication approved. In addition, we are required to pay up to an aggregate of $125 million upon the satisfaction of commercial milestones, based on the amount of annual net sales. We are also required to pay tiered royalties ranging from a mid-single digit percentage to a low-teen digit percentage on annual net sales of products. These royalty obligations last on a product-by-product and country-by-country basis until the latest of (i) the expiration of the last valid claim of a Novartis patent covering a subject product, (ii) the expiration of any regulatory exclusivity for the subject product in a country, or (iii) the 10th anniversary of the first commercial sale of the product in the country, and are subject to a reduction after the expiration of the last valid claim of a Novartis patent or the introduction of a generic equivalent of a product in a country. In addition, if we sublicense the rights under the license agreement, we are required to pay a certain percentage of the sublicense revenue to Novartis. Novartis will no longer be entitled to sublicense revenue following the last visit of the 400th subject in any human clinical trial conducted by us or a sublicensee of ours, which we expect to occur by the end of our ongoing Phase 2b clinical trial.

Either we or Novartis may terminate the license agreement if the other party commits a material breach and fails to cure such breach within 60 days after written notice. Novartis may terminate the license agreement upon our bankruptcy, insolvency, dissolution or winding up. In addition, Novartis may partially terminate the license agreement with respect to everolimus if we fail or cease to use commercially reasonable efforts to research, develop and commercialize a product utilizing everolimus for a period of three years, provided that our license related to RTB101 and Novartis's license to our improvements related to everolimus will continue. In addition, we may terminate the license agreement, with or without cause, in its entirety or on a product-by-product or country-by-country basis, upon 60 days' prior written notice.

In connection with the license agreement, NIBR entered into certain stockholder agreements related to this investment. See "Certain Relationship and Related Party Transactions—Series A Preferred Stock Financing."

Sales and Marketing

We hold worldwide commercialization rights to our product candidates. We do not have our own marketing, sales or distribution capabilities. In order to commercialize our product candidate if approved for commercial sale, we must either develop a sales and marketing infrastructure or collaborate with third parties that have sales and marketing experience. We plan to directly commercialize our product candidates in the United States with a focused sales force targeting top-prescribing physicians with high flow of elderly patients. For some indications, we may also directly commercialize our product candidates in the European Union. In other markets or for certain indications outside the United States for which commercialization may be less capital efficient for us, we may selectively pursue strategic collaborations with third parties in order to maximize the commercial potential of our product candidates.

Manufacturing

RTB101 and everolimus are small molecules that can be manufactured using commercially available technologies. We acquired data from Novartis related to the chemical synthesis and manufacturing of RTB101,

which is currently being manufactured by a single contract manufacturing organization, and are outsourcing the manufacturing of everolimus.

We believe there are multiple sources for all of the materials required for the manufacture of our product candidates. Our manufacturing strategy enables us to more efficiently direct financial resources to the research, development, and commercialization of product candidates rather than diverting resources to internally develop manufacturing facilities. As our product candidates advance through development, we expect to enter into longer-term commercial supply agreements with key suppliers and manufacturers to fulfill and secure the ongoing and planned preclinical, clinical, and, if our product candidates are approved for marketing, our commercial supply needs for ourselves and our collaborators. Our long-term strategy is to secure at least two sources for the manufacturing of our products.

Manufacturing of any product candidate is subject to extensive regulations that impose various procedural and documentation requirements, which govern recordkeeping, manufacturing processes and controls, personnel, quality control and quality assurance, among others. We expect that all of our contract manufacturing organizations will manufacture RTB101 under current Good Manufacturing Practice, or cGMP, conditions. cGMP is a regulatory standard for the production of pharmaceuticals to be used in humans.

Competition

We consider Navitor Pharma to be our most direct competitor in developing novel therapeutics targeting TORC1 for aging-related diseases. However, Navitor has not publicly announced testing of any pipeline candidate in human subjects to date. We are aware of multiple other allosteric and catalytic mTOR inhibitors in development by other companies. We are not aware of any product with comparable TORC1 selectivity being commercially developed.

We are also aware of other companies seeking to develop treatments to prevent or treat aging-related diseases through biological pathways unrelated to mTOR inhibition, including Calico and Unity. Calico has not yet disclosed any pipeline candidates, and Unity's most advanced candidate, based on publicly disclosed information, is in preclinical development. Hence, we believe that we currently have the most clinically advanced program based on the stage of development of our competitors' programs.

We are aware of other companies that are potential competitors for prevention or treatment of respiratory tract infections. Companies pursuing broad-spectrum prophylactic and therapeutic treatments in respiratory tract infections include PrEP BioPharm and Innavac. Based on publicly disclosed information, we believe that we have the most clinically advanced program, and the only program based on TORC1 selectivity. Narrow-spectrum prophylactic treatments are also being developed by potential competitors. Several of these treatments target the respiratory syncytial virus, or RSV, one of the top known causes of RTIs in older adults. However, as RTIs in the elderly are largely caused by many different viruses, we believe that our approach may be more broadly applicable in addressing RTIs.

Drug development is highly competitive and subject to rapid and significant technological advancements. Our ability to compete will significantly depend upon our ability to complete necessary clinical trials and regulatory approval processes, and effectively market any drug that we may successfully develop. Our current and potential future competitors may include pharmaceutical and biotechnology companies, academic institutions and government agencies. The primary competitive factors that will affect the commercial success of any product candidate for which we may receive regulatory approval include efficacy, safety and tolerability profile, dosing convenience, price, formulary coverage and reimbursement. Our existing or potential future competitors may have substantially greater financial, technical and human resources than we do and significantly greater experience in the discovery and development of product candidates, as well as in obtaining regulatory approvals of those product candidates in the United States and in foreign countries. Our current and potential future competitors may also have significantly more experience commercializing drugs that have been approved

for marketing. Mergers and acquisitions in the pharmaceutical and biotechnology industries could result in even more resources being concentrated among a small number of our competitors.

Accordingly, our competitors may be more successful than us in obtaining regulatory approval for therapies and in achieving widespread market acceptance of their drugs. It is also possible that the development of a more effective treatment method for prevention of respiratory tract infections by a competitor could render our product candidate non-competitive or obsolete or reduce the demand for our product candidate before we can recover our development and commercialization expenses.

Government Regulation

Government authorities in the United States, at the federal, state and local level, and in other countries and jurisdictions, including the European Union, extensively regulate, among other things, the research, development, testing, manufacture, quality control, approval, packaging, storage, recordkeeping, labeling, advertising, promotion, distribution, marketing, post-approval monitoring and reporting, and import and export of pharmaceutical products. The processes for obtaining regulatory approvals in the United States and in foreign countries and jurisdictions, along with subsequent compliance with applicable statutes and regulations and other regulatory authorities, require the expenditure of substantial time and financial resources.

Review and Approval of Drugs in the United States

In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act, or FDCA, and its implementing regulations. The failure to comply with applicable U.S. requirements at any time during the product development process, approval process or after approval may subject an applicant and/or sponsor to a variety of administrative or judicial sanctions, including refusal by the FDA to approve pending applications, withdrawal of an approval, imposition of a clinical hold, issuance of warning letters and other types of letters, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement of profits, or civil or criminal investigations and penalties brought by the FDA and the Department of Justice or other governmental entities. In addition, an applicant may need to recall a product.

An applicant seeking approval to market and distribute a new drug product in the United States must typically undertake the following:

- completion of nonclinical, or preclinical, laboratory tests, animal studies and formulation studies in compliance with the FDA's good laboratory practice, or GLP, regulations;
- submission to the FDA of an IND, which must take effect before human clinical trials may begin;
- approval by an independent Institutional Review Board, or IRB, representing each clinical site before each clinical trial may be initiated at that site;
- performance of adequate and well-controlled human clinical trials in accordance with good clinical practices, or GCP, to establish the safety and efficacy of the proposed drug product for each indication;
- preparation and submission to the FDA of a new drug application, or NDA, and payment of user fees;
- review of the product by an FDA advisory committee, where appropriate or if applicable;

- satisfactory completion of one or more FDA inspections of the manufacturing facility or facilities at which the product, or components thereof, are produced to assess compliance with current Good Manufacturing Practices, or cGMP, requirements and to assure that the facilities, methods and controls are adequate to preserve the product's identity, strength, quality and purity;
- satisfactory completion of FDA audits of clinical trial sites to assure compliance with GCPs and the integrity of the clinical data;
- FDA review and approval of the NDA; and
- compliance with any post-approval requirements, including Risk Evaluation and Mitigation Strategies, or REMS, and post-approval studies required by the FDA.

Preclinical Studies

Before an applicant begins testing a compound in humans, the drug candidate enters the preclinical testing stage. Preclinical studies include laboratory evaluation of the purity and stability of the manufactured drug substance or active pharmaceutical ingredient and the formulated drug or drug product, as well as in vitro and animal studies to assess the safety and activity of the drug for initial testing in humans and to establish a rationale for therapeutic use. The conduct of preclinical studies is subject to federal regulations and requirements, including GLP regulations. The results of the preclinical tests, together with manufacturing information, analytical data, any available clinical data or literature and plans for clinical trials, among other things, are submitted to the FDA as part of an IND. Some long-term preclinical testing, such as animal tests of reproductive adverse events and carcinogenicity, may continue after the IND is submitted.

The IND and IRB Processes

An IND is an exemption from the FDCA that allows an unapproved drug to be shipped in interstate commerce for use in an investigational clinical trial and a request for FDA authorization to administer such investigational drug to humans. Such authorization must be secured prior to interstate shipment and administration of the investigational drug. In an IND, applicants must submit a protocol for each clinical trial and any subsequent protocol amendments. In addition, the results of the preclinical tests, manufacturing information, analytical data, any available clinical data or literature and plans for clinical trials, among other things, are submitted to the FDA as part of an IND. The FDA requires a 30-day waiting period after the filing of each IND before clinical trials may begin. At any time during this 30-day period, the FDA may raise concerns or questions about the conduct of the trials as outlined in the IND and impose a clinical hold. In this case, the IND sponsor and the FDA must resolve any outstanding concerns before clinical trials can begin.

Following commencement of a clinical trial under an IND, the FDA may also place a clinical hold or partial clinical hold on that trial. A clinical hold is an order issued by the FDA to the sponsor to delay a proposed clinical investigation or to suspend an ongoing investigation. A partial clinical hold is a delay or suspension of only part of the clinical work requested under the IND. No more than 30 days after imposition of a clinical hold or partial clinical hold, the FDA will provide the sponsor a written explanation of the basis for the hold. Following issuance of a clinical hold or partial clinical hold, an investigation may only resume after the FDA has notified the sponsor that the investigation may proceed. The FDA will base that determination on information provided by the sponsor correcting the deficiencies previously cited or otherwise satisfying the FDA that the investigation can proceed.

A sponsor may choose, but is not required, to conduct a foreign clinical study under an IND. When a foreign clinical study is conducted under an IND, all FDA IND requirements must be met unless waived. When the foreign clinical study is not conducted under an IND, the sponsor must ensure that the study is conducted in accordance with good clinical practice, or GCP, including review and approval by an independent ethics

committee, or IEC, and informed consent from subjects. The GCP requirements are intended to help ensure the protection of human subjects enrolled in non-IND foreign clinical studies, as well as the quality and integrity of the resulting data. FDA must also be able to validate the data from the study through an on-site inspection if necessary.

In addition to the foregoing IND requirements, an IRB representing each institution participating in the clinical trial must review and approve the plan for any clinical trial before it commences at that institution, and the IRB must conduct continuing review of the study at least annually. The IRB must review and approve, among other things, the study protocol and informed consent information to be provided to study subjects. An IRB must operate in compliance with FDA regulations. An IRB can suspend or terminate approval of a clinical trial at its institution, or an institution it represents, if the clinical trial is not being conducted in accordance with the IRB's requirements or if the product candidate has been associated with unexpected serious harm to patients.

Additionally, some trials are overseen by an independent group of qualified experts organized by the trial sponsor, known as a data safety monitoring board or committee. This group provides authorization for whether or not a trial may move forward at designated check points based on access that only the group maintains to available data from the study. Suspension or termination of development during any phase of clinical trials can occur if it is determined that the subjects or patients are being exposed to an unacceptable health risk. Other reasons for suspension or termination may be made by us based on evolving business objectives and/or competitive climate.

Information about certain clinical trials must be submitted within specific timeframes to the National Institutes of Health, or NIH, for public dissemination on its ClinicalTrials.gov website.

Human Clinical Trials in Support of an NDA

Clinical trials involve the administration of the investigational product to human subjects under the supervision of qualified investigators in accordance with GCP requirements, which include, among other things, the requirement that all research subjects provide their informed consent in writing before their participation in any clinical trial. Clinical trials are conducted under written study protocols detailing, among other things, the inclusion and exclusion criteria, the objectives of the study, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated.

Human clinical trials are typically conducted in three sequential phases, which may overlap or be combined:

- *Phase 1.* The drug is initially introduced into healthy human subjects or, in certain indications such as cancer, patients with the target disease or condition and tested for safety, dosage tolerance, absorption, metabolism, distribution, excretion and, if possible, to gain an early indication of its effectiveness and to determine optimal dosage.

- *Phase 2.* The drug is administered to a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance and optimal dosage.

- *Phase 3.* The drug is administered to an expanded patient population, generally at geographically dispersed clinical trial sites, in well-controlled clinical trials to generate enough data to evaluate the efficacy and safety of the product for approval, to establish the overall risk-benefit profile of the product and to provide adequate information for the labeling of the product.

- *Phase 4.* Post-approval studies may be conducted after initial regulatory approval. These studies are used to gain additional experience from the treatment of patients in the intended therapeutic indication.

Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA. In addition, IND safety reports must be submitted to the FDA for any of the following: serious and unexpected suspected adverse reactions; findings from other studies or animal or in vitro testing that suggest a significant risk in humans exposed to the drug; and any clinically important increase in the case of a serious suspected adverse reaction over that listed in the protocol or investigator brochure. Phase 1, Phase 2 and Phase 3 clinical trials may not be completed successfully within any specified period, or at all. Furthermore, the FDA or the sponsor may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research subjects are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution, or an institution it represents, if the clinical trial is not being conducted in accordance with the IRB's requirements or if the drug has been associated with unexpected serious harm to patients. The FDA will typically inspect one or more clinical sites to assure compliance with GCP and the integrity of the clinical data submitted.

Concurrent with clinical trials, companies often complete additional animal studies and must also develop additional information about the chemistry and physical characteristics of the drug as well as finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the drug candidate and, among other things, the applicant must develop methods for testing the identity, strength, quality, purity, and potency of the final drug. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the drug candidate does not undergo unacceptable deterioration over its shelf life.

Review of an NDA by the FDA

Assuming successful completion of required clinical testing and other requirements, the results of the preclinical studies and clinical trials, together with detailed information relating to the product's chemistry, manufacture, controls and proposed labeling, among other things, are submitted to the FDA as part of an NDA requesting approval to market the drug product for one or more indications. Under federal law, the submission of most NDAs is additionally subject to an application user fee, currently exceeding $2.4 million for applications requiring clinical data, and an annual prescription drug program fee exceeding $304,000. These fees are typically increased annually. Certain exceptions and waivers are available for some of these fees, such as an exception from the application fee for drugs with orphan designation.

The FDA conducts a preliminary review of an NDA within 60 days of its receipt, before accepting the NDA for filing, to determine whether the application is sufficiently complete to permit substantive review. The FDA may request additional information rather than accept an NDA for filing. In this event, the application must be resubmitted with the additional information. The resubmitted application is also subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review. The FDA has agreed to specified performance goals in the review process of NDAs. Applications for drugs containing novel active moieties are meant to be reviewed within ten months from the date of filing, and applications for "priority review" products containing novel active moieties are meant to be reviewed within six months of filing. The review process may be extended by the FDA for three additional months to consider new information or clarification provided by the applicant to address an outstanding deficiency identified by the FDA following the original submission.

Before approving an NDA, the FDA typically will inspect the facility or facilities where the product is or will be manufactured. These pre-approval inspections may cover all facilities associated with an NDA submission, including drug component manufacturing (such as active pharmaceutical ingredients), finished drug product manufacturing, and control testing laboratories. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications.

In addition, as a condition of approval, the FDA may require an applicant to develop a REMS. REMS use risk minimization strategies beyond the professional labeling to ensure that the benefits of the product outweigh the potential risks. To determine whether a REMS is needed, the FDA will consider the size of the population likely to use the product, seriousness of the disease, expected benefit of the product, expected duration of treatment, seriousness of known or potential adverse events, and whether the product is a new molecular entity. REMS can include medication guides, physician communication plans for healthcare professionals, and elements to assure safe use, or ETASU. ETASU may include, but are not limited to, special training or certification for prescribing or dispensing, dispensing only under certain circumstances, special monitoring, and the use of patient registries. The FDA may require a REMS before approval or post-approval if it becomes aware of a serious risk associated with use of the product. The requirement for a REMS can materially affect the potential market and profitability of a product.

The FDA is required to refer an application for a novel drug to an advisory committee or explain why such referral was not made. Typically, an advisory committee is a panel of independent experts, including clinicians and other scientific experts, that reviews, evaluates and provides a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

Fast Track, Breakthrough Therapy, and Priority Review

The FDA has a number of programs intended to facilitate and expedite development and review of new drugs if they are intended to address an unmet medical need in the treatment of a serious or life-threatening disease or condition. Three of these programs are referred to as fast track designation, breakthrough therapy designation, and priority review designation.

Specifically, the FDA may designate a product for Fast Track review if it is intended, whether alone or in combination with one or more other products, for the treatment of a serious or life-threatening disease or condition, and it demonstrates the potential to address unmet medical needs for such a disease or condition. For Fast Track products, sponsors may have greater interactions with the FDA and the FDA may initiate review of sections of a Fast Track product's application before the application is complete. This rolling review may be available if the FDA determines, after preliminary evaluation of clinical data submitted by the sponsor, that a Fast Track product may be effective. The sponsor must also provide, and the FDA must approve, a schedule for the submission of the remaining information and the sponsor must pay applicable user fees. However, the FDA's time period goal for reviewing a Fast Track application does not begin until the last section of the application is submitted. In addition, the Fast Track designation may be withdrawn by the FDA if the FDA believes that the designation is no longer supported by data emerging in the clinical trial process.

Second, a product may be designated as a Breakthrough Therapy if it is intended, either alone or in combination with one or more other products, to treat a serious or life-threatening disease or condition and preliminary clinical evidence indicates that the product may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. The FDA may take certain actions with respect to Breakthrough Therapies, including holding meetings with the sponsor throughout the development process; providing timely advice to the product sponsor regarding development and approval; involving more senior staff in the review process; assigning a cross-disciplinary project lead for the review team; and taking other steps to design the clinical trials in an efficient manner.

Third, the FDA may designate a product for priority review if it is a product that treats a serious or life-threatening disease or condition and, if approved, would provide a significant improvement in safety or effectiveness. The FDA determines, on a case-by-case basis, whether the proposed product represents a significant improvement when compared with other available therapies. Significant improvement may be illustrated by evidence of increased effectiveness in the treatment of a condition, elimination or substantial

reduction of a treatment-limiting product reaction, documented enhancement of patient compliance that may lead to improvement in serious outcomes, and evidence of safety and effectiveness in a new subpopulation. A priority designation is intended to direct overall attention and resources to the evaluation of such applications, and to shorten the FDA's goal for taking action on a marketing application from ten months to six months.

Accelerated Approval Pathway

The FDA may grant accelerated approval to a product for a serious or life-threatening condition that provides meaningful therapeutic advantage to patients over existing treatments based upon a determination that the product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit or on an intermediate clinical endpoint that can be measured earlier than an effect on irreversible morbidity or mortality, or IMM, and that is reasonably likely to predict an effect on IMM or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. Products granted accelerated approval must meet the same statutory standards for safety and effectiveness as those granted traditional approval.

For the purposes of accelerated approval, a surrogate endpoint is a marker, such as a laboratory measurement, radiographic image, physical sign, or other measure that is thought to predict clinical benefit, but is not itself a measure of clinical benefit. Surrogate endpoints can often be measured more easily or more rapidly than clinical endpoints. An intermediate clinical endpoint is a measurement of a therapeutic effect that is considered reasonably likely to predict the clinical benefit of a product, such as an effect on IMM. The FDA has limited experience with accelerated approvals based on intermediate clinical endpoints, but has indicated that such endpoints generally may support accelerated approval where the therapeutic effect measured by the endpoint is not itself a clinical benefit and basis for traditional approval, if there is a basis for concluding that the therapeutic effect is reasonably likely to predict the ultimate clinical benefit of a product.

The accelerated approval pathway is most often used in settings in which the course of a disease is long and an extended period of time is required to measure the intended clinical benefit of a product, even if the effect on the surrogate or intermediate clinical endpoint occurs rapidly.

The accelerated approval pathway is usually contingent on a sponsor's agreement to conduct, in a diligent manner, additional post-approval confirmatory studies to verify and describe the product's clinical benefit. As a result, a product candidate approved on this basis is subject to rigorous post-marketing compliance requirements, including the completion of Phase 4 or post-approval clinical trials to confirm the effect on the clinical endpoint. Failure to conduct required post-approval studies, or confirm a clinical benefit during post-marketing studies, could result in the FDA's withdrawal of the approval and require the withdrawal of the product from the market on an expedited basis. All promotional materials for product candidates approved under accelerated regulations are subject to prior review by the FDA.

The FDA's Decision on an NDA

On the basis of the FDA's evaluation of the NDA and accompanying information, including the results of the inspection of the manufacturing facilities and select clinical trial sites, the FDA may issue an approval letter or a complete response letter. An approval letter authorizes commercial marketing of the product with specific prescribing information for specific indications. A complete response letter generally outlines the deficiencies in the submission and may require substantial additional testing or information in order for the FDA to reconsider the application. If and when those deficiencies have been addressed to the FDA's satisfaction in a resubmission of the NDA, the FDA will issue an approval letter. The FDA has committed to reviewing such resubmissions in two or six months depending on the type of information included. Even with submission of this additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

If the FDA approves a product, it may limit the approved indications for use for the product, require that contraindications, warnings or precautions be included in the product labeling, require that post-approval studies, including Phase 4 clinical trials, be conducted to further assess the drug's safety or effectiveness after approval, require testing and surveillance programs to monitor the product after commercialization, or impose other conditions, including distribution restrictions or other risk management mechanisms, including REMS, which can materially affect the potential market and profitability of the product. The FDA may prevent or limit further marketing of a product based on the results of post-market studies or surveillance programs.

Post-Approval Requirements

Drugs manufactured or distributed pursuant to FDA approvals are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to recordkeeping, periodic reporting, product sampling and distribution, advertising and promotion and reporting of adverse experiences with the product. After approval, many changes to the approved product, such as adding new indications or other labeling claims, are subject to prior FDA review and approval. There also are annual program fee requirements for certain marketed products.

The FDA may impose a number of post-approval requirements as a condition of approval of an NDA. For example, the FDA may require post-marketing testing, including Phase 4 clinical trials, and surveillance to further assess and monitor the product's safety and effectiveness after commercialization.

In addition, drug manufacturers and other entities involved in the manufacture and distribution of approved drugs are required to register their establishments with the FDA and state agencies, and are subject to periodic unannounced inspections by the FDA and these state agencies for compliance with cGMP requirements. Changes to the manufacturing process are strictly regulated and often require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting and documentation requirements upon the NDA holder and any third-party manufacturers that the NDA holder may decide to use. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP compliance.

Once an approval is granted, the FDA may withdraw the approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical trials to assess new safety risks; or imposition of distribution or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of the product, complete withdrawal of the product from the market or voluntary product recalls;
- fines, warning or untitled letters or holds on post-approval clinical trials;
- refusal of the FDA to approve pending NDAs or supplements to approved NDAs, or suspension or revocation of product approvals;
- product seizure or detention, or refusal to permit the import or export of products; or
- injunctions or the imposition of civil or criminal penalties.

The FDA strictly regulates marketing, labeling, advertising and promotion of products that are placed on the market. Drugs may be promoted only for the approved indications and in accordance with the provisions of

the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability.

In addition, the distribution of prescription pharmaceutical products is subject to the Prescription Drug Marketing Act, or PDMA, which regulates the distribution of drugs and drug samples at the federal level, and sets minimum standards for the registration and regulation of drug distributors by the states. Both the PDMA and state laws limit the distribution of prescription pharmaceutical product samples and impose requirements to ensure accountability in distribution.

Hatch-Waxman Amendments

Section 505 of the FDCA describes three types of marketing applications that may be submitted to the FDA to request marketing authorization for a new drug. A Section 505(b)(1) NDA is an application that contains full reports of investigations of safety and efficacy. A 505(b)(2) NDA is an application that contains full reports of investigations of safety and efficacy but where at least some of the information required for approval comes from investigations that were not conducted by or for the applicant and for which the applicant has not obtained a right of reference or use from the person by or for whom the investigations were conducted. This regulatory pathway enables the applicant to rely, in part, on the FDA's prior findings of safety and efficacy for an existing product, or published literature, in support of its application. Section 505(j) establishes an abbreviated approval process for a generic version of approved drug products through the submission of an Abbreviated New Drug Application, or ANDA. An ANDA provides for marketing of a generic drug product that has the same active ingredients, dosage form, strength, route of administration, labeling, performance characteristics and intended use, among other things, to a previously approved product, known as a reference listed drug, or RLD. ANDAs are termed "abbreviated" because they are generally not required to include preclinical (animal) and clinical (human) data to establish safety and efficacy. Instead, generic applicants must scientifically demonstrate that their product is bioequivalent to, or performs in the same manner as, the innovator drug through in vitro, in vivo, or other testing. The generic version must deliver the same amount of active ingredients into a subject's bloodstream in the same amount of time as the innovator drug and can often be substituted by pharmacists under prescriptions written for the reference listed drug.

Non-Patent Exclusivity

Under the Hatch-Waxman Amendments, the FDA may not approve (or in some cases accept) an ANDA or 505(b)(2) application until any applicable period of non-patent exclusivity for the RLD has expired. The FDCA provides a period of five years of non-patent data exclusivity for a new drug containing a new chemical entity, or NCE. For the purposes of this provision, an NCE is a drug that contains no active moiety that has previously been approved by the FDA in any other NDA. An active moiety is the molecule or ion responsible for the physiological or pharmacological action of the drug substance. In cases where such NCE exclusivity has been granted, an ANDA may not be filed with the FDA until the expiration of five years unless the submission is accompanied by a Paragraph IV certification, which states the proposed generic drug will not infringe one or more of the already approved product's listed patents or that such patents are invalid or unenforceable, in which case the applicant may submit its application four years following the original product approval.

The FDCA also provides for a period of three years of exclusivity for non-NCE drugs if the NDA or a supplement to the NDA includes reports of one or more new clinical investigations, other than bioavailability or bioequivalence studies, that were conducted by or for the applicant and are essential to the approval of the application or supplement. This three-year exclusivity period often protects changes to a previously approved drug product, such as a new dosage form, route of administration, combination or indication, but it generally would not protect the original, unmodified product from generic competition. Unlike five-year NCE exclusivity, an award of three-year exclusivity does not block the FDA from accepting ANDAs seeking approval for generic versions of the drug as of the date of approval of the original drug product; it only prevents FDA from approving such ANDAs.

Hatch-Waxman Patent Certification and the 30-Month Stay

In seeking approval of an NDA or a supplement thereto, NDA sponsors are required to list with the FDA each patent with claims that cover the applicant's product or an approved method of using the product. Upon approval, each of the patents listed by the NDA sponsor is published in the FDA's Approved Drug Products with Therapeutic Equivalence Evaluations, commonly known as the Orange Book. Upon submission of an ANDA or 505(b)(2) NDA, an applicant is required to certify to the FDA concerning any patents listed for the RLD in the Orange Book that:

- no patent information on the drug product that is the subject of the application has been submitted to the FDA;
- such patent has expired;
- the date on which such patent expires; or
- such patent is invalid, unenforceable or will not be infringed upon by the manufacture, use, or sale of the drug product for which the application is submitted.

Generally, the ANDA or 505(b)(2) NDA cannot be approved until all listed patents have expired, except where the ANDA or 505(b)(2) NDA applicant challenges a listed patent through the last type of certification, also known as a paragraph IV certification. If the applicant does not challenge the listed patents or indicates that it is not seeking approval of a patented method of use, the ANDA or 505(b)(2) NDA application will not be approved until all of the listed patents claiming the referenced product have expired. If the ANDA or 505(b)(2) NDA applicant has provided a paragraph IV certification the applicant must send notice of the paragraph IV certification to the NDA and patent holders once the application has been accepted for filing by the FDA. The NDA and patent holders may then initiate a patent infringement lawsuit in response to the notice of the paragraph IV certification. If the paragraph IV certification is challenged by an NDA holder or the patent owner(s) asserts a patent challenge to the paragraph IV certification, the FDA may not approve that application until the earlier of 30 months from the receipt of the notice of the paragraph IV certification, the expiration of the patent, when the infringement case concerning each such patent was favorably decided in the applicant's favor or settled, or such shorter or longer period as may be ordered by a court. This prohibition is generally referred to as the 30-month stay. In instances where an ANDA or 505(b)(2) NDA applicant files a paragraph IV certification, the NDA holder or patent owner(s) regularly take action to trigger the 30-month stay, recognizing that the related patent litigation may take many months or years to resolve. Thus, approval of an ANDA or 505(b)(2) NDA could be delayed for a significant period of time depending on the patent certification the applicant makes and the reference drug sponsor's decision to initiate patent litigation. If the drug has NCE exclusivity and the ANDA is submitted four years after approval, the 30-month stay is extended so that it expires 7 ½ years after approval of the innovator drug, unless the patent expires or there is a decision in the infringement case that is favorable to the ANDA applicant before then.

Pediatric Studies and Exclusivity

Under the Pediatric Research Equity Act of 2003, an NDA or supplement thereto for a drug with certain innovative features (*e.g.*, new active ingredient, new indication, new dosage form) must contain data that are adequate to assess the safety and effectiveness of the drug product for the claimed indications in all relevant pediatric subpopulations, and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. With enactment of the Food and Drug Administration Safety and Innovation Act, or FDASIA, in 2012, sponsors must also submit pediatric study plans prior to the assessment data. Those plans must contain an outline of the proposed pediatric study or studies the applicant plans to conduct, including study objectives and design, any deferral or waiver requests, and other information required by regulation. The applicant, the FDA, and the FDA's internal review committee must then review the information submitted,

consult with each other, and agree upon a final plan. The FDA or the applicant may request an amendment to the plan at any time.

The FDA may, on its own initiative or at the request of the applicant, grant deferrals for submission of some or all pediatric data until after approval of the product for use in adults, or full or partial waivers from the pediatric data requirements. Unless otherwise required by regulation, the pediatric data requirements do not apply to products with orphan designation.

Pediatric exclusivity is another type of non-patent exclusivity in the United States and, if granted, provides for the attachment of an additional six months of marketing protection to the term of certain existing non-patent exclusivity periods, including orphan exclusivity. This six-month exclusivity may be granted if an NDA sponsor submits pediatric data that fairly respond to a written request from the FDA for such data within certain time periods. The data do not need to show the product to be effective in the pediatric population studied; rather, if the clinical trial is deemed to fairly respond to the FDA's request, the additional protection is granted. If reports of requested pediatric studies are submitted to and accepted by the FDA within the statutory time limits, whatever statutory or regulatory periods of exclusivity or patent protection cover the product are extended by six months. This is not a patent term extension, but it effectively extends the regulatory period during which the FDA cannot approve another application after expiration of a patent.

Orphan Drug Designation and Exclusivity

Under the Orphan Drug Act, the FDA may designate a drug product as an "orphan drug" if it is intended to treat a rare disease or condition (generally meaning that it affects fewer than 200,000 individuals in the United States, or more in cases in which there is no reasonable expectation that the cost of developing and making a drug product available in the United States for treatment of the disease or condition will be recovered from sales of the product). A company must request orphan product designation before submitting an NDA. If the request is granted, the FDA will disclose the identity of the therapeutic agent and its potential use. Orphan product designation does not convey any advantage in or shorten the duration of the regulatory review and approval process.

If a product with orphan status receives the first FDA approval for the drug for the disease or condition for which it has such designation or for a select indication or use within the rare disease or condition for which it was designated, the product generally will receive orphan product exclusivity. Orphan product exclusivity means that the FDA may not approve any other applications for the same product for the same indication for seven years, except in certain limited circumstances. Competitors may receive approval of different products for the indication for which the orphan product has exclusivity and may obtain approval for the same product but for a different indication. If a drug or drug product designated as an orphan product ultimately receives regulatory approval for an indication broader than what was designated in its orphan product application, it may not be entitled to exclusivity.

Patent Term Restoration and Extension

A patent claiming a new drug product may be eligible for a limited patent term extension under the Hatch-Waxman Amendments, which permits a patent term restoration of up to five years for patent term lost during product development and the FDA regulatory review. The restoration period granted is typically one-half the time between the effective date of an IND and the submission date of an NDA, plus the time between the submission date of an NDA and the ultimate approval date. Patent term restoration cannot be used to extend the remaining term of a patent past a total of 14 years from the product's approval date. Only one patent applicable to an approved drug product is eligible for the extension, and the application for the extension must be submitted prior to the expiration of the patent in question and within 60 days of drug approval. A patent that covers multiple drugs for which approval is sought can only be extended in connection with one of the approvals. The U.S. Patent and Trademark Office reviews and approves the application for any patent term extension or restoration in consultation with the FDA.

Review and Approval of Medicinal Products in the European Union

In order to market any product outside of the United States, a company must also comply with numerous and varying regulatory requirements of other countries and jurisdictions regarding quality, safety and efficacy and governing, among other things, clinical trials, marketing authorization, commercial sales and distribution of products. Whether or not it obtains FDA approval for a product, an applicant will need to obtain the necessary approvals by the comparable foreign regulatory authorities before it can commence clinical trials or marketing of the product in those countries or jurisdictions. Specifically, the process governing approval of medicinal products in the European Union generally follows the same lines as in the United States. It entails satisfactory completion of preclinical studies and adequate and well-controlled clinical trials to establish the safety and efficacy of the product for each proposed indication. It also requires the submission to the relevant competent authorities of a marketing authorization application, or MAA, and granting of a marketing authorization by these authorities before the product can be marketed and sold in the European Union.

Clinical Trial Approval

The Clinical Trials Directive 2001/20/EC, the Directive 2005/28/EC on Good Clinical Practice, or GCP, and the related national implementing provisions of the individual EU Member States govern the system for the approval of clinical trials in the European Union. Under this system, an applicant must obtain prior approval from the competent national authority of the EU Member States in which the clinical trial is to be conducted. Furthermore, the applicant may only start a clinical trial at a specific study site after the competent ethics committee has issued a favorable opinion. The clinical trial application must be accompanied by, among other documents, an investigational medicinal product dossier (the Common Technical Document) with supporting information prescribed by Directive 2001/20/EC, Directive 2005/28/EC, where relevant the implementing national provisions of the individual EU Member States and further detailed in applicable guidance documents.

In April 2014, the new Clinical Trials Regulation, (EU) No 536/2014 (Clinical Trials Regulation) was adopted. The Regulation is anticipated to apply in 2019. The Clinical Trials Regulation will be directly applicable in all the EU Member States, repealing the current Clinical Trials Directive 2001/20/EC. Conduct of all clinical trials performed in the European Union will continue to be bound by currently applicable provisions until the new Clinical Trials Regulation becomes applicable. The extent to which ongoing clinical trials will be governed by the Clinical Trials Regulation will depend on when the Clinical Trials Regulation becomes applicable and on the duration of the individual clinical trial. If a clinical trial continues for more than three years from the day on which the Clinical Trials Regulation becomes applicable the Clinical Trials Regulation will at that time begin to apply to the clinical trial.

The new Clinical Trials Regulation aims to simplify and streamline the approval of clinical trials in the European Union. The main characteristics of the regulation include: a streamlined application procedure via a single entry point, the “EU portal”; a single set of documents to be prepared and submitted for the application as well as simplified reporting procedures for clinical trial sponsors; and a harmonized procedure for the assessment of applications for clinical trials, which is divided in two parts. Part I is assessed by the competent authorities of all EU Member States in which an application for authorization of a clinical trial has been submitted (Member States concerned). Part II is assessed separately by each Member State concerned. Strict deadlines have been established for the assessment of clinical trial applications. The role of the relevant ethics committees in the assessment procedure will continue to be governed by the national law of the concerned EU Member State. However, overall related timelines will be defined by the Clinical Trials Regulation.

Marketing Authorization

To obtain a marketing authorization for a product under European Union regulatory systems, an applicant must submit an MAA either under a centralized procedure administered by the European Medicines Agency, or EMA, or one of the procedures administered by competent authorities in the EU Member States

(decentralized procedure or mutual recognition procedure). A marketing authorization may be granted only to an applicant established in the European Union. Regulation (EC) No 1901/2006 provides that prior to obtaining a marketing authorization in the European Union, applicants have to demonstrate compliance with all measures included in an EMA-approved Paediatric Investigation Plan, or PIP, covering all subsets of the pediatric population, unless the EMA has granted (1) a product-specific waiver, (2) a class waiver or (3) a deferral for one or more of the measures included in the PIP.

The centralized procedure provides for the grant of a single marketing authorization by the European Commission that is valid for all EU Member States and three of the four European Free Trade Association, or EFTA, States, Iceland, Liechtenstein and Norway. Pursuant to Regulation (EC) No 726/2004, the centralized procedure is compulsory for specific products, including for medicines produced by certain biotechnological processes, products designated as orphan medicinal products, advanced therapy products and products with a new active substance indicated for the treatment of certain diseases, including products for the treatment of HIV or AIDS, cancer, diabetes, neurodegenerative diseases, auto-immune and other immune dysfunctions and viral diseases. For products with a new active substance indicated for the treatment of other diseases and products that are a significant therapeutic, scientific or technical innovation and whose authorization would be in the interest of public health at EU level, the centralized procedure is optional.

Under the centralized procedure, the Committee for Medicinal Products for Human Use, or the CHMP, established at the EMA is responsible for conducting the initial assessment of a product. The CHMP is also responsible for several post-authorization and maintenance activities, such as the assessment of modifications or extensions to an existing marketing authorization. Under the centralized procedure in the European Union, the maximum timeframe for the evaluation of an MAA is 210 days, excluding clock stops, when additional information or written or oral explanation is to be provided by the applicant in response to questions of the CHMP. Accelerated evaluation might be granted by the CHMP in exceptional cases, when a medicinal product is of major interest from the point of view of public health and in particular from the viewpoint of therapeutic innovation. If the CHMP accepts such request, the time limit of 210 days will be reduced to 150 days but it is possible that the CHMP can revert to the standard time limit for the centralized procedure if it considers that it is no longer appropriate to conduct an accelerated assessment. At the end of this period, the CHMP provides a scientific opinion on whether or not a marketing authorization should be granted in relation to a medicinal product. Within 67 days from the date of the CHMP Opinion, the European Commission will adopt its final decision on the marketing authorization application.

Unlike the centralized authorization procedure, the decentralized marketing authorization procedure requires a separate application to, and leads to separate approval by, the competent authorities of each EU Member State in which the product is to be marketed. This application is identical to the application that would be submitted to the EMA for authorization through the centralized procedure. The reference EU Member State prepares a draft assessment and drafts of the related materials within 120 days after receipt of a valid application. The resulting assessment report is submitted to the concerned EU Member States who, within 90 days of receipt, must decide whether to approve the assessment report and related materials. If a concerned EU Member State cannot approve the assessment report and related materials due to concerns relating to a potential serious risk to public health, disputed elements may be referred to the European Commission, whose decision is binding on all EU Member States.

The mutual recognition procedure similarly is based on the acceptance by the competent authorities of the EU Member States of the marketing authorization of a medicinal product by the competent authorities of other EU Member States. The holder of a national marketing authorization may submit an application to the competent authority of an EU Member State requesting that this authority recognize the marketing authorization delivered by the competent authority of another EU Member State.

Regulatory Data Protection in the European Union

In the European Union, innovative medicinal products approved on the basis of a complete independent data package qualify for eight years of data exclusivity upon marketing authorization and an additional two years of market exclusivity pursuant to Directive 2001/83/EC. Regulation (EC) No 726/2004 repeats this entitlement for medicinal products authorized in accordance the centralized authorization procedure. Data exclusivity prevents applicants for authorization of generics of these innovative products from referencing the innovator's data to assess a generic (abbreviated) application for a period of eight years. During an additional two-year period of market exclusivity, a generic marketing authorization application can be submitted and authorized, and the innovator's data may be referenced, but no generic medicinal product can be placed on the European Union market until the expiration of the market exclusivity. The overall ten-year period will be extended to a maximum of 11 years if, during the first eight years of those ten years, the marketing authorization holder obtains an authorization for one or more new therapeutic indications which, during the scientific evaluation prior to their authorization, are held to bring a significant clinical benefit in comparison with existing therapies. Even if a compound is considered to be a new chemical entity so that the innovator gains the prescribed period of data exclusivity, another company nevertheless could also market another version of the product if such company obtained marketing authorization based on an MAA with a complete independent data package of pharmaceutical tests, preclinical tests and clinical trials.

Periods of Authorization and Renewals

A marketing authorization has an initial validity for five years in principle. The marketing authorization may be renewed after five years on the basis of a re-evaluation of the risk-benefit balance by the EMA or by the competent authority of the EU Member State. To this end, the marketing authorization holder must provide the EMA or the competent authority with a consolidated version of the file in respect of quality, safety and efficacy, including all variations introduced since the marketing authorization was granted, at least six months before the marketing authorization ceases to be valid. The European Commission or the competent authorities of the EU Member States may decide, on justified grounds relating to pharmacovigilance, to proceed with one further five year period of marketing authorization. Once subsequently definitively renewed, the marketing authorization shall be valid for an unlimited period. Any authorization which is not followed by the actual placing of the medicinal product on the European Union market (in case of centralized procedure) or on the market of the authorizing EU Member State within three years after authorization ceases to be valid (the so-called sunset clause).

Regulatory Requirements after a Marketing Authorization has been Obtained

In case an authorization for a medicinal product in the European Union is obtained, the holder of the marketing authorization is required to comply with a range of requirements applicable to the manufacturing, marketing, promotion and sale of medicinal products. These include:

- Compliance with the European Union's stringent pharmacovigilance or safety reporting rules must be ensured. These rules can impose post-authorization studies and additional monitoring obligations.

- The manufacturing of authorized medicinal products, for which a separate manufacturer's license is mandatory, must also be conducted in strict compliance with the applicable European Union laws, regulations and guidance, including Directive 2001/83/EC, Directive 2003/94/EC, Regulation (EC) No 726/2004 and the European Commission Guidelines for Good Manufacturing Practice. These requirements include compliance with European Union cGMP standards when manufacturing medicinal products and active pharmaceutical ingredients, including the manufacture of active pharmaceutical ingredients outside of the European Union with the intention to import the active pharmaceutical ingredients into the European Union.

- The marketing and promotion of authorized drugs, including industry-sponsored continuing medical education and advertising directed toward the prescribers of drugs and/or the general public, are strictly regulated in the European Union notably under Directive 2001/83/EC, as amended, and EU Member State laws.

Brexit and the Regulatory Framework in the United Kingdom

On June 23, 2016, the electorate in the United Kingdom voted in favor of leaving the European Union (commonly referred to as "Brexit"). Thereafter, on March 29, 2017, the country formally notified the European Union of its intention to withdraw pursuant to Article 50 of the Lisbon Treaty. The withdrawal of the United Kingdom from the European Union will take effect either on the effective date of the withdrawal agreement or, in the absence of agreement, two years after the United Kingdom provides a notice of withdrawal pursuant to the EU Treaty. Since the regulatory framework for pharmaceutical products in the United Kingdom covering quality, safety and efficacy of pharmaceutical products, clinical trials, marketing authorization, commercial sales and distribution of pharmaceutical products is derived from European Union directives and regulations, Brexit could materially impact the future regulatory regime which applies to products and the approval of product candidates in the United Kingdom. It remains to be seen how, if at all, Brexit will impact regulatory requirements for product candidates and products in the United Kingdom.

Healthcare Law and Regulation

Healthcare providers and third-party payors play a primary role in the recommendation and prescription of drug products that are granted regulatory approval. Arrangements with providers, consultants, third-party payors and customers are subject to broadly applicable fraud and abuse, anti-kickback, false claims laws, reporting of payments to physicians and teaching hospitals and patient privacy laws and regulations and other healthcare laws and regulations that may constrain our business and/or financial arrangements. Restrictions under applicable federal and state healthcare laws and regulations, include the following:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons and entities from knowingly and willfully soliciting, offering, paying, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made, in whole or in part, under a federal healthcare program such as Medicare and Medicaid; a person or entity need not have actual knowledge of the federal Anti-Kickback Statute or specific intent to violate it in order to have committed a violation; in addition, the government may assert that a claim that includes items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act;

- the federal civil and criminal false claims laws, including the civil False Claims Act, and civil monetary penalties laws, which prohibit individuals or entities from, among other things, knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false, fictitious or fraudulent; knowingly making a false statement or record material to a false or fraudulent claim or obligation to pay or transmit money or property to the federal government; or knowingly concealing or knowingly and improperly avoiding or decreasing an obligation to pay money to the federal government;

- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created additional federal criminal laws that prohibit, among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement in connection with the delivery of or payment for healthcare benefits, items or services; similar to the federal Anti-Kickback Statute, a person or entity does not need to

have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;

- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, and their respective implementing regulations, including the Final Omnibus Rule published in January 2013, which impose obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;

- the federal transparency requirements known as the federal Physician Payments Sunshine Act, under the Patient Protection and Affordable Care Act, as amended by the Health Care Education Reconciliation Act, or the Affordable Care Act, which requires certain manufacturers of drugs, devices, biologics and medical supplies to report annually to the Centers for Medicare & Medicaid Services, or CMS, within the United States Department of Health and Human Services, information related to payments and other transfers of value made by that entity to physicians and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members; and

- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, which may apply to healthcare items or services that are reimbursed by non-governmental third-party payors, including private insurers.

Some state laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring manufacturers to report information related to payments to physicians and other healthcare providers or marketing expenditures and pricing information. State and foreign laws also govern the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Pharmaceutical Insurance Coverage and Healthcare Reform

In the United States and markets in other countries, patients who are prescribed treatments for their conditions and providers performing the prescribed services generally rely on third-party payors to reimburse all or part of the associated healthcare costs. Thus, even if a product candidate is approved, sales of the product will depend, in part, on the extent to which third-party payors, including government health programs in the United States such as Medicare and Medicaid, commercial health insurers and managed care organizations, provide coverage, and establish adequate reimbursement levels for, the product. The process for determining whether a payor will provide coverage for a product may be separate from the process for setting the price or reimbursement rate that the payor will pay for the product once coverage is approved. Third-party payors are increasingly challenging the prices charged, examining the medical necessity, and reviewing the cost-effectiveness of medical products and services and imposing controls to manage costs. Third-party payors may limit coverage to specific products on an approved list, also known as a formulary, which might not include all of the approved products for a particular indication.

In order to secure coverage and reimbursement for any product that might be approved for sale, a company may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of the product, in addition to the costs required to obtain FDA or other comparable regulatory approvals. Additionally, companies may also need to provide discounts to purchasers, private health plans or government healthcare programs. Nonetheless, product candidates may not be considered medically necessary or cost effective. A decision by a third-party payor not to cover a product could reduce physician utilization once the product is approved and have a material adverse effect on sales, results of operations and financial condition. Additionally, a payor's decision to provide coverage for a product does not imply that an adequate reimbursement rate will be approved. Further, one payor's determination to provide

coverage for a product does not assure that other payors will also provide coverage and reimbursement for the product, and the level of coverage and reimbursement can differ significantly from payor to payor.

The containment of healthcare costs has become a priority of federal, state and foreign governments, and the prices of products have been a focus in this effort. Governments have shown significant interest in implementing cost-containment programs, including price controls, restrictions on reimbursement and requirements for substitution of generic products. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit a company's revenue generated from the sale of any approved products. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which a company or its collaborators receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

There have been a number of federal and state proposals during the last few years regarding the pricing of pharmaceutical products, limiting coverage and the amount of reimbursement for drugs and other medical products, government control and other changes to the healthcare system in the United States. For example, in March 2010, the United States Congress enacted the Affordable Care Act, which, among other things, includes changes to the coverage and payment for products under government health care programs. Among the provisions of the Affordable Care Act of importance to our potential product candidates are:

- an annual, nondeductible fee on any entity that manufactures or imports specified branded prescription drugs and biologic products, apportioned among these entities according to their market share in certain government healthcare programs;
- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to certain individuals with income at or below 133% of the federal poverty level, thereby potentially increasing a manufacturer's Medicaid rebate liability;
- expanded manufacturers' rebate liability under the Medicaid Drug Rebate Program by increasing the minimum rebate for both branded and generic drugs and revising the definition of "average manufacturer price," or AMP, for calculating and reporting Medicaid drug rebates on outpatient prescription drug prices;
- addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected;
- expanded the types of entities eligible for the 340B drug discount program;
- established the Medicare Part D coverage gap discount program by requiring manufacturers to provide a 50% point-of-sale-discount off the negotiated price of applicable brand drugs to eligible beneficiaries during their coverage gap period as a condition for the manufacturers' outpatient drugs to be covered under Medicare Part D; and
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research.

Other legislative changes have been proposed and adopted in the United States since the Affordable Care Act was enacted. In August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers of 2% per fiscal year, which went into effect in April

2013 and will remain in effect through 2025 unless additional Congressional action is taken. In January 2013, then-President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, further reduced Medicare payments to several providers, including hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. In addition, recently there has been heightened governmental scrutiny over the manner in which manufacturers set prices for their commercial products, which has resulted in several Congressional inquiries and proposed bills designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for pharmaceutical products. Individual states in the United States have also become increasingly active in passing legislation and implementing regulations designed to control pharmaceutical product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing.

On January 20, 2017, President Trump signed an Executive Order directing federal agencies with authorities and responsibilities under the Affordable Care Act to waive, defer, grant exemptions from, or delay the implementation of any provision of the Affordable Care Act that would impose a fiscal or regulatory burden on states, individuals, healthcare providers, health insurers, or manufacturers of pharmaceuticals or medical devices. Further legislative changes to or regulatory changes under the Affordable Care Act remain possible in the 115th U.S. Congress and under the Trump Administration. The nature and extent of any legislative or regulatory changes to the Affordable Care Act are uncertain at this time, however.

Outside the United States, ensuring coverage and adequate payment for a product also involves challenges. Pricing of prescription pharmaceuticals is subject to government control in many countries. Pricing negotiations with government authorities can extend well beyond the receipt of regulatory approval for a product and may require a clinical trial that compares the cost-effectiveness of a product to other available therapies. The conduct of such a clinical trial could be expensive and result in delays in commercialization.

In the European Union, pricing and reimbursement schemes vary widely from country to country. Some countries provide that products may be marketed only after a reimbursement price has been agreed. Some countries may require the completion of additional studies that compare the cost-effectiveness of a particular product candidate to currently available therapies or so-called health technology assessments, in order to obtain reimbursement or pricing approval. For example, the European Union provides options for its member states to restrict the range of products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. European Union member states may approve a specific price for a product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the product on the market. Other member states allow companies to fix their own prices for products, but monitor and control prescription volumes and issue guidance to physicians to limit prescriptions. Recently, many countries in the European Union have increased the amount of discounts required on pharmaceuticals and these efforts could continue as countries attempt to manage healthcare expenditures, especially in light of the severe fiscal and debt crises experienced by many countries in the European Union. The downward pressure on healthcare costs in general, particularly prescription products, has become intense. As a result, increasingly high barriers are being erected to the entry of new products. Political, economic and regulatory developments may further complicate pricing negotiations, and pricing negotiations may continue after reimbursement has been obtained. Reference pricing used by various European Union member states, and parallel trade, i.e., arbitrage between low-priced and high-priced member states, can further reduce prices. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any products, if approved in those countries.

Employees

As of January 16, 2018, we had seven full-time employees, including a total of three employees with M.D. or Ph.D. degrees. Of our workforce, four employees are directly engaged in research and development activities, and three employees provide administrative, business and operations support. None of our employees are represented by labor unions or covered by collective bargaining agreements. We consider the relationship with our employees to be good. We also use outside consultants and contractors for limited engagements.

Facilities

We occupy office space within the offices of PureTech Health pursuant to the terms of our Business Services, Personnel and Information Management Agreement with PureTech Health. In January 2018, we entered into a multi-year agreement to lease office space in Boston, Massachusetts under an operating lease agreement. We believe that this office is sufficient to meet our current needs and that suitable additional space will be available as and when needed. See “Transactions with Related Persons.”

Legal Proceedings

We are not currently subject to any material legal proceedings.

MANAGEMENT

The following table sets forth the name, age as of the date of this prospectus, and position of each of our executive officers and directors.

Name	Age	Position
Executive Officers		
Chen Schor(1)	45	President, Chief Executive Officer and Director
Joan Mannick, M.D.	59	Chief Medical Officer
John J. McCabe	50	Vice President, Finance
Non-Employee Directors		
Paul Fonteyne(2)(3)	56	Director
Jonathan Silverstein(2)(3)	50	Director
David Steinberg(1)(2)	45	Director
Lynne Sullivan(1)	51	Director
Daphne Zohar(3)	47	Director

(1) Member of audit committee
(2) Member of compensation committee
(3) Member of nominating and corporate governance committee

Executive Officers

Chen Schor has served as our President and Chief Executive Officer and as a member of our board of directors since our incorporation in July 2016. Mr. Schor previously served as President, Chief Executive Officer and director of Synta Pharmaceuticals Corp. from May 2015 until its merger with Madrigal Pharmaceuticals in July 2016, and prior to that, from 2014 until 2016, Mr. Schor served as its Executive Vice President and Chief Operation Officer. From 2012 to 2014, Mr. Schor served as President and Chief Executive Officer of Novalere FP, Inc., a pre-commercial stage allergy therapeutics company. From 2011 to 2012, Mr. Schor served as Chief Business Officer of Eleven Biotherapeutics, an emerging therapeutics company. From 2009 until 2011, Mr. Schor served as Vice President of Business Development, global branded products at Teva Pharmaceuticals. Prior to joining Teva, Mr. Schor was Chief Business Officer at Epix Pharmaceuticals, Inc. (formerly known as Predix Pharmaceuticals Inc.) from 2003 until 2009. Prior to joining Epix, Mr. Schor was a Partner at Yozma Venture Capital from 1998 until 2003, managing the fund's investments in biotechnology and medical device companies. Mr. Schor currently sits on the board of Brainstorm Cell Therapeutics Inc., a public biotechnology company. Mr. Schor received his MBA from Tel Aviv University, a B.A. in Economics and Accounting from Haifa University and a B.A. in Biology from Tel Aviv University. We believe that Mr. Schor is qualified to serve on our board of directors due to his service as our President and Chief Executive Officer and his extensive knowledge of our company and industry.

Joan Mannick, M.D., has served as our Chief Medical Officer since March 2017 and served as a member of our board of directors from March 2017 to November 2017. From November 2010 until March 2017, Dr. Mannick was Senior Director and subsequently Executive Director in the Translated Medical Division of NIBR, where Dr. Mannick led the clinical program at NIBR that targets pathways regulating aging to treat aging-related conditions. Prior to joining NIBR in 2010, Dr. Mannick was a Medical Director at Genzyme from 2007 to 2010 working in multiple therapeutic areas and a faculty member at Harvard Medical School from 1991 to 1999 and University of Massachusetts Medical School from 2000 to 2011. Her NIH-sponsored laboratory focused on the role of protein S-nitrosylation in physiology and pathophysiology. Dr. Mannick received her A.B. from Harvard College and her M.D. from Harvard Medical School. She completed her residency in Internal Medicine at Brigham and Women's Hospital and an Infectious Disease fellowship as part of the Harvard Combined Infectious Disease Program.

John J. McCabe, C.P.A., has served as our Vice President, Finance since October 2017. Mr. McCabe served as Chief Financial Officer for Eleven Biotherapeutics, Inc. from January 2016 until October 2017 and

prior to that served as Senior Vice President from June 2013 to December 2015 and Director of Financial Reporting from April 2012 to June 2013. Mr. McCabe also provided independent financial and accounting consulting services from June 2011 to April 2012. Prior to that, Mr. McCabe served as Vice President of Finance at Clinical Data, Inc., from December 2010 to June 2011 and as the Senior Director of Financial Reporting of Clinical Data from August 2007 to December 2010. Prior to that, Mr. McCabe served in several financial roles at Interleukin Genetics, Inc. He began his career working for the accounting firm of Coopers & Lybrand LLP, now known as PricewaterhouseCoopers LLP. Mr. McCabe received a B.S. in Business Administration from the University of Vermont and is also a Certified Public Accountant.

Non-Employee Directors

Paul Fonteyne has served as a member of our board of directors since December 2017. Mr. Fonteyne has served as the United States Country Managing Director and President and Chief Executive Officer of Boehringer Ingelheim USA Corporation since 2011. Previously, Mr. Fonteyne served as Senior Corporate Vice President in Boehringer Ingelheim GmbH from 2009 to 2011. From 2003 to 2008 he served as Executive Vice President, Head of Marketing and Sales for Prescription Medicines at Boehringer-Ingelheim Pharmaceuticals, Inc. Prior to 2003, Mr. Fonteyne served in numerous leadership positions at Merck and Co. Inc, including Vice President of Sales in North Central US, Vice President of Marketing and Senior Director of Marketing. Mr. Fonteyne currently serves on the advisory board of the Brigham and Women's Hospital Lung Center and the board of PhRMA (the leading pharmaceutical industry association). Mr. Fonteyne received his MBA from Carnegie-Mellon University and his MS in Chemical Engineering from the Polytechnic School at the University of Brussels. We believe Mr. Fonteyne is qualified to serve on our board of directors as a result of his past experience in the life sciences industry.

Jonathan Silverstein has served as a member of our board of directors since November 2017. Mr. Silverstein is currently a general partner at OrbiMed, a healthcare investment firm, where he has worked since December 1998. Previously, Mr. Silverstein was a director of life sciences in the investment banking department at Sumitomo Bank. Mr. Silverstein serves on the board of directors of Glaukos Corporation and Ascendis Pharma A/S. Mr. Silverstein also serves on the boards of directors of several private companies. Mr. Silverstein holds a B.A. from Denison University and a J.D. and M.B.A. from the University of San Diego. We believe that Mr. Silverstein's strategic development and capital markets experience qualifies him to serve on our board of directors.

David Steinberg has served as a member of our board of directors since March 2017. Mr. Steinberg is a Co-founder of PureTech Health plc and has been the Chief Innovation Officer for over five years. PureTech Health (PRTC.L) is an advanced clinical stage biopharma company developing new categories of medicines targeting the brain-immune-gut "BIG" axis. As a senior executive officer of PureTech Health, Mr. Steinberg is a member of the executive committee. He has been involved in initiating and leading multiple PureTech programs, including PureTech's microbiome initiative, lymphatic biology platform and immune-oncology pipeline. Prior to joining PureTech Health, he was a strategy consultant with Vertex Partners and the Boston Consulting Group, where he focused on research and development and product strategy and strategic alliances for Fortune 500 pharmaceutical and biotechnology clients. Mr. Steinberg is also a member of the UChicago Tech Innovation Fund Advisory Committee. He received his B.A. in Biology with distinction from Cornell University and graduated with high honors from the University of Chicago Booth School of Business with an M.B.A. in Strategy and Finance. We believe that Mr. Steinberg is qualified to serve on our board of directors due to his finance background and industry experience.

Lynne Sullivan has served as a member of our board of directors since December 2017. Ms. Sullivan is currently the Senior Vice President of Finance for Biogen Inc., where she has worked since 2008. Ms. Sullivan has global responsibility for Biogen's Financial Planning & Analysis, Corporate Tax, and Corporate Finance groups, which includes ownership of long-range planning, capital allocation projects and the financial aspects of Mergers & Acquisitions/Business Development. Previously, Ms. Sullivan was the Vice President of Tax for

Biogen, Vice President Tax for EMD Serono and the Vice President of Tax for North America at Merck KgaA. She was also a Tax Partner at Arthur Andersen, where she led the North East Region's Tax Consulting Practice for the firm. Ms. Sullivan is on the Board of Solid Biosciences LLC, where she chairs the Audit Committee since 2015. Ms. Sullivan holds a B.S. in Accounting from Suffolk University and a M.S. in Taxation from Bentley College. We believe that Ms. Sullivan is qualified to serve on our board of directors due to her finance background and experience in the life sciences industry.

Daphne Zohar has served as a member of our board of directors since December 2017. Ms. Zohar is the founder and Chief Executive Officer of PureTech Health plc (PRTC.L), an advanced clinical stage biopharma company developing new categories of medicines targeting the brain-immune-gut "BIG" axis. Ms. Zohar has also co-founded and currently sits on the board of directors of a number of private life science companies, as well as on the board of PureTech Health plc, which is FTSE indexed and listed on the main market of the London Stock Exchange. Ms. Zohar also serves on the advisory board of the Technology Development Fund Advisory Board at Children's Hospital Boston, is an Editorial Advisor to Xconomy, a national news company, and is on the board of advisors of Life Science Cares. Ms. Zohar has been recognized as a leader and innovator in biotechnology by a number of sources, including Ernst & Young, BioWorld, MIT's Technology Review, the Boston Globe, and Scientific American. Ms. Zohar has been an entrepreneur since an early age and received her B.A. in entrepreneurship and new venture creation from Northeastern University. We believe Ms. Zohar is qualified to serve on our board of directors given her experience and knowledge of the life sciences industry.

Board Composition and Election of Directors

Board Composition

Our board of directors currently consists of five members. Our directors hold office until their successors have been elected and qualified or until the earlier of their resignation or removal.

Our certificate of incorporation and bylaws that will become effective as of the closing date of this offering provide that the authorized number of directors may be changed only by resolution of our board of directors. Our certificate of incorporation and bylaws will also provide that our directors may be removed only for cause by the affirmative vote of the holders of at least 66.7% of our shares of capital stock present in person or by proxy and entitled to vote, and that any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, may be filled only by vote of a majority of our directors then in office.

In accordance with the terms of our certificate of incorporation and bylaws that will become effective as of the closing date of this offering, our board of directors will be divided into three classes, class I, class II and class III, with members of each class serving staggered three-year terms. Upon the closing of this offering, the members of the classes will be divided as follows:

- the class I directors will be Jonathan Silverstein and David Steinberg, and their term will expire at the annual meeting of stockholders to be held in 2019;
- the class II directors will be Lynne Sullivan and Daphne Zohar, and their term will expire at the annual meeting of stockholders to be held in 2020; and
- the class III directors will be Chen Schor and Paul Fonteyne, and their term will expire at the annual meeting of stockholders to be held in 2021.

Upon the expiration of the term of a class of directors, directors in that class will be eligible to be elected for a new three-year term at the annual meeting of stockholders in the year in which their term expires.

We have no formal policy regarding board diversity. Our priority in selection of board members is identification of members who will further the interests of our stockholders through his or her established record of professional accomplishment, the ability to contribute positively to the collaborative culture among board members, knowledge of our business and understanding of the competitive landscape.

Director Independence

Applicable Nasdaq Stock Market, or Nasdaq, rules require a majority of a listed company's board of directors to be comprised of independent directors within one year of listing. In addition, the Nasdaq rules require that, subject to specified exceptions, each member of a listed company's audit, compensation and nominating and corporate governance committees be independent. Audit committee members must also satisfy the independence criteria set forth in Rule 10A-3 under the Securities Exchange Act of 1934, as amended, or the Exchange Act, and compensation committee members must also satisfy the independence criteria set forth in Rule 10C-1 under the Exchange Act. Under applicable Nasdaq rules, a director will only qualify as an "independent director" if, in the opinion of the listed company's board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In order to be considered independent for purposes of Rule 10A-3, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors, or any other board committee, accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries or otherwise be an affiliated person of the listed company or any of its subsidiaries. In order to be considered independent for purposes of Rule 10C-1, the board must consider, for each member of a compensation committee of a listed company, all factors specifically relevant to determining whether a director has a relationship to such company which is material to that director's ability to be independent from management in connection with the duties of a compensation committee member, including, but not limited to: the source of compensation of the director, including any consulting, advisory or other compensatory fee paid by such company to the director; and whether the director is affiliated with the company or any of its subsidiaries or affiliates.

In December 2017, our board of directors undertook a review of the composition of our board of directors and its committees and the independence of each director. Based upon information requested from and provided by each director concerning his or her background, employment and affiliations, including family relationships, our board of directors has determined that Jonathan Silverstein, Paul Fonteyne and Lynne Sullivan are each an "independent director" as defined under applicable Nasdaq rules. In making such determination, our board of directors considered the relationships that each such non-employee director has with our company and all other facts and circumstances that our board of directors deemed relevant in determining his or her independence, including the beneficial ownership of our capital stock by each non-employee director. Mr. Schor is not an independent director under these rules because he is our President and Chief Executive Officer.

There are no family relationships among any of our directors or executive officers.

Board Committees

Our board of directors has established an audit committee, a compensation committee and a nominating and corporate governance committee. Each of these committees will operate under a charter that has been approved by our board of directors. The composition of each committee will be effective as of the date of this prospectus.

Audit Committee

The members of our audit committee are Chen Schor, David Steinberg and Lynne Sullivan, and Lynne Sullivan is the chair of the audit committee. Effective as of the date of this prospectus, our audit committee's responsibilities will include:

- appointing, approving the compensation of, and assessing the independence of our registered public accounting firm;
- overseeing the work of our independent registered public accounting firm, including through the receipt and consideration of reports from that firm;
- reviewing and discussing with management and our independent registered public accounting firm our annual and quarterly financial statements and related disclosures;
- monitoring our internal control over financial reporting, disclosure controls and procedures and code of business conduct and ethics;
- overseeing our internal audit function, if any;
- discussing our risk assessment and risk management policies;
- establishing policies regarding hiring employees from our independent registered public accounting firm and procedures for the receipt and retention of accounting related complaints and concerns;
- meeting independently with our internal auditing staff, if any, our independent registered public accounting firm and management;
- reviewing and approving or ratifying any related person transactions; and
- preparing the audit committee report required by the SEC rules.

All audit and non-audit services, other than *de minimis* non-audit services, to be provided to us by our independent registered public accounting firm must be approved in advance by our audit committee.

Our board of directors has determined that Lynne Sullivan is an "audit committee financial expert" as defined in applicable SEC rules and that each of the members of our audit committee possesses the financial sophistication required for audit committee members under Nasdaq rules. Under the applicable Nasdaq rules, a company listed in connection with its initial public offering is permitted to phase in its compliance with the independent audit committee requirements set forth in Marketplace Rule 5615(b)(1) on the same schedule as it is permitted to phase in its compliance with the independence audit committee requirement pursuant to Rule 10A-3(b)(1)(iv)(A) under the Exchange Act, that is, (1) one independent member at the time of listing; (2) a majority of independent members within 90 days of listing; and (3) all independent members within one year of listing.

Compensation Committee

The members of our compensation committee are Paul Fonteyne, Jonathan Silverstein and David Steinberg, and Paul Fonteyne is the chair of the compensation committee. Effective as of the date of this prospectus, our compensation committee's responsibilities will include:

- reviewing and approving, or making recommendations to our board of directors with respect to, the compensation of our chief executive officer and our other executive officers;
- overseeing an evaluation of our senior executives;

- reviewing and making recommendations to our board of directors with respect to our incentive-compensation and equity-based compensation plans;
- overseeing and administering our equity-based plans;
- reviewing and making recommendations to our board of directors with respect to director compensation;
- reviewing and discussing annually with management our "Compensation Discussion and Analysis" disclosure if and to the extent then required by SEC rules; and
- preparing the compensation committee report if and to the extent then required by SEC rules.

Under the applicable Nasdaq rules, a company listing in conjunction with its initial public offering is permitted to phase in its compliance with the independent committee requirements set forth in Nasdaq Rules §5605(d) and (e) as follows: (1) one independent member at the time of listing; (2) a majority of independent members within 90 days of listing; and (3) all independent members within one year of listing.

Nominating and Corporate Governance Committee

The members of our nominating and corporate governance committee are Paul Fonteyne, Jonathan Silverstein and Daphne Zohar, and Jonathan Silverstein is the chair of the nominating and corporate governance committee. Effective as of the date of this prospectus, our nominating and corporate governance committee's responsibilities will include:

- identifying individuals qualified to become members of our board of directors;
- recommending to our board of directors the persons to be nominated for election as directors and to each of our board's committees;
- developing and recommending to our board of directors corporate governance principles; and
- overseeing an annual evaluation of our board of directors.

Under the applicable Nasdaq rules, a company listing in conjunction with its initial public offering is permitted to phase in its compliance with the independent committee requirements set forth in Nasdaq Rules §5605(d) and (e) as follows: (1) one independent member at the time of listing; (2) a majority of independent members within 90 days of listing; and (3) all independent members within one year of listing.

Compensation Committee Interlocks and Insider Participation

None of our executive officers serves, or in the past year has served, as a member of the board of directors or compensation committee, or other committee serving an equivalent function, of any other entity that has one or more of its executive officers serving as a member of our board of directors or our compensation committee. None of the members of our compensation committee is, or has ever been, an officer or employee of ours.

Code of Business Conduct and Ethics

We have adopted, effective upon the effectiveness of the registration statement of which this prospectus forms a part, a written code of business conduct and ethics that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. Following this offering, we will post a copy of the code on the Corporate Governance section of our website. If we make any substantive amendments to, or grant any waivers from, the code of business conduct and ethics for any officer or director, we will disclose the nature of such amendment or waiver on our website or in a current report on Form 8-K.

EXECUTIVE COMPENSATION

This section describes the material elements of compensation awarded to, earned by or paid to our named executive officers in 2017, who were Chen Schor, our President and Chief Executive Officer, Joan Mannick, our Chief Medical Officer, and John McCabe, our Vice President, Finance. These individuals represent our principal executive officer and our next two most highly compensated executive officers in the year ended December 31, 2017. We are an "emerging growth company," within the meaning of the JOBS Act, and have elected to comply with the reduced compensation disclosure requirements available to emerging growth companies under the JOBS Act. This section also provides qualitative information regarding the manner and context in which compensation is awarded to and earned by our named executive officers and is intended to place in perspective the data presented in the tables and narrative that follow.

Summary Compensation Table

The following table sets forth information regarding compensation awarded to, earned by or paid to our named executive officers during 2017 and 2016.

Name and Principal Position	Year	Salary ($)	Option Awards ($)(1)	Non-Equity Incentive Compensation(2)	All Other Compensation ($)(3)	Total ($)
Chen Schor(4)	2017	268,826	—	36,000(4)	7,400	312,226
President and Chief Executive Officer	2016	—	—	—	—	—
Joan Mannick(6)	2017	236,035	—	30,000(5)	6,484	272,519
Chief Medical Officer						
John McCabe(7)	2017	47,526	485,474	—	314	533,314
Vice President, Finance						

(1) The amounts reported in the "Option Awards" column reflects the aggregate grant date fair value of share- based compensation awarded during the year computed in accordance with the provisions of Financial Accounting Standards Board Accounting Standards Codification, or ASC, Topic 718. See Note 2 to our financial statements appearing at the end of this prospectus regarding assumptions underlying the valuation of equity awards.

(2) Each of our named executive officers is eligible to earn cash incentive compensation for 2017 based upon achievement of clinical and developmental objectives. Such amounts have not yet been determined, but are expected to be determined and paid in the first quarter of 2018 and will be reported at such time as required by SEC rules.

(3) Amounts reflecting Company matching contributions to our 401(k) plan.

(4) Mr. Schor has served as a director and as our President and Chief Executive Officer since July 2016, but did not become an employee of our company until April 4, 2017. Mr. Schor did not earn any compensation for his services until he commenced his employment relationship with us in 2017. In 2016, he purchased 1,866,363 shares of restricted common stock as founder shares at the then-current fair market value.

(5) Amounts represent bonuses paid upon achievement of certain milestones in 2017 as further described below.

(6) Dr. Mannick commenced her employment with us in April 2017.

(7) Mr. McCabe commenced his employment with us in October 2017.

Narrative to Summary Compensation Table

Our sole executive officer during 2016 was our President and Chief Executive Officer, Chen Schor. Mr. Schor did not receive any compensation for his services in 2016, but purchased restricted stock at the then-current fair market value at incorporation.

In March 2017, we appointed Dr. Joan Mannick as our Chief Medical Officer. In April 2017, Mr. Schor and Dr. Mannick commenced an employment relationship with us, and at that time, began receiving base salary and eligibility for performance-based bonuses, as described in greater detail below under "—Employment Arrangements with Our Named Executive Officers." John McCabe, our Vice President, Finance, has provided consulting services to us since September 2017, and was appointed to his current position in October 2017.

In July 2016, the board of directors issued and sold at the then-current fair market value 2,415,300 shares of restricted common stock to each of Mr. Schor and Dr. Mannick as founder shares. These equity awards are subject to a repurchase option in favor of us, pursuant to which we may repurchase any unvested shares at the purchase price paid for such shares in the event that either Mr. Schor or Dr. Mannick ceases providing services to us. In the case of a qualified funding (as defined in the applicable award agreement), which was satisfied upon the closing of our Series A preferred stock financing, a portion of the unvested shares accelerated and vested in full. In the case of a liquidity event (as defined in the applicable award agreement), which includes this initial public offering, the remaining unvested shares will accelerate and vest in full.

We use base salaries and performance-based bonuses to recognize the experience, skills, knowledge and responsibilities required of all our employees, including our named executive officers. Although we do not have a formal policy with respect to the grant of equity incentive awards to our current and future named executive officers, we believe that equity grants provide these officers with a strong link to our long-term performance, create an ownership culture and help to align the interests of these officers and our stockholders. In addition, we believe that equity grants with a time-based vesting feature promote executive retention because this feature incents our current and future named executive officers to remain in our employment during the vesting period. Accordingly, our board of directors intends to periodically review the equity incentive compensation of our current and future named executive officers and from time to time may grant equity incentive awards to them in the form of stock options.

Outstanding Equity Awards at 2017 Year End

The following table sets forth information regarding outstanding equity awards held by our named executive officers as of December 31, 2017:

	Option Awards				Stock Awards	
Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price ($)	Option Expiration Date	Number of Shares of Stock that have not Vested (#)	Market Value of Shares of Stock that have not Vested ($)
Chen Schor	—	—	—	—	548,224(1)	7,220,110
Joan Mannick	—	—	—	—	548,224(1)	7,220,110
John McCabe	—	78,100(2)	9.33	12/5/2027	—	—

(1) These shares of restricted stock were issued on July 11, 2016 to Mr. Schor and Dr. Mannick, and vest in 48 equal monthly installments through July 11, 2020. Upon the closing of a liquidity event (as defined in the award agreement), which includes this initial public offering, the unvested shares of restricted stock will accelerate and vest in full.

(2) On December 5, 2017, Mr. McCabe was awarded an option to purchase 78,100 shares of our common stock under our 2017 Plan. The shares underlying this option vest as follows: 25% of the shares vest on October 23, 2018, and the remaining shares vest in six equal semi-annual installments following October 23, 2018, subject to Mr. McCabe's continued service.

Employment Arrangements with Our Named Executive Officers

In connection with their commencement of employment with us, we have entered into employment offer letters with each of our named executive officers. Mr. Schor's and Dr. Mannick's offer letters have been amended effective upon the closing of this offering.

Chen Schor Offer Letter

In March 2017, we entered into an offer letter with Mr. Schor. The offer letter established Mr. Schor's title, his base salary of $361,000 per year, his eligibility for an annual bonus and certain milestone-based bonuses, and his eligibility for benefits made available to employees generally and also provides for certain benefits upon termination of his employment under specified conditions. Our board of directors determined that Mr. Schor was eligible to receive an annual bonus of up to 40% of his base salary, including a bonus at the same rate for the period from January 1, 2017 through March 31, 2017, when his offer letter was signed.

Mr. Schor's offer letter also provided for the following milestone-based bonuses: (i) $18,000 after the first subject is dosed in a Phase 2 study following the pre-IND meeting or call with the FDA (or written feedback to a pre-IND briefing book from the FDA) provided such dosing occurs by April 4, 2018; (ii) $18,000 after we enroll the first subject following interim analysis review by a committee defined by the Phase 2 study protocol, provided such enrollment occurs by April 4, 2019; and (iii) $36,000 after we achieve the primary end point with a p-value equal to or less than 0.05 in a Phase 2 study, provided such achievement occurs by April 4, 2020. The Company achieved the milestones described in clauses (i) and (ii) above and paid such amounts to Mr. Schor in 2017

Mr. Schor's employment is at will. Under the terms of his offer letter, if Mr. Schor's employment is terminated by us without cause or by Mr. Schor for good reason, each as defined in his offer letter, and subject to Mr. Schor's execution of a general release of potential claims against us, we have agreed to pay Mr. Schor an amount equal to 6 months of his then-current base salary and provide continued coverage under our health and dental plans for 6 months if such termination occurs within the first 12 months of his employment or an amount equal to 12 months of his then-current base salary and continued coverage under our health and dental plans for 12 months if such termination occurs thereafter. In addition, if such termination occurs following a change of control (as defined in his offer letter), Mr. Schor will also be eligible to receive a pro-rated portion of his annual performance bonus for the calendar year in which his employment was terminated.

Mr. Schor's offer letter also provides that he will (1) not compete with us during his employment and for a period of six months after the termination of his employment, (2) not solicit our employees, independent contractors or customers during his employment and for a period of six months after the termination of his employment, (3) protect our confidential and proprietary information and (4) assign to us related intellectual property developed during the course of his employment.

We amended Mr. Schor's offer letter, effective upon the closing of this offering. Pursuant to this amendment, Mr. Schor will be entitled to receive an annual base salary of $450,000 and an annual target bonus equal to 50% of his annual base salary. Mr. Schor's amended offer letter provides that, in the event that his employment is terminated by us without cause or by him for good reason, and such termination occurs within the 12-month period following a change of control, then in lieu of the payments and benefits described above, Mr. Schor shall be entitled to receive (i) a lump sum cash payment equal to 1.5 times the sum of his base salary and target annual incentive compensation, (ii) continued coverage under our health and dental plans for up to 18 months following termination and (iii) full acceleration of all time-based stock options and other time-based stock-based awards held by Mr. Schor.

In connection with this offering, subject to and effective upon the day of the effectiveness of the registration statement of which this prospectus forms a part, we intend to grant to Mr. Schor a stock option to purchase 238,311 shares of our common stock, at an exercise price equal to the per share price of our common stock in this offering. Such option will vest 25% on the first anniversary of the grant date, and the remainder ratably each month over the remaining three years.

Joan Mannick Offer Letter

In March 2017, we entered into an offer letter with Dr. Mannick. The offer letter established Dr. Mannick's title, her base salary of $318,250 per year, her eligibility for an annual bonus and certain milestone-based bonuses, and her eligibility for benefits made available to employees generally and also provides for certain benefits upon termination of her employment under specified conditions. Dr. Mannick's annual base salary shall be subject to increase in the discretion of our board of directors; provided that her base salary shall be increased by no less than 5% upon the earlier of April 4, 2019 or her eligibility to receive the bonus described in clause (iii) of the following paragraph. Our board of directors determined that Dr. Mannick was eligible to receive an annual bonus of up to 35% of her base salary, and a bonus at the rate of 23.33% for the period from January 1, 2017 through March 31, 2017, when her offer letter was signed.

Dr. Mannick's offer letter also provided for the following milestone-based bonuses: (i) $15,000 after the first subject is dosed in a Phase 2 study following the pre-IND meeting or call with the FDA (or written feedback to a pre-IND briefing book from the FDA) provided such dosing occurs by April 4, 2018; (ii) $15,000 after we enroll the first subject following interim analysis review by a committee defined by the Phase 2 study protocol, provided such enrollment occurs by April 4, 2019; and (iii) $30,000 after we achieve the primary end point with a p-value equal to or less than 0.05 in a Phase 2 study, provided such achievement occurs by April 4, 2020. The Company achieved the milestones described in clauses (i) and (ii) above and paid such amounts to Dr. Mannick in 2017.

Dr. Mannick's employment is at will. Under the terms of her offer letter, if Dr. Mannick's employment is terminated by us without cause or by Dr. Mannick for good reason, each as defined in her offer letter, and subject to Dr. Mannick's execution of a general release of potential claims against us, we have agreed to pay Dr. Mannick an amount equal to 6 months of her then-current base salary and provide continued coverage under our health and dental plans for 6 months if such termination occurs within the first 12 months of her employment or an amount equal to 9 months of her then-current base salary and continued coverage under our health and dental plans for 9 months if such termination occurs thereafter. In addition, if such termination occurs following a change of control (as defined in her offer letter), Dr. Mannick will also be eligible to receive a pro-rated portion of her annual performance bonus for the calendar year in which her employment was terminated.

Dr. Mannick's offer letter also provides that she will (1) not compete with us during her employment and for a period of six months after the termination of her employment, (2) not solicit our employees, independent contractors or customers during her employment and for a period of six months after the termination of her employment, (3) protect our confidential and proprietary information and (4) assign to us related intellectual property developed during the course of her employment.

We amended Dr. Mannick's offer letter, effective upon the closing of this offering. Pursuant to this amendment, Dr. Mannick's base salary will be increased to $360,000 per year. Dr. Mannick's amended offer letter provides that, in the event that her employment is terminated by us without cause or by her for good reason, and such termination occurs within the 12-month period following a change of control, then in lieu of the payments and benefits described above, Dr. Mannick shall be entitled to receive (i) a lump sum cash payment equal to the sum of her base salary and target annual incentive compensation, (ii) continued coverage under our health and dental plans for up to 12 months following termination and (iii) full acceleration of all time-based stock options and other time-based stock-based awards held by Dr. Mannick.

In connection with this offering, subject to and effective upon the day of the effectiveness of the registration statement of which this prospectus forms a part, we intend to grant to Dr. Mannick a stock option to purchase 92,999 shares of our common stock, at an exercise price equal to the per share price of our common stock in this offering. Such option will vest 25% on the first anniversary of the grant date, and the remainder ratably each month over the remaining three years.

In addition, we have entered into a letter agreement with Dr. Mannick, effective from and after the closing of this offering, to provide her with certain rights to participate in meetings of our board of directors as a non-voting observer and to receive copies of materials provided to our board of directors. We may exclude Dr. Mannick from such participation for any reason, including if we believe that such exclusion is reasonably necessary to preserve the attorney-client privilege, to protect confidential proprietary information or for other similar reasons. The observer rights will terminate in the event that Dr. Mannick is no longer serving as an officer of our company for any reason, or if she materially breaches any employment agreement or confidentiality agreement with us, or if we undergo a merger or consolidation.

John McCabe

In October 2017, we entered into an offer letter with Mr. McCabe. The offer letter established Mr. McCabe's title, his base salary of $250,000 per year, his eligibility for an annual bonus, and his eligibility for benefits made available to employees generally and also provides for certain benefits upon termination of his employment under specified conditions. Our board of directors determined that Mr. McCabe was eligible to receive an annual bonus of up to 30% of his base salary, pro-rated for 2017 to reflect his partial year of employment.

Mr. McCabe's employment is at will. Under the terms of his offer letter, if Mr. McCabe's employment is terminated by us without cause or by Mr. McCabe for good reason, each as defined in his offer letter, and such termination occurs following the 12-month anniversary of his start and not in connection with a change in control, then subject to Mr. McCabe's execution of a general release of potential claims against us and continued compliance with the restrictive covenants described below, we have agreed to pay Mr. McCabe an amount equal to three months of his then-current base salary and provide continued coverage under our health and dental plans on the same terms and conditions in effect prior to his termination until the earlier of the expiration of the three- month period for which he is entitled to receive severance and the date Mr. McCabe commences new employment which offers health coverage. If Mr. McCabe's employment is terminated by us without cause or by Mr. McCabe for good reason within 12 months after a change in control, and subject to Mr. McCabe's execution of a general release of potential claims against us and continued compliance with the restrictive covenants described below, we have agreed to pay Mr. McCabe (1) an amount equal to six months of his then-current base salary, (2) up to 50% of a pro-rated portion of his annual performance bonus for any partial year of service and (3) continued coverage under the Company's health and dental plans until the earlier of the expiration of 6 months and the date Mr. McCabe commences new employment which offers health coverage. In addition, all equity-based awards held by Mr. McCabe shall accelerate in full.

Mr. McCabe's offer letter also provides that he will (1) not compete with us during his employment and for a period of one year after the termination of his employment, (2) not solicit our employees, independent contractors or customers during his employment and for a period of one year after the termination of his employment, (3) protect our confidential and proprietary information and (4) assign to us related intellectual property developed during the course of his employment.

Stock Option and Other Compensation Plans

The three equity incentive plans described in this section are our 2017 stock incentive plan, or the 2017 Plan, our 2018 stock option and incentive plan, or the 2018 Plan, and our 2018 employee stock purchase plan, or the ESPP. Prior to this offering, we granted awards to eligible participants under the 2017 Plan. Following the closing of this offering, we expect to grant awards to eligible participants only under the 2018 Plan and the ESPP.

2017 Stock Incentive Plan

The 2017 Plan was adopted by our board of directors in June 2017 and approved by our stockholders in August 2017. The 2017 Plan provides for the grant of incentive stock options, nonqualified stock options, restricted stock awards, restricted stock units, stock appreciation rights and other stock-based awards. Our employees, officers, directors, consultants and advisors are eligible to receive awards under the 2017 Plan; however, incentive stock options may only be granted to our employees. Our board of directors, or a committee appointed by our board, administers the 2017 Plan and, subject to any limitations set forth in the 2017 Plan, will select the recipients of awards and determine:

- the number of shares of common stock covered by options and the dates upon which those options become exercisable;
- the type of options to be granted;
- the exercise prices of options;
- the duration of options; and
- the number of shares of common stock subject to any restricted stock or other stock-based awards and the terms and conditions of those awards, including the issue price, conditions for repurchase or forfeiture and repurchase price.

If our board of directors delegates authority to an executive officer to grant awards under the 2017 Plan, the executive officer has the power to make awards to employees and officers, except executive officers. Our board of directors will fix the terms of the awards to be granted by such executive officer, including the exercise price of such awards, and the maximum number of shares subject to awards that such executive officer may make.

The 2017 Plan provides that a maximum of 1,866,009 shares of our common stock are authorized for issuance under the plan. Our board of directors may amend, suspend, or terminate the 2017 Plan at any time.

Upon the occurrence of any stock split, reverse stock split, stock dividend, recapitalization, combination of shares, reclassification of shares, spinoff, or other similar change in capitalization or event, or any dividend or distribution to holders of our common stock other than an ordinary cash dividend, under the terms of the 2017 Plan, we are required to equitably adjust (or make substitute awards, if applicable), in the manner determined by our board of directors:

- the number and class of securities available under the 2017 Plan;
- the number and class of securities and exercise price per share of each outstanding option;
- the share and per-share provisions and the measurement price of each outstanding stock appreciation right;
- the number of shares subject to and the repurchase price per share subject to each outstanding restricted stock award; and
- the share and per-share-related provisions and the purchase price, if any, of each outstanding other stock-based award.

Upon the occurrence of a merger or consolidation of our company with or into another entity as a result of which all of our common stock is converted into or exchanged for the right to receive cash, securities, or other property or is cancelled; any transfer or disposition of all of our common stock for cash, securities, or other property pursuant to a share exchange or other transaction; or a liquidation or dissolution of our company, our board of directors may, on such terms as our board of directors determines (except to the extent specifically provided otherwise in an applicable award agreement or other agreement between us and the plan participant), take any one or more of the following actions pursuant to the 2017 Plan, as to some or all outstanding awards, other than restricted stock awards:

- provide that awards shall be assumed, or substantially equivalent awards shall be substituted, by the acquiring or succeeding corporation (or an affiliate thereof);
- upon written notice to a plan participant, provide that the participant's unexercised awards will terminate immediately prior to the consummation of such transaction unless exercised by the participant (to the extent then exercisable) within a specified period;
- provide that outstanding awards shall become exercisable, realizable or deliverable, or restrictions applicable to an award shall lapse, in whole or in part, prior to or upon such transaction;
- in the event of a transaction under the terms of which holders of common stock will receive upon consummation thereof a cash payment for each share surrendered in the transaction, make or provide for a cash payment to a plan participant;
- provide that, in connection with a liquidation of dissolution of the company, awards shall convert into the right to receive liquidation proceeds; or
- any combination of the foregoing.

Our board of directors is not obligated under the 2017 Plan to treat all awards, all awards held by a participant, or all awards of the same type, identically.

Upon the occurrence of any corporate transaction described above, other than our liquidation or dissolution, our repurchase and other rights under each outstanding restricted stock award will continue for the benefit of our successor and will, unless our board of directors determines otherwise, apply to the cash, securities, or other property which our common stock was converted into or exchanged for in the transaction in the same manner and to the same extent as they applied to the common stock subject to the restricted stock award; provided, however, that the board may provide termination or deemed satisfaction of such repurchase or other rights under the restricted stock award agreement, either initially or by amendment, or provide for forfeiture of such restricted stock if issued at no cost. Upon our liquidation or dissolution, except to the extent specifically provided to the contrary in the restricted stock award agreement or any other agreement between the plan participant and us, all restrictions and conditions on all restricted stock awards then outstanding will automatically be deemed terminated or satisfied.

Our board of directors, in its sole discretion, may accelerate the exercisability of any option or time at which any restrictions shall lapse or be removed from any restricted stock award, as the case may be.

As of December 31, 2017, there were 195,668 shares of common stock outstanding under the 2017 Plan at a weighted average exercise price of $4.49 per share, and 1,670,341 shares of common stock were available for future issuance under the 2017 Plan. On and after the effective date of the 2018 Stock Incentive Plan, or 2018 Plan, described below, we will grant no further stock options or other awards under the 2017 Plan. However, any shares of common stock subject to awards under our 2017 Plan that expire, terminate, or otherwise are surrendered, canceled, forfeited or repurchased without having been fully exercised or resulting in any common stock being issued will become available for issuance under our 2018 Plan up to a specified number of shares.

2018 Stock Option and Incentive Plan

Our board of directors has adopted, and our stockholders have approved, the 2018 Plan, which will become effective upon the effectiveness of the registration statement of which this prospectus forms a part. The 2018 Plan will replace our 2017 Plan. The 2018 Plan allows the board of directors and the compensation committee to make equity-based incentive awards to our officers, employees, directors and other key persons (including consultants).

Upon effectiveness of the 2018 Plan, the number of shares of our common stock that will be reserved for issuance under the 2018 Plan will be 2,200,260 shares, or the Initial Limit. The 2018 Plan provides that the number of shares reserved and available for issuance under the plan will automatically increase each January 1, beginning on January 1, 2019, by 4% of the outstanding number of shares of our common stock on the immediately preceding December 31 or such lesser number of shares as determined by our compensation committee, or the Annual Increase. The Initial Limits and other share limits in the 2018 Plan are subject to adjustment in the event of a stock split, stock dividend or other change in our capitalization.

The shares we issue under the 2018 Plan will be authorized but unissued shares or shares that we acquire. The shares of common stock underlying any awards that are forfeited, cancelled, held back upon exercise of an option or settlement of an award to cover the exercise price or tax withholding, reacquired by us prior to vesting, satisfied without the issuance of stock or are otherwise terminated (other than by exercise) under the 2018 Plan or the 2017 Plan will be added back to the shares of common stock available for issuance under the 2018 Plan.

The maximum number of shares that may be issued as incentive stock options may not exceed the Initial Limit cumulatively increased on January 1, 2019 and on each January 1 thereafter by the lesser of the Annual Increase or 1,359,815 shares. The value of all awards made under the 2018 Plan and all other cash compensation paid by us to any non-employee director in any calendar year shall not exceed $1.0 million.

The 2018 Plan will be administered by our compensation committee. Our compensation committee has full power to select, from among the individuals eligible for awards, the individuals to whom awards will be granted, to make any combination of awards to participants, and to determine the specific terms and conditions of each award, subject to the provisions of the 2018 Plan. Persons eligible to participate in the 2018 Plan will be those full- or part-time officers, employees, non-employee directors and consultants as selected from time to time by our compensation committee in its discretion.

The 2018 Plan permits the granting of both options to purchase common stock intended to qualify as incentive stock options under Section 422 of the Code and options that do not so qualify. The option exercise price of each option will be determined by our compensation committee but may not be less than 100% of the fair market value of our common stock on the date of grant. The term of each option will be fixed by our compensation committee and may not exceed ten years from the date of grant. Our compensation committee will determine at what time or times each option may be exercised.

Our compensation committee may award stock appreciation rights subject to such conditions and restrictions as it may determine. Stock appreciation rights entitle the recipient to shares of common stock, or cash, equal to the value of the appreciation in our stock price over the exercise price. The exercise price may not be less than 100% of the fair market value of our common stock on the date of grant. The term of each stock appreciation right will be fixed by our compensation committee and may not exceed ten years from the date of grant. Our compensation committee will determine at what time or times each stock appreciation right may be exercised.

Our compensation committee may award restricted shares of common stock and restricted stock units to participants subject to such conditions and restrictions as it may determine. These conditions and restrictions may include the achievement of certain performance goals and/or continued employment with us through a specified vesting period. Our compensation committee may also grant shares of common stock that are free from any restrictions under the 2018 Plan. Unrestricted stock may be granted to participants in recognition of past services or for other valid consideration and may be issued in lieu of cash compensation due to such participant.

Our compensation committee may grant performance share awards to participants that entitle the recipient to receive awards of common stock upon the achievement of certain performance goals and such other conditions as our compensation committee may determine. Our compensation committee may grant dividend equivalent rights to participants that entitle the recipient to receive credits for dividends that would be paid if the recipient had held a specified number of shares of common stock.

Our compensation committee may grant cash bonuses under the 2018 Plan to participants, subject to the achievement of certain performance goals.

Our compensation committee may grant awards that vest or become payable upon the attainment of performance goals that are established by our compensation committee and related to one or more performance criteria. The performance criteria that could be used with respect to any such awards are limited to: total stockholder return, earnings before interest, taxes, depreciation and amortization, net income (loss) (either before or after interest, taxes, depreciation and/or amortization), changes in the market price of our common stock, economic value-added, sales or revenue, coverage decisions, research and development, publication clinical, regulatory or commercial milestones, acquisitions or strategic transactions, including licenses, collaborations, joint ventures or promotional arrangements, operating income (loss), cash flow (including, but not limited to, operating cash flow and free cash flow), return on capital, assets, equity, or investment, return on sales, gross or net profit levels, productivity, expense, margins, operating efficiency, customer satisfaction, working capital, earnings (loss) per share of our common stock, sales or market shares and number of customers, any of which may be measured either in absolute terms or as compared to any incremental increase or as compared to results of a peer group.

The 2018 Plan provides that upon the effectiveness of a “sale event,” as defined in the 2018 Plan, an acquirer or successor entity may assume, continue or substitute outstanding awards under the 2018 Plan. To the extent that awards granted under the 2018 Plan are not assumed or continued or substituted by the successor entity, upon the effective time of the sale event, the 2018 Plan and all awards thereunder shall terminate. In the event of such termination, except as may otherwise be provided in the relevant award certificate, all options and stock appreciation rights that are not exercisable immediately prior to the effective time of the sale event shall become fully exercisable as of the effective time of the sale event, all other awards with time based vesting, conditions or restrictions, shall become fully vested and nonforfeitable as of the effective time of the sale event and all awards with conditions and restrictions relating to the attainment of performance goals may become vested and nonforfeitable in the discretion of the administrator or to the extent specified in the relevant award certificate. In addition, in connection with the termination of the 2018 Plan and awards thereunder upon a sale event, we may make or provide for a cash payment to participants holding vested and exercisable options and stock appreciation rights equal to the difference between the per share cash consideration payable to stockholders in the sale event and the exercise price of the options or stock appreciation rights or each grantee, shall be permitted within a specified period of time prior to the sale event, to exercise all outstanding stock options and stock appreciation rights held by such grantee to the extent exercisable. We shall also have the option to make or provide for payment, in cash or in kind, to the grantees of other awards equal to the per share cash consideration payable to stockholders in the sale event multiplied by the number of vested shares of common stock subject to such awards.

Our board of directors may amend or discontinue the 2018 Plan and our compensation committee may amend or cancel outstanding awards for purposes of satisfying changes in law or any other lawful purpose, but no such action may adversely affect rights under an award without the holder's consent. Certain amendments to the 2018 Plan require the approval of our stockholders.

No awards may be granted under the 2018 Plan after the date that is ten years from the date of stockholder approval of the 2018 Plan.

2018 Employee Stock Purchase Plan

We expect our board of directors to adopt, and our stockholders to approve, the ESPP, which will become effective upon the effectiveness of the registration statement of which this prospectus is a part. The ESPP is intended to qualify as an "employee stock purchase plan" within the meaning of Section 423(b) of the Code. The ESPP initially reserves and authorizes the issuance of up to a total of 275,030 shares of common stock to participating employees. The ESPP provides that the number of shares reserved and available for issuance will automatically increase each January 1, beginning on January 1, 2019 and each January 1 thereafter through January 1, 2028, by the least of (i) 1% of the outstanding number of shares of our common stock on the immediately preceding December 31; (ii) 543,926 shares or (iii) such number of shares as determined by the ESPP administrator. The number of shares reserved under the ESPP is subject to adjustment in the event of a stock split, stock dividend or other change in our capitalization.

All employees who have completed at least three months of employment and whose customary employment is for more than 20 hours per week are eligible to participate in the ESPP. However, any employee who owns 5% or more of the total combined voting power or value of all classes of stock is not eligible to purchase shares under the ESPP.

We will make one or more offerings each year to our employees to purchase shares under the ESPP. Unless otherwise determined by the compensation committee, offerings will usually begin on each January 1 and July 1 and will continue for six-month periods, referred to as offering periods. Each eligible employee may elect to participate in any offering by submitting an enrollment form at least 15 business days before the relevant offering date.

Each employee who is a participant in the ESPP may purchase shares by authorizing payroll deductions of up to 15% of his or her base compensation during an offering period. Unless the participating employee has previously withdrawn from the offering, his or her accumulated payroll deductions will be used to purchase shares on the last business day of the offering period at a price equal to 85% of the fair market value of the shares on the first business day or the last business day of the offering period, whichever is lower. Under applicable tax rules, an employee may purchase no more than $25,000 worth of shares of common stock, valued at the start of the purchase period, under the ESPP in any calendar year.

The accumulated payroll deductions of any employee who is not a participant on the last day of an offering period will be refunded. An employee's rights under the ESPP terminate upon voluntary withdrawal from the plan or when the employee ceases employment with us for any reason.

The ESPP may be terminated or amended by our board of directors at any time. An amendment that increases the number of shares of common stock authorized under the ESPP and certain other amendments require the approval of our stockholders.

401(k) Retirement Plan

We participate in a 401(k) retirement plan sponsored by PureTech Health, our shareholder, that is intended to be a tax-qualified defined contribution plan under Section 401(k) of the Internal Revenue Code. In general, all of our employees are eligible to participate, beginning two months after the commencement of their employment. The 401(k) plan includes a salary deferral arrangement pursuant to which participants may elect to

reduce their current compensation by up to the statutorily prescribed limit and have the amount of the reduction contributed to the 401(k) plan. We currently contribute to each employee's 401(k) account, in the first quarter of each year, 3% of his or her eligible earnings from the prior year.

Limitations on Liability and Indemnification

As permitted by Delaware law, we expect our board of directors and stockholders to adopt provisions in our certificate of incorporation, which will become effective as of the closing date of this offering, that limit or eliminate the personal liability of our directors. Our certificate of incorporation, which will become effective as of the closing date of this offering, limits the personal liability of directors for breach of fiduciary duty to the maximum extent permitted by the General Corporation Law of the State of Delaware and provides that no director will have personal liability to us or to our stockholders for monetary damages for breach of fiduciary duty. However, these provisions do not eliminate or limit the liability of any of our directors:

- for any breach of the director's duty of loyalty to us or our stockholders;
- for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- for voting for or assenting to unlawful payments of dividends, stock repurchases or other distributions; or
- for any transaction from which the director derived an improper personal benefit.

Any amendment to or repeal of these provisions will not eliminate or reduce the effect of these provisions in respect of any act, omission or claim that occurred or arose prior to such amendment or repeal. If the General Corporation Law of the State of Delaware is amended to provide for further limitations on the personal liability of directors of corporations, then the personal liability of our directors will be further limited to the greatest extent permitted by the General Corporation Law of the State of Delaware.

In addition, our certificate of incorporation, which will become effective as of the closing date of this offering, provides that we must indemnify our directors and officers and we must advance expenses, including attorneys' fees, to our directors and officers in connection with legal proceedings, subject to very limited exceptions.

We maintain a general liability insurance policy that covers specified liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers. In addition, we expect to enter into indemnification agreements with each of our officers and directors prior to the completion of this offering. These indemnification agreements will require us, among other things, to indemnify each such director or officer for some expenses, including attorneys' fees, judgments, fines and settlement amounts, incurred by him or her in any action or proceeding arising out of his or her service as one of our directors or officers.

Some of our non-employee directors may, through their relationships with their employers, be insured or indemnified against specified liabilities incurred in their capacities as members of our board of directors.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, executive officers or persons controlling us, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Rule 10b5-1 Sales Plans

Our directors and executive officers may adopt written plans, known as Rule 10b5-1 plans, in which they will contract with a broker to buy or sell shares of our common stock on a periodic basis. Under a Rule 10b5-1 plan, a broker executes trades pursuant to parameters established by the director or officer when entering into the plan, without further direction from the director or officer. The director or officer may amend or terminate the plan in some circumstances. Our directors and executive officers may also buy or sell additional shares outside of a Rule 10b5-1 plan when they are not in possession of material, nonpublic information.

Director Compensation

We have historically not compensated our directors for their services to us. We reimburse our non-employee directors for reasonable travel and out-of-pocket expenses incurred in connection with attending board of directors and committee meetings.

Our board of directors has approved a compensation policy for our non-employee directors that will become effective upon the effectiveness of the registration statement of which this prospectus forms a part. This policy will be intended to provide a total compensation package that enables us to attract and retain qualified and experienced individuals to serve as directors and to align our directors' interests with those of our stockholders.

Under the policy, each director who is not an employee will be paid cash compensation from and after the completion of this offering, as set forth below:

	Member Annual Fee	Chairperson Additional Annual Fee
Board of Directors	$35,000	$ 30,000
Audit Committee	7,500	7,500
Compensation Committee	5,000	5,000
Nominating and Corporate Governance Committee	4,000	4,000

Each annual cash retainer will be payable in arrears in four quarterly installments on the last day of each quarter, provided that the amount of each payment will be prorated for any portion of a quarter that a director is not serving on our board of directors.

In addition, each new non-employee director elected to our board of directors following this offering will be granted an option to purchase 28,828 shares of our common stock on the date of such director's election or appointment to the board of directors, which will vest in the following manner, subject to continued service through such vesting date: 33% on first anniversary of grant, then the remainder should vest ratably monthly over two years. On the date of each annual meeting of stockholders of our company, each non-employee director will be granted an option to purchase 14,414 shares of our common stock, which will vest in the following manner, subject to continued service as a director through such vesting date: in full upon the earlier to occur of the first anniversary of the date of grant or the date of the next annual meeting.

TRANSACTIONS WITH RELATED PERSONS

Since our incorporation in July 2016, we have engaged in the following transactions in which the amount involved exceeded $120,000 and any of our directors, executive officers or beneficial holders of more than 5% of any class of our voting securities, or any of their affiliates, had a material interest. We believe that all of these transactions were on terms comparable to terms that could have been obtained from unrelated third parties.

Founders Shares

In July 2016, Chen Schor and Joan Mannick purchased 1,886,363 shares of common stock at $0.0001 per share. See the "Executive Compensation" section of this prospectus for a further discussion of these purchases. In addition, on March 1, 2017, we issued 1,886,363 shares of our common stock to PureTech Health as founder shares at par value, the fair market value of the shares at the time of their issuance for an aggregate price of $242.

Series A Preferred Stock Financing

In March 2017, we entered into a Series A preferred stock purchase agreement for the sale of up to 10,351,968 shares of Series A preferred stock in one or more closings at a price per share of $1.932. In March 2017, we issued and sold an aggregate of 5,434,783 shares of our Series A preferred stock in the first closing of our Series A preferred stock financing. PureTech Health paid $5,017,989 for such Series A shares, and the remaining $482,011 of the purchase price was net settled against invoices paid by PureTech Health on our behalf prior to the closing of our Series A financing and as reimbursement for certain due diligence costs incurred in connection with the financing. The shares of Series A preferred stock issued to NIBR were issued in consideration for a license from Novartis, as discussed further below. The Series A preferred stock purchase agreement provided that, after the initial closing, PureTech Health would purchase up to an additional 4,917,185 shares of Series A preferred stock at $1.932 per share at future dates based on the occurrence of certain events as specified under the agreement. In addition, we entered into a side letter with PureTech Health under which PureTech Health agreed to purchase up to 5,175,984 additional shares of Series A preferred stock at $1.932 per share at a future date based on the occurrence of certain events as specified under the letter. We refer to these agreements to purchase such additional shares as the tranche rights. Such tranche rights were exercised to the extent described below and, as of the date of this prospectus, have been terminated.

The following table sets forth the number of shares of our Series A preferred stock purchased by our directors, executive officers and 5% stockholders and their affiliates and the aggregate purchase price paid for such shares.

Name	Shares of Series A Preferred Stock Purchased	Aggregate Cash Purchase Price
PureTech Health LLC	2,846,791	$ 5,500,001
Novartis Institutes for Biomedical Research, Inc.	2,587,992	—
Total	5,434,783	$ 5,500,001

In August 2017, we issued and sold an additional 2,329,193 shares of our Series A preferred stock at a price per share of $1.932 in the second closing of our Series A preferred stock financing, for a purchase price of approximately $4.5 million. The following table sets forth the number of shares of our Series A preferred stock purchased by our directors, executive officers and 5% stockholders and their affiliates and the aggregate purchase price paid for such shares.

Name	Shares of Series A Preferred Stock Purchased	Aggregate Purchase Price
PureTech Health LLC	2,329,193	$ 4,500,001
Total	2,329,193	$ 4,500,001

In October 2017, we issued and sold an additional 7,763,975 shares of our Series A preferred stock at a price per share of $1.932 in the third and final closing of our Series A preferred stock financing, for a purchase price of approximately $15.0 million. The following table sets forth the number of shares of our Series A preferred stock purchased by our directors, executive officers and 5% stockholders and their affiliates and the aggregate purchase price paid for such shares.

Name	Shares of Series A Preferred Stock Purchased	Aggregate Cash Purchase Price
PureTech Health LLC	4,658,385	$ 9,000,000
OrbiMed Private Investments VI, LP	3,105,590	6,000,000
Total	7,763,975	$ 15,000,000

Series B Preferred Stock Financing

In October 2017, we entered into a Series B preferred stock purchase agreement for the sale of up to 4,792,716 shares of Series B preferred stock in one or more closings at a price per share of $8.346. In November 2017, we issued and sold an aggregate of 4,792,716 shares of our Series B preferred stock for gross proceeds of approximately $40.0 million. The following table sets forth the number of shares of our Series B preferred stock purchased by our directors, executive officers and 5% stockholders and their affiliates and the aggregate purchase price paid for such shares.

Name	Shares of Series B Preferred Stock Purchased	Aggregate Cash Purchase Price
OrbiMed Private Investments VI, LP	2,396,358	$ 20,000,004
Total	2,396,358	$ 20,000,004

Participation in this Offering

Certain of our existing stockholders, including certain affiliates of our directors, have indicated an interest in purchasing an aggregate of up to $35 million of shares of our common stock in this offering at the initial public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters may determine to sell more, less or no shares in this offering to any of these stockholders, or any of these stockholders may determine to purchase more, less or no shares in this offering.

License Agreement with Novartis

In March 2017, we entered into a license agreement with Novartis pursuant to which we were granted an exclusive worldwide license to certain intellectual property rights owned or controlled by Novartis, including patents, patent applications, proprietary information, know-how and other intellectual property, to develop, commercialize and sell one or more therapeutic products comprising RTB101 or RTB101 and everolimus in a fixed dose combination. See “Business—Intellectual Property—License Agreement with Novartis.”

PureTech Health Shared Resources

PureTech Health is a founder of our company and in that capacity has provided us with strategic medical, clinical and scientific advice pursuant to a business services, personnel and information management agreement. PureTech Health also played a significant role in securing our foundational intellectual property from Novartis, leveraging its connections to establish the relationship, assisting in the negotiation of the license agreement and providing strategic advice throughout the process. In addition, we currently share administrative resources and offices with PureTech Health, including legal, accounting and human resources support, computer

and telecommunications systems and other office infrastructure pursuant to the agreement. Beginning in April 2017, PureTech has invoiced us at cost for such services, with such amounts totaling $109,063 as of September 30, 2017. In addition, PureTech Health periodically invoices us for reimbursement of out of pocket expenses reasonably incurred on our behalf in connection with providing such business services.

Investors' Rights Agreement

We are a party to an investors' rights agreement, dated as of November 29, 2017, with holders of our preferred stock, including some of our 5% stockholders and entities affiliated with our directors. Such holders consisted of entities affiliated with OrbiMed, PureTech Health and Novartis, each a 5% stockholder. Each of PureTech Health and OrbiMed have appointed representatives to our board of directors. The investor rights agreement provides these holders the right, following the completion of this offering, to demand that we file a registration statement or request that their shares be covered by a registration statement that we are otherwise filing. See "Description of Capital Stock—Registration Rights" for additional information regarding these registration rights.

Voting Agreement

We are a party to a voting agreement, dated as of November 29, 2017, with holders of our preferred stock, including some of our 5% stockholders and entities affiliated with our directors. Such holders consisted of entities affiliated with OrbiMed, PureTech Health and Novartis, each a 5% stockholder. Each of PureTech Health and OrbiMed have appointed representatives to our board of directors. The voting agreement provides the holders the right to elect certain directors to the Board. Pursuant to the voting agreement, we agreed to appoint to our board of directors two representatives designated by PureTech Health, who are David Steinberg and Daphne Zohar, and one representative designated by an entity affiliated with OrbiMed who is Jonathan Silverstein. The voting agreement will terminate upon completion of this offering.

Right of First Refusal and Co-Sale Agreement

We are a party to a right of first refusal and co-sale agreement, dated as of November 29, 2017, with holders of our preferred stock, including some of our 5% stockholders and entities affiliated with our directors. Such holders consisted of entities affiliated with OrbiMed, PureTech Health and Novartis, each a 5% stockholder. Each of PureTech Health and OrbiMed have appointed representatives to our board of directors. The right of first refusal and co-sale agreement provides the key holders the right to purchase all or any portion of transfer stock, as well as the right of co-sale and participate in any proposed transfers. The agreement shall terminate upon completion of this offering.

Employment Agreements

See the "Executive Compensation—Employment Arrangements with Our Named Executive Officer and Other Executive Officers" section of this prospectus for a further discussion of these arrangements.

Indemnification Agreements

Our certificate of incorporation that will become effective as of the closing date of this offering provides that we will indemnify our directors and officers to the fullest extent permitted by Delaware law. In addition, we plan to enter into indemnification agreements with each of our officers and directors that may be broader in scope than the specific indemnification provisions contained in the Delaware General Corporation Law. See "Executive Compensation—Limitations on Liability and Indemnification" for additional information regarding these agreements.

Policies and Procedures for Related Person Transactions

Our board of directors reviews and approves transactions with directors, officers and holders of 5% or more of our voting securities and their affiliates, each a related party. Prior to this offering, the material facts as

to the related party's relationship or interest in the transaction are disclosed to our board of directors prior to their consideration of such transaction, and the transaction is not considered approved by our board of directors unless a majority of the directors who are not interested in the transaction approve the transaction. Further, when stockholders are entitled to vote on a transaction with a related party, the material facts of the related party's relationship or interest in the transaction are disclosed to the stockholders, who must approve the transaction in good faith.

In connection with this offering, we have adopted a written related party transactions policy that such transactions must be approved by our audit committee. This policy will become effective on the date on which the registration statement of which this prospectus is part is declared effective by the SEC. Pursuant to this policy, the audit committee has the primary responsibility for reviewing and approving or disapproving "related party transactions," which are transactions between us and related persons in which the aggregate amount involved exceeds or may be expected to exceed $120,000 and in which a related person has or will have a direct or indirect material interest. For purposes of this policy, a related person will be defined as a director, executive officer, nominee for director, or greater than 5% beneficial owner of our common stock, in each case since the beginning of the most recently completed year, and their immediate family members. Our audit committee charter will provide that the audit committee shall review and approve or disapprove any related party transactions.

PRINCIPAL STOCKHOLDERS

The following table sets forth information with respect to the beneficial ownership of our common stock as of December 31, 2017 by:

- each of our directors;
- our named executive officer;
- all of our directors and executive officers as a group; and
- each person, or group of affiliated persons, who is known by us to beneficially own more than 5% of our common stock.

The column entitled "Percentage of Shares Beneficially Owned—Before Offering" is based on a total of 5,659,089 shares of our common stock outstanding as of December 31, 2017, and assumes the automatic conversion of all outstanding shares of our preferred stock into an aggregate of 15,870,559 shares of our common stock upon the closing of this offering. The column entitled "Percentage of Shares Beneficially Owned—After Offering" is based on 27,196,315 shares of our common stock to be outstanding after this offering, including the 5,666,667 shares of our common stock that we are selling in this offering, but not including any additional shares issuable upon exercise of outstanding options or any exercise by the underwriters of their option to purchase additional shares.

Beneficial ownership is determined in accordance with the rules and regulations of the SEC and includes voting or investment power with respect to our common stock. Shares of our common stock subject to options that are currently exercisable or exercisable within 60 days after December 31, 2017 are considered outstanding and beneficially owned by the person holding the options for the purpose of calculating the percentage ownership of that person but not for the purpose of calculating the percentage ownership of any other person. Except as otherwise noted, the persons and entities in this table have sole voting and investment power with respect to all of the shares of our common stock beneficially owned by them, subject to community property laws, where applicable. Except as otherwise set forth below, the address of the beneficial owner is c/o resTORbio, Inc., 501 Boylston Street, Suite 6102, Boston, Massachusetts 02116.

Certain of our existing stockholders, including certain affiliates of our directors, have indicated an interest in purchasing an aggregate of up to $35 million of shares of our common stock in this offering at the initial public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters may determine to sell more, less or no shares in this offering to any of these stockholders, or any of these stockholders may determine to purchase more, less or no shares in this offering. The table below does not give effect to the potential purchases by such stockholders in this offering.

Name of Beneficial Owner	Shares Beneficially Owned	Percentage of Shares Beneficially Owned Before Offering	Percentage of Shares Beneficially Owned After Offering
5% Stockholders			
PureTech Health LLC(1)	9,567,063	44.4%	35.2%
Novartis Institutes for BioMedical Research, Inc.(2)	2,021,237	9.4%	7.4%
OrbiMed Private Investments VI, LP(3)	4,297,054	20.0%	15.8%
Named Executive Officers and Directors			
Chen Schor	1,886,363	8.8%	6.9%
Paul Fonteyne	—	—	—
Joan Mannick, M.D.	1,886,363	8.8%	6.9%
John McCabe	—	—	—
Jonathan Silverstein	—	—	—
David Steinberg	—	—	—
Lynne Sullivan	—	—	—
Daphne Zohar	—	—	—
All Current Executive Officers and Directors as a Group (8 persons)	3,772,726	17.5%	13.9%

(1) Consists of (a) 1,886,363 shares of common stock and (b) 7,680,700 shares of common stock issuable upon conversion of preferred stock. Voting and investment power over the shares held by PureTech Health LLC is exercised by its parent entity, PureTech Health plc. The board of directors of PureTech Health plc consists of Mr. Joi Ito, Dr. Raju Kucherlapati, Dr. John LaMattina, Dr. Robert Langer, Dame Marjorie Scardino, Dr. Ben Shapiro, Mr. Christopher Viehbacher, Ms. Daphne Zohar and Mr. Stephen Muniz. None of the members of the board of directors of PureTech Health plc or PureTech Health LLC has individual voting or investment power with respect to such shares. The address for PureTech Health LLC and the individuals listed above is c/o PureTech Health LLC, 501 Boylston Street, Suite 6102, Boston, MA 02116.

(2) Consists of 2,021,237 shares of common stock issuable upon conversion of preferred stock. All shares are held by NIBR. NIBR is an indirect wholly-owned subsidiary of, and controlled by, Novartis AG. The address for NIBR is 250 Massachusetts Avenue, Cambridge, MA 02139.

(3) Consists of 4,297,054 shares of common stock issuable upon conversion of preferred stock held by OrbiMed Private Investments VI, LP (“OPI VI”). OrbiMed Capital GP VI LLC (“GP VI”) is the sole general partner of OPI VI. OrbiMed Advisors LLC (“OrbiMed Advisors”) is the managing member of GP VI. Samuel D. Isaly is the managing member of and owner of a controlling interest in OrbiMed Advisors. By virtue of such relationships, GP VI, OrbiMed Advisors, and Mr. Isaly may be deemed to have voting and investment power with respect to the shares held by OPI VI and as a result may be deemed to have beneficial ownership of such shares. Jonathan T. Silverstein, a member of OrbiMed Advisors, is a member of our board of directors. Each of GP VI, OrbiMed Advisors, Mr. Isaly and Mr. Silverstein disclaims beneficial ownership of the shares held by OPI VI, except to the extent of its or his pecuniary interest therein if any. The address of these entities is 601 Lexington Avenue, 54th floor, New York, New York 10022.

DESCRIPTION OF CAPITAL STOCK

The following descriptions are summaries of the material terms of our amended and restated certificate of incorporation, which will be effective upon the closing of this offering and amended and restated bylaws, which will be effective upon the effectiveness of the registration statement of which this prospectus is a part. The descriptions of the common stock and preferred stock give effect to changes to our capital structure that will occur immediately prior to the completion of this offering. We refer in this section to our amended and restated certificate of incorporation as our certificate of incorporation, and we refer to our amended and restated bylaws as our bylaws.

General

Upon completion of this offering, our authorized capital stock will consist of 150,000,000 shares of common stock, par value $0.0001 per share, and 10,000,000 shares of preferred stock, par value $0.0001 per share, all of which shares of preferred stock will be undesignated.

As of December 31, 2017, 5,659,089 shares of our common stock, 15,527,951 shares of Series A preferred stock and 4,792,716 shares of Series B preferred stock were outstanding and held by 11 stockholders of record.

Common Stock

The holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of the stockholders. The holders of our common stock do not have any cumulative voting rights. Holders of our common stock are entitled to receive ratably any dividends declared by our board of directors out of funds legally available for that purpose, subject to any preferential dividend rights of any outstanding preferred stock. Our common stock has no preemptive rights, conversion rights or other subscription rights or redemption or sinking fund provisions.

In the event of our liquidation, dissolution or winding up, holders of our common stock will be entitled to share ratably in all assets remaining after payment of all debts and other liabilities and any liquidation preference of any outstanding preferred stock. The shares to be issued by us in this offering will be, when issued and paid for, validly issued, fully paid and non-assessable.

Preferred Stock

Upon the completion of this offering, all outstanding shares of our preferred stock will be converted into shares of our common stock. Upon the consummation of this offering, our board of directors will have the authority, without further action by our stockholders, to issue up to 10,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting, or the designation of, such series, any or all of which may be greater than the rights of common stock. The issuance of our preferred stock could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon our liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change in control of our company or other corporate action. Immediately after consummation of this offering, no shares of preferred stock will be outstanding, and we have no present plan to issue any shares of preferred stock.

Registration Rights

Upon the completion of this offering, the holders of 15,870,559 shares of our common stock, including those issuable upon the conversion of preferred stock, will be entitled to rights with respect to the registration of

these securities under the Securities Act. These rights are provided under the terms of an investors' rights agreement between us and holders of our preferred stock. The investors' rights agreement includes demand registration rights, short-form registration rights and piggyback registration rights. All fees, costs and expenses of underwritten registrations under this agreement will be borne by us and all selling expenses, including underwriting discounts and selling commissions, will be borne by the holders of the shares being registered.

Demand Registration Rights

Beginning 180 days after the effective date of this registration statement, the holders of 15,870,559 shares of our common stock, including those issuable upon the conversion of preferred stock, are entitled to demand registration rights. Under the terms of the investors' rights agreement, we will be required, upon the written request of the holders of at least 40% of our outstanding registrable securities, as defined in the investors' rights agreement, to file a registration statement and use commercially reasonable efforts to effect the registration of all or a portion of their registrable securities for public resale so long as the total amount of registrable shares requested to be registered has an anticipated aggregate offering price to the public, net of selling expenses, of least $15.0 million. We are required to effect only two registrations pursuant to this provision of the investors' rights agreement.

Short-Form Registration Rights

Pursuant to the investor rights agreement, if we are eligible to file a registration statement on Form S-3, upon the written request of the holders of at least 30% of our outstanding registrable securities, as defined in the investors' rights agreement so long as the total amount of registrable securities requested to be registered has an anticipated aggregate offering price to the public, net of selling expenses, of least $10.0 million. We are required to effect only two registrations in any twelve month period pursuant to the investors' rights agreement. The right to have such shares registered on Form S-3 is further subject to other specified conditions and limitations.

Piggyback Registration Rights

Pursuant to the investors' rights agreement, if we register any of our securities either for our own account or for the account of other security holders, the holders of these shares are entitled to include their shares in the registration. Subject to certain exceptions contained in the investors' rights agreement, we and the underwriters may limit the number of shares included in the underwritten offering to the number of shares which we and the underwriters determine in our sole discretion will not jeopardize the success of the offering.

Indemnification

Our investor rights agreement contains customary cross-indemnification provisions, under which we are obligated to indemnify holders of registrable securities in the event of material misstatements or omissions in the registration statement attributable to us, and they are obligated to indemnify us for material misstatements or omissions attributable to them.

Expiration of Registration Rights

The demand registration rights and short form registration rights granted under the investor rights agreement will terminate on the fifth anniversary of the completion of this offering.

Anti-Takeover Effects of our Certificate of Incorporation and Bylaws and Delaware Law

Our certificate of incorporation and bylaws include a number of provisions that may have the effect of delaying, deferring or preventing another party from acquiring control of us and encouraging persons considering unsolicited tender offers or other unilateral takeover proposals to negotiate with our board of directors rather than pursue non-negotiated takeover attempts. These provisions include the items described below.

Board Composition and Filling Vacancies

Our certificate of incorporation provides for the division of our board of directors into three classes serving staggered three-year terms, with one class being elected each year. Our certificate of incorporation also provides that directors may be removed only for cause and then only by the affirmative vote of the holders of 66.7% or more of the shares then entitled to vote at an election of directors. Furthermore, any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of our board, may only be filled by the affirmative vote of a majority of our directors then in office even if less than a quorum. The classification of directors, together with the limitations on removal of directors and treatment of vacancies, has the effect of making it more difficult for stockholders to change the composition of our board of directors.

No Written Consent of Stockholders

Our certificate of incorporation provides that all stockholder actions are required to be taken by a vote of the stockholders at an annual or special meeting, and that stockholders may not take any action by written consent in lieu of a meeting. This limit may lengthen the amount of time required to take stockholder actions and would prevent the amendment of our bylaws or removal of directors by our stockholders without holding a meeting of stockholders.

Meetings of Stockholders

Our certificate of incorporation and bylaws provide that only a majority of the members of our board of directors then in office may call special meetings of stockholders and only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders. Our bylaws limit the business that may be conducted at an annual meeting of stockholders to those matters properly brought before the meeting.

Advance Notice Requirements

Our bylaws establish advance notice procedures with regard to stockholder proposals relating to the nomination of candidates for election as directors or new business to be brought before meetings of our stockholders. These procedures provide that notice of stockholder proposals must be timely given in writing to our corporate secretary prior to the meeting at which the action is to be taken. Generally, to be timely, notice must be received at our principal executive offices not less than 90 days nor more than 120 days prior to the first anniversary date of the annual meeting for the preceding year. Our bylaws specify the requirements as to form and content of all stockholders' notices. These requirements may preclude stockholders from bringing matters before the stockholders at an annual or special meeting.

Amendment to Certificate of Incorporation and Bylaws

Any amendment of our certificate of incorporation must first be approved by a majority of our board of directors, and if required by law or our certificate of incorporation, must thereafter be approved by a majority of the outstanding shares entitled to vote on the amendment and a majority of the outstanding shares of each class entitled to vote thereon as a class, except that the amendment of the provisions relating to stockholder action, board composition and limitation of liability must be approved by not less than 66.7% of the outstanding shares entitled to vote on the amendment, and not less than 66.7% of the outstanding shares of each class entitled to vote thereon as a class. Our bylaws may be amended by the affirmative vote of a majority of the directors then in office or by the affirmative vote of at least a majority of the outstanding shares entitled to vote on the amendment, subject to any limitations set forth in the bylaws; except that certain enumerated provisions in our bylaws may be amended by the affirmative vote of at least 66.7% of the outstanding shares entitled to vote on the amendment, or, if our board of directors recommends that the stockholders approve the amendment, by the affirmative vote of the majority of the outstanding shares entitled to vote on the amendment, in each case voting together as a single class.

Undesignated Preferred Stock

Our certificate of incorporation provides for 10,000,000 authorized shares of preferred stock. The existence of authorized but unissued shares of preferred stock may enable our board of directors to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise. For example, if in the due exercise of its fiduciary obligations, our board of directors were to determine that a takeover proposal is not in the best interests of our stockholders, our board of directors could cause shares of preferred stock to be issued without stockholder approval in one or more private offerings or other transactions that might dilute the voting or other rights of the proposed acquirer or insurgent stockholder or stockholder group. In this regard, our certificate of incorporation grants our board of directors broad power to establish the rights and preferences of authorized and unissued shares of preferred stock. The issuance of shares of preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance may also adversely affect the rights and powers, including voting rights, of these holders and may have the effect of delaying, deterring or preventing a change in control of us.

Choice of Forum

Our certificate of incorporation provides that, unless we consent in writing to the selection of an alternative form, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for: (1) any derivative action or proceeding brought on our behalf; (2) any action asserting a claim of breach of a fiduciary duty or other wrongdoing by any of our directors, officers, employees or agents to us or our stockholders; (3) any action asserting a claim against us arising pursuant to any provision of the General Corporation Law of the State of Delaware or our certificate of incorporation or bylaws; (4) any action to interpret, apply, enforce or determine the validity of our certificate of incorporation or bylaws; or (5) any action asserting a claim governed by the internal affairs doctrine. Our certificate of incorporation also provides that any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock will be deemed to have notice of and to have consented to this choice of forum provision. It is possible that a court of law could rule that the choice of forum provision contained in our restated certificate of incorporation is inapplicable or unenforceable if it is challenged in a proceeding or otherwise.

Section 203 of the Delaware General Corporation Law

Upon completion of this offering, we will be subject to the provisions of Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a three-year period following the time that this stockholder becomes an interested stockholder, unless the business combination is approved in a prescribed manner. Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions:

- before the stockholder became interested, our board of directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, shares owned by persons who are directors and also officers, and employee stock plans, in some instances, but not the outstanding voting stock owned by the interested stockholder; or
- at or after the time the stockholder became interested, the business combination was approved by our board of directors and authorized at an annual or special meeting of the stockholders by the

affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

Section 203 defines a business combination to include:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, lease, pledge or other disposition involving the interested stockholder of 10% or more of the assets of the corporation;
- subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- subject to exceptions, any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; and
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by the entity or person.

Nasdaq Global Market Listing

We have applied to list our common stock on The Nasdaq Global Market under the trading symbol “TORC.”

Transfer Agent and Registrar

The transfer agent and registrar for our common stock will be Computershare Trust Company, N.A. The transfer agent and registrar’s address is 250 Royall Street, Canton, Massachusetts 02021, and its telephone number is (800) 962-4284.

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our shares. Future sales of our common stock in the public market, or the availability of such shares for sale in the public market, could adversely affect market prices prevailing from time to time. As described below, only a limited number of shares will be available for sale shortly after this offering due to contractual and legal restrictions on resale. Nevertheless, sales of our common stock in the public market after such restrictions lapse, or the perception that those sales may occur, could adversely affect the prevailing market price at such time and our ability to raise equity capital in the future.

Based on the number of shares outstanding as of December 31, 2017, upon the completion of this offering, 27,196,315 shares of our common stock will be outstanding, assuming the automatic conversion of all outstanding shares of our preferred stock into an aggregate of 15,870,559 shares of our common stock upon the closing of this offering, no exercise of the underwriters' option to purchase additional shares and no exercise of outstanding options. Of the outstanding shares, all of the shares sold in this offering will be freely tradable, except that any shares held by our affiliates, as that term is defined in Rule 144 under the Securities Act, may only be sold in compliance with the limitations described below. All remaining shares of common stock held by existing stockholders immediately prior to the completion of this offering will be "restricted securities" as such term is defined in Rule 144. These restricted securities were issued and sold by us, or will be issued and sold by us, in private transactions and are eligible for public sale only if registered under the Securities Act or if they qualify for an exemption from registration under the Securities Act, including the exemptions provided by Rule 144 or Rule 701, summarized below.

Rule 144

In general, under Rule 144, beginning 90 days after the date of this prospectus, any person who is not our affiliate and has not been our affiliate at any time during the preceding three months and has held their shares for at least six months, including the holding period of any prior owner other than one of our affiliates, may sell shares without restriction, subject to the availability of current public information about us. In addition, under Rule 144, any person who is not our affiliate and has not been our affiliate at any time during the preceding three months and has held their shares for at least one year, including the holding period of any prior owner other than one of our affiliates, would be entitled to sell an unlimited number of shares immediately upon the closing of this offering without regard to whether current public information about us is available.

Beginning 90 days after the date of this prospectus, a person who is our affiliate or who was our affiliate at any time during the preceding three months may sell any unrestricted securities, as well as restricted securities that the person has beneficially owned for at least six months, including the holding period of any prior owner other than one of our affiliates, under Rule 144. Affiliates selling restricted or unrestricted securities may sell a number of shares within any three-month period that does not exceed the greater of:

- 1% of the number of shares then outstanding, which will equal approximately 271,963 shares immediately after this offering, assuming no exercise of the underwriters' option to purchase additional shares; or
- the average weekly trading volume of our common stock on The Nasdaq Global Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

Sales under Rule 144 by our affiliates are also subject to manner of sale provisions and notice requirements and to the availability of current public information about us.

Rule 701

In general, under Rule 701 of the Securities Act, any of our employees, consultants or advisors, other than our affiliates, who purchased shares from us in connection with a qualified compensatory stock plan or other

written agreement is eligible to resell these shares 90 days after the date of this prospectus in reliance on Rule 144, but without compliance with the holding period requirements of Rule 144 and without regard to the volume of such sales or the availability of public information about us.

However, substantially all Rule 701 shares are subject to lock-up agreements as described below and under "Underwriting" included elsewhere in this prospectus and will become eligible for sale upon the expiration of the restrictions set forth in those agreements.

Lock-Up Agreements

All of our directors, executive officers and stockholders have signed a lock-up agreement which prevents them from selling any of our common stock or any securities convertible into or exercisable or exchangeable for common stock for a period of not less than 180 days from the date of this prospectus without the prior written consent of the representatives, subject to certain exceptions. See the section entitled "Underwriting" appearing elsewhere in this prospectus for more information.

Registration Rights

Upon completion of this offering, certain holders of our securities will be entitled to various rights with respect to registration of their shares under the Securities Act. Registration of these shares under the Securities Act would result in these shares becoming fully tradable without restriction under the Securities Act immediately upon the effectiveness of the registration. See the section entitled "Description of Capital Stock—Registration Rights" appearing elsewhere in this prospectus for more information.

Equity Incentive Plans

We intend to file one or more registration statements on Form S-8 under the Securities Act to register our shares issued or reserved for issuance under our equity incentive plans. The first such registration statement is expected to be filed soon after the date of this prospectus and will automatically become effective upon filing with the SEC. Accordingly, shares registered under such registration statement will be available for sale in the open market, unless such shares are subject to vesting restrictions with us or the lock-up restrictions described above.

MATERIAL U.S. FEDERAL INCOME AND ESTATE TAX CONSIDERATIONS FOR NON-U.S. HOLDERS OF COMMON STOCK

The following is a general discussion of the material U.S. federal income tax considerations applicable to non-U.S. holders (as defined below) with respect to their ownership and disposition of shares of our common stock issued pursuant to this offering. For purposes of this discussion, a non-U.S. holder means a beneficial owner of our common stock that is for U.S. federal income tax purposes:

- a non-resident alien individual;
- a foreign corporation or any other foreign organization taxable as a corporation for U.S. federal income tax purposes; or
- a foreign estate or trust, the income of which is not subject to U.S. federal income tax on a net income basis.

This discussion does not address the tax treatment of partnerships or other entities that are past-through entities for U.S. federal income tax purposes or persons that hold their common stock through partnerships or other pass-through entities. A partner in a partnership or other pass-through entity that will hold our common stock should consult his, her or its tax advisor regarding the tax consequences of acquiring, holding and disposing of our common stock through a partnership or other pass-through entity, as applicable.

This discussion is based on current provisions of the U.S. Internal Revenue Code of 1986, as amended, which we refer to as the Code, existing and proposed U.S. Treasury Regulations promulgated hereunder, current administrative rulings and judicial decisions, all as in effect as of the date of this prospectus, all of which are subject to change or to differing interpretation, possibly with retroactive effect. Any such change could alter the tax consequences to non-U.S. holders described in this prospectus. In addition, the U.S. government has recently enacted comprehensive tax legislation that includes significant changes to the taxation of business entities. This prospectus does not discuss such tax legislation and we cannot assure you that such a change in law does not impact that tax considerations that we describe in this summary. There can be no assurance that the Internal Revenue Service, which we refer to as the IRS, will not challenge one or more of the tax consequences described herein. We assume in this discussion that a non-U.S. holder holds shares of our common stock as a capital asset within the meaning of Section 1221 of the Code, generally property held for investment.

This discussion does not address all aspects of U.S. federal income taxation that may be relevant to a particular non-U.S. holder in light of that non-U.S. holder's individual circumstances nor does it address any aspects of any U.S. federal tax other than the income tax, U.S. state, local or non-U.S. taxes, the alternative minimum tax, or the Medicare tax on net investment income. This discussion also does not consider any specific facts or circumstances that may apply to a non-U.S. holder and does not address the special tax rules applicable to particular non-U.S. holders, such as:

- insurance companies;
- tax-exempt or governmental organizations;
- financial institutions;
- brokers or dealers in securities;
- regulated investment companies;
- pension plans;
- controlled foreign corporations;
- passive foreign investment companies;

- persons that have a functional currency other than the U.S. dollar;
- persons deemed to sell our common stock under the constructive sale provisions of the Code;
- persons that hold our common stock as part of a straddle, hedge, conversion transaction, synthetic security or other integrated investment;
- persons who hold or receive our common stock pursuant to the exercise of any employee stock option or otherwise as compensation;
- persons for whom our stock constitutes "qualified small business stock" within the meaning of Section 1202 of the Code; and
- certain U.S. expatriates.

This discussion is for general information only and is not tax advice. Accordingly, all prospective non-U.S. holders of our common stock should consult their tax advisors with respect to the U.S. federal, state, local and non-U.S. tax consequences of the purchase, ownership and disposition of our common stock.

Distributions on Our Common Stock

Distributions, if any, on our common stock will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. If a distribution exceeds our current and accumulated earnings and profits, the excess will be treated as a tax-free return of the non-U.S. holder's investment, up to such holder's tax basis in the common stock. Any remaining excess will be treated as capital gain, subject to the tax treatment described below in "Gain on sale, exchange or other disposition of our common stock." Any such distributions will also be subject to the discussions below under the sections titled "Backup Withholding and Information Reporting" and "Withholding and Information Reporting Requirements—FATCA."

Dividends paid to a non-U.S. holder generally will be subject to withholding of U.S. federal income tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence. Dividends that are treated as effectively connected with a trade or business conducted by a non-U.S. holder within the United States and, if an applicable income tax treaty so provides, that are attributable to a permanent establishment or a fixed base maintained by the non-U.S. holder within the United States, are generally exempt from the 30% withholding tax if the non-U.S. holder satisfies applicable certification and disclosure requirements. However, such U.S. effectively connected income, net of specified deductions and credits, is taxed at the same graduated U.S. federal income tax rates applicable to United States persons (as defined in the Code). Any U.S. effectively connected income received by a non-U.S. holder that is a corporation may also, under certain circumstances, be subject to an additional "branch profits tax" at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence.

A non-U.S. holder of our common stock who claims the benefit of an applicable income tax treaty between the United States and such holder's country of residence generally will be required to provide a properly executed IRS Form W-8BEN or W-8BEN-E (or successor form) and satisfy applicable certification and other requirements. Non-U.S. holders are urged to consult their tax advisors regarding their entitlement to benefits under a relevant income tax treaty. A non-U.S. holder that is eligible for a reduced rate of U.S. withholding tax under an income tax treaty may obtain a refund or credit of any excess amounts withheld by timely filing a U.S. tax return with the IRS.

Gain on Sale, Exchange or Other Disposition of Our Common Stock

Subject to the discussions below under "Backup Withholding and Information Reporting" and "Withholding and Information Reporting Requirements—FATCA," a non-U.S. holder generally will not be subject to any U.S. federal income tax on any gain realized upon such holder's sale, exchange or other disposition of shares of our common stock unless:

- the gain is effectively connected with the non-U.S. holder's conduct of a U.S. trade or business and, if an applicable income tax treaty so provides, is attributable to a permanent establishment or a fixed-base maintained by such non-U.S. holder in the United States, in which case the non-U.S. holder generally will be taxed on a net income basis at the graduated U.S. federal income tax rates applicable to United States persons (as defined in the Code) and, if the non-U.S. holder is a foreign corporation, the branch profits tax described above in "Distributions on Our Common Stock" also may apply;

- the non-U.S. holder is a nonresident alien individual who is present in the United States for 183 days or more in the taxable year of the disposition and certain other conditions are met, in which case the non-U.S. holder will be subject to a 30% tax (or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence) on the net gain derived from the disposition, which may be offset by certain U.S. source capital losses of the non-U.S. holder, if any (even though the individual is not considered a resident of the United States, provided that the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses); or

- we are, or have been, at any time during the five-year period preceding such disposition (or the non-U.S. holder's holding period, if shorter) a "U.S. real property holding corporation," unless our common stock is regularly traded on an established securities market and the non-U.S. holder holds no more than 5% of our outstanding common stock, directly or indirectly, actually or constructively, during the shorter of the 5-year period ending on the date of the disposition or the period that the non-U.S. holder held our common stock. If we are determined to be a U.S. real property holding corporation and the foregoing exception does not apply, then a purchaser may withhold 15% of the proceeds payable to a non-U.S. holder from a sale of our common stock and the non-U.S. holder generally will be taxed on its net gain derived from the disposition at the graduated U.S. federal income tax rates applicable to United States persons (as defined in the Code). Generally, a corporation is a U.S. real property holding corporation only if the fair market value of its U.S. real property interests equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus its other assets used or held for use in a trade or business. Although there can be no assurance, we do not believe that we are, or have been, a U.S. real property holding corporation, or that we are likely to become one in the future. No assurance can be provided that our common stock will be regularly traded on an established securities market for purposes of the rules described above.

Backup Withholding and Information Reporting

We must report annually to the IRS and to each non-U.S. holder the gross amount of the distributions on our common stock paid to such holder and the tax withheld, if any, with respect to such distributions. Non-U.S. holders may have to comply with specific certification procedures to establish that the holder is not a United States person (as defined in the Code) in order to avoid backup withholding at the applicable rate with respect to dividends on our common stock. Dividends paid to non-U.S. holders subject to withholding of U.S. federal income tax, as described above in "Distributions on Our Common Stock," generally will be exempt from U.S. backup withholding.

Information reporting and backup withholding will generally apply to the proceeds of a disposition of our common stock by a non-U.S. holder effected by or through the U.S. office of any broker, U.S. or foreign, unless the holder certifies its status as a non-U.S. holder and satisfies certain other requirements, or otherwise establishes an exemption. Generally, information reporting and backup withholding will not apply to a payment of disposition proceeds to a non-U.S. holder where the transaction is effected outside the United States through a non-U.S. office of a broker. However, for information reporting purposes, dispositions effected through a non-U.S. office of a broker with substantial U.S. ownership or operations generally will be treated in a manner similar to dispositions effected through a U.S. office of a broker. Non-U.S. holders should consult their tax advisors regarding the application of the information reporting and backup withholding rules to them. Copies of information returns may be made available to the tax authorities of the country in which the non-U.S. holder resides or is incorporated under the provisions of a specific treaty or agreement. Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from a payment to a non-U.S. holder can be refunded or credited against the non-U.S. holder's U.S. federal income tax liability, if any, provided that an appropriate claim is filed with the IRS in a timely manner.

Withholding and Information Reporting Requirements—FATCA

The Foreign Account Tax Compliance Act, or FATCA, generally imposes a U.S. federal withholding tax at a rate of 30% on payments of dividends on, or gross proceeds from the sale or other disposition of, our common stock paid to a foreign entity unless (i) if the foreign entity is a "foreign financial institution," such foreign entity undertakes certain due diligence, reporting, withholding, and certification obligations, (ii) if the foreign entity is not a "foreign financial institution," such foreign entity identifies certain of its U.S. investors, if any, or (iii) the foreign entity is otherwise exempt under FATCA. Under applicable U.S. Treasury regulations, withholding under FATCA currently applies to payments of dividends on our common stock, but will only apply to payments of gross proceeds from a sale or other disposition of our common stock made after December 31, 2018. Under certain circumstances, a non-U.S. holder may be eligible for refunds or credits of the tax. An intergovernmental agreement between the United States and an applicable foreign country may modify the requirements described in this paragraph. Non-U.S. holders should consult their tax advisors regarding the possible implications of this legislation on their investment in our common stock and the entities through which they hold our common stock, including, without limitation, the process and deadlines for meeting the applicable requirements to prevent the imposition of the 30% withholding tax under FATCA.

UNDERWRITING

Merrill Lynch, Pierce, Fenner & Smith Incorporated and Leerink Partners LLC are acting as representatives of each of the underwriters named below. Subject to the terms and conditions set forth in an underwriting agreement among us and the underwriters, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the number of shares of common stock set forth opposite its name below.

Underwriter	Number of Shares
Merrill Lynch, Pierce, Fenner & Smith Incorporated	
Leerink Partners LLC	
Evercore Group L.L.C.	
Wedbush Securities Inc.	
Total	5,666,667

Subject to the terms and conditions set forth in the underwriting agreement, the underwriters have agreed, severally and not jointly, to purchase all of the shares sold under the underwriting agreement if any of these shares are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the underwriting agreement may be terminated.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriters may be required to make in respect of those liabilities.

The underwriters are offering the shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the shares, and other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officer's certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Commissions and Discounts

The representatives have advised us that the underwriters propose initially to offer the shares to the public at the public offering price set forth on the cover page of this prospectus and to dealers at that price less a concession not in excess of $ per share. After the initial offering, the public offering price, concession or any other term of the offering may be changed.

The following table shows the public offering price, underwriting discount and proceeds before expenses to us. The information assumes either no exercise or full exercise by the underwriters of their option to purchase additional shares.

	Per Share	Without Option	With Option
Public offering price	$	$	$
Underwriting discount	$	$	$
Proceeds, before expenses, to us	$	$	$

The expenses of the offering, not including the underwriting discount, are estimated at $1.5 million and are payable by us. We have also agreed to reimburse the underwriters for up to $50,000 of their expenses incurred in connection with the review and clearance by the Financial Industry Regulatory Authority, Inc., or FINRA, of the terms of this offering, as set forth in the underwriting agreement. Under the rules of FINRA, certain affiliates of Leerink Partners LLC are each deemed to be a "related person" of Leerink Partners LLC and, therefore, the 119,818 shares of Series B preferred stock purchased by such affiliates in our Series B financing in November 2017 are regarded by FINRA as additional compensation to the underwriters and will be subject to FINRA's lock-up requirements.

Option to Purchase Additional Shares

We have granted an option to the underwriters, exercisable for 30 days after the date of this prospectus, to purchase up to 850,000 additional shares at the public offering price, less the underwriting discount. If the underwriters exercise this option, each will be obligated, subject to conditions contained in the underwriting agreement, to purchase a number of additional shares proportionate to that underwriter's initial amount reflected in the above table.

No Sales of Similar Securities

We, our executive officers and directors and our other existing security holders have agreed not to sell or transfer any common stock or securities convertible into, exchangeable for, exercisable for, or repayable with common stock, for 180 days after the date of this prospectus without first obtaining the written consent of the representatives. Specifically, we and these other persons have agreed, with certain limited exceptions, not to directly or indirectly:

- offer, pledge, sell or contract to sell any common stock;
- sell any option or contract to purchase any common stock;
- purchase any option or contract to sell any common stock;
- grant any option, right or warrant for the sale of any common stock;
- lend or otherwise dispose of or transfer any common stock;
- request or demand that we file or make a confidential submission of a registration statement related to the common stock; or
- enter into any swap or other agreement that transfers, in whole or in part, the economic consequence of ownership of any common stock whether any such swap or transaction is to be settled by delivery of shares or other securities, in cash or otherwise.

This lock-up provision applies to common stock and to securities convertible into or exchangeable or exercisable for or repayable with common stock. It also applies to common stock owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition.

Nasdaq Global Market Listing

We expect the shares to be approved for listing on The Nasdaq Global Market, subject to notice of issuance, under the symbol "TORC."

Before this offering, there has been no public market for our common stock. The initial public offering price will be determined through negotiations between us and the representatives. In addition to prevailing market conditions, the factors to be considered in determining the initial public offering price are

- the valuation multiples of publicly traded companies that the representatives believe to be comparable to us;
- our financial information;
- the history of, and the prospects for, our company and the industry in which we compete;

- an assessment of our management, its past and present operations, and the prospects for, and timing of, our future revenues;
- the present state of our development;
- the likelihood of approval for our product candidates; and
- the above factors in relation to market values and various valuation measures of other companies engaged in activities similar to ours.

An active trading market for the shares may not develop. It is also possible that after the offering the shares will not trade in the public market at or above the initial public offering price.

The underwriters do not expect to sell more than 5% of the shares in the aggregate to accounts over which they exercise discretionary authority.

Price Stabilization, Short Positions and Penalty Bids

Until the distribution of the shares is completed, SEC rules may limit underwriters and selling group members from bidding for and purchasing our common stock. However, the representatives may engage in transactions that stabilize the price of the common stock, such as bids or purchases to peg, fix or maintain that price.

In connection with the offering, the underwriters may purchase and sell our common stock in the open market. These transactions may include short sales, purchases on the open market to cover positions created by short sales and stabilizing transactions. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering. “Covered” short sales are sales made in an amount not greater than the underwriters’ option to purchase additional shares described above. The underwriters may close out any covered short position by either exercising their option to purchase additional shares or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option granted to them. “Naked” short sales are sales in excess of such option. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of our common stock in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of shares of common stock made by the underwriters in the open market prior to the completion of the offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

Similar to other purchase transactions, the underwriters’ purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. The underwriters may conduct these transactions on The Nasdaq Global Market, in the over-the-counter market or otherwise.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. In addition, neither we nor any of the underwriters make any representation that the representatives will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Electronic Distribution

In connection with the offering, certain of the underwriters or securities dealers may distribute prospectuses by electronic means, such as e-mail.

Other Relationships

Some of the underwriters and their affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us or our affiliates. They have received, or may in the future receive, customary fees and commissions for these transactions.

In addition, in the ordinary course of their business activities, the underwriters and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. The underwriters and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

In addition, affiliates of Leerink Partners LLC were also investors in our Series B financing.

European Economic Area

In relation to each member state of the European Economic Area, no offer of shares which are the subject of the offering has been, or will be made to the public in that Member State, other than under the following exemptions under the Prospectus Directive:

(a) to any legal entity which is a qualified investor as defined in the Prospectus Directive;

(b) to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Directive), subject to obtaining the prior consent of the representatives for any such offer; or

(c) in any other circumstances falling within Article 3(2) of the Prospectus Directive,

provided that no such offer of shares referred to in (a) to (c) above shall result in a requirement for us or the representatives to publish a prospectus pursuant to Article 3 of the Prospectus Directive, or supplement a prospectus pursuant to Article 16 of the Prospectus Directive.

Each person located in a Member State to whom any offer of shares is made or who receives any communication in respect of an offer of shares, or who initially acquires any shares will be deemed to have represented, warranted, acknowledged and agreed to and with the representatives and us that (1) it is a “qualified investor” within the meaning of the law in that Member State implementing Article 2(1)(e) of the Prospectus Directive; and (2) in the case of any shares acquired by it as a financial intermediary as that term is used in Article 3(2) of the Prospectus Directive, the shares acquired by it in the offer have not been acquired on behalf of, nor have they been acquired with a view to their offer or resale to, persons in any Member State other than qualified investors, as that term is defined in the Prospectus Directive, or in circumstances in which the prior consent of the representatives has been given to the offer or resale; or where shares have been acquired by it on behalf of persons in any Member State other than qualified investors, the offer of those shares to it is not treated under the Prospectus Directive as having been made to such persons.

We, the representatives and their respective affiliates will rely upon the truth and accuracy of the foregoing representations, acknowledgments and agreements.

This prospectus has been prepared on the basis that any offer of shares in any Member State will be made pursuant to an exemption under the Prospectus Directive from the requirement to publish a prospectus for offers of shares. Accordingly any person making or intending to make an offer in that Member State of shares which are the subject of the offering contemplated in this prospectus may only do so in circumstances in which no obligation arises for us or the representatives to publish a prospectus pursuant to Article 3 of the Prospectus Directive in relation to such offer. Neither we nor the representatives have authorized, nor do they authorize, the making of any offer of shares in circumstances in which an obligation arises for us or the representatives to publish a prospectus for such offer.

For the purposes of this provision, the expression an "offer of shares to the public" in relation to any shares in any Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the shares to be offered so as to enable an investor to decide to purchase or subscribe the shares, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, the expression "Prospectus Directive" means Directive 2003/71/EC (as amended) and includes any relevant implementing measure in each Member State.

The above selling restriction is in addition to any other selling restrictions set out below.

Notice to Prospective Investors in the United Kingdom

In addition, in the United Kingdom, this document is being distributed only to, and is directed only at, and any offer subsequently made may only be directed at persons who are "qualified investors" (as defined in the Prospectus Directive) (i) who have professional experience in matters relating to investments falling within Article 19 (5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the "Order") and/or (ii) who are high net worth companies (or persons to whom it may otherwise be lawfully communicated) falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons"). This document must not be acted on or relied on in the United Kingdom by persons who are not relevant persons. In the United Kingdom, any investment or investment activity to which this document relates is only available to, and will be engaged in with, relevant persons.

Notice to Prospective Investors in Switzerland

The shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange ("SIX") or on any other stock exchange or regulated trading facility in Switzerland. This document has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, the Company, the shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of shares will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA (FINMA), and the offer of shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes ("CISA"). The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of shares.

Notice to Prospective Investors in the Dubai International Financial Centre

This prospectus relates to an Exempt Offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority ("DFSA"). This prospectus is intended for distribution only to persons of a type specified in the Offered Securities Rules of the DFSA. It must not be delivered to, or relied on by, any other

person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus nor taken steps to verify the information set forth herein and has no responsibility for the prospectus. The shares to which this prospectus relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the shares offered should conduct their own due diligence on the shares. If you do not understand the contents of this prospectus you should consult an authorized financial advisor.

Notice to Prospective Investors in Australia

No placement document, prospectus, product disclosure statement or other disclosure document has been lodged with the Australian Securities and Investments Commission ("ASIC"), in relation to the offering. This prospectus does not constitute a prospectus, product disclosure statement or other disclosure document under the Corporations Act 2001 (the "Corporations Act"), and does not purport to include the information required for a prospectus, product disclosure statement or other disclosure document under the Corporations Act.

Any offer in Australia of the shares may only be made to persons (the "Exempt Investors") who are "sophisticated investors" (within the meaning of section 708(8) of the Corporations Act), "professional investors" (within the meaning of section 708(11) of the Corporations Act) or otherwise pursuant to one or more exemptions contained in section 708 of the Corporations Act so that it is lawful to offer the shares without disclosure to investors under Chapter 6D of the Corporations Act.

The shares applied for by Exempt Investors in Australia must not be offered for sale in Australia in the period of 12 months after the date of allotment under the offering, except in circumstances where disclosure to investors under Chapter 6D of the Corporations Act would not be required pursuant to an exemption under section 708 of the Corporations Act or otherwise or where the offer is pursuant to a disclosure document which complies with Chapter 6D of the Corporations Act. Any person acquiring shares must observe such Australian on-sale restrictions.

This prospectus contains general information only and does not take account of the investment objectives, financial situation or particular needs of any particular person. It does not contain any securities recommendations or financial product advice. Before making an investment decision, investors need to consider whether the information in this prospectus is appropriate to their needs, objectives and circumstances, and, if necessary, seek expert advice on those matters.

Notice to Prospective Investors in Hong Kong

The shares have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (a) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance; or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of that Ordinance. No advertisement, invitation or document relating to the shares has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the Securities and Futures Ordinance and any rules made under that Ordinance.

Notice to Prospective Investors in Japan

The shares have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948, as amended) and, accordingly, will not be offered or sold, directly or indirectly, in

Japan, or for the benefit of any Japanese Person or to others for re-offering or resale, directly or indirectly, in Japan or to any Japanese Person, except in compliance with all applicable laws, regulations and ministerial guidelines promulgated by relevant Japanese governmental or regulatory authorities in effect at the relevant time. For the purposes of this paragraph, "Japanese Person" shall mean any person resident in Japan, including any corporation or other entity organized under the laws of Japan.

Notice to Prospective Investors in Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA"), (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275, of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

(a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

(b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities (as defined in Section 239(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the shares pursuant to an offer made under Section 275 of the SFA except:

(c) to an institutional investor or to a relevant person defined in Section 275(2) of the SFA, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;

(d) where no consideration is or will be given for the transfer;

(e) where the transfer is by operation of law;

(f) as specified in Section 276(7) of the SFA; or

(g) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

Notice to Prospective Investors in Canada

The shares may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 *Prospectus Exemptions* or subsection 73.3(1) of the *Securities Act* (Ontario), and are permitted clients, as defined in National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 (or, in the case of securities issued or guaranteed by the government of a non-Canadian jurisdiction, section 3A.4) of National Instrument 33-105 *Underwriting Conflicts* (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

LEGAL MATTERS

The validity of the shares of our common stock offered hereby is being passed upon for us by Goodwin Procter LLP, Boston, Massachusetts. Certain legal matters relating to this offering will be passed upon for the underwriters by Latham & Watkins LLP.

EXPERTS

The financial statements of resTORbio, Inc. as of December 31, 2016 and September 30, 2017 and for the period July 5, 2016 (inception) through December 31, 2016 and the nine months ended September 30, 2017, have been included herein in reliance upon the reports of KPMG LLP, an independent registered public accounting firm, appearing elsewhere herein, and upon the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the common stock we are offering by this prospectus. This prospectus does not contain all of the information included in the registration statement. For further information pertaining to us and our common stock, you should refer to the registration statement and to its exhibits. Whenever we make reference in this prospectus to any of our contracts, agreements or other documents, the references are not necessarily complete, and you should refer to the exhibits attached to the registration statement for copies of the actual contract, agreement or other document.

Upon the completion of the offering, we will be subject to the informational requirements of the Exchange Act and will file annual, quarterly and current reports, proxy statements and other information with the SEC. You can read our SEC filings, including the registration statement, at the SEC's website at www.sec.gov. You may also read and copy any document we file with the SEC at its public reference facility at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. We also maintain a website at www.restorbio.com. Upon completion of the offering, you may access, free of charge, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendment to those reported filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC.

You may also obtain copies of the documents at prescribed rates by writing to the Public Reference Section of the SEC at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facilities.

resTORbio, Inc.

INDEX TO FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

The Board of Directors
resTORbio, Inc.:

We have audited the accompanying balance sheets of resTORbio, Inc. as of December 31, 2016 and September 30, 2017, and the related statements of operations, statements of redeemable convertible preferred stock and stockholders' (deficit) equity, and cash flows for the period July 5, 2016 (inception) through December 31, 2016 and the nine months ended September 30, 2017. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of resTORbio, Inc. as of December 31, 2016 and September 30, 2017, and the results of its operations and its cash flows for the period July 5, 2016 (inception) through December 31, 2016 and the nine months ended September 30, 2017 in conformity with U.S. generally accepted accounting principles.

/s/ KPMG LLP

Cambridge, Massachusetts
October 26, 2017, except for note 14, as to which the date is January 16, 2018

resTORbio, Inc.
Balance Sheets
(In thousands, except share and per share data)

	December 31, 2016	September 30, 2017	
		Actual	Pro Forma (unaudited)
Assets			
Current assets:			
Cash	$ —	$ 3,965	$ 58,911
Prepaid expenses	—	210	210
Other current assets (including related party amounts of $0 and $4 as of December 31, 2016 and September 30, 2017, respectively)	—	4	4
Total current assets	—	4,179	59,125
Property and equipment, net	—	36	36
Total assets	$ —	$ 4,215	$ 59,161
Liabilities, redeemable convertible preferred stock and stockholders' (deficit) equity			
Current liabilities:			
Accounts payable (including related party amounts of $0 and $45 as of December 31, 2016 and September 30, 2017, respectively)	$ —	$ 1,094	$ 1,094
Accrued liabilities	—	1,022	1,022
Tranche rights liability	—	1,379	—
Total current liabilities	—	3,495	2,116
Total liabilities	—	3,495	2,116
Commitments and contingencies (see Note 11)			
Redeemable convertible preferred stock:			
Redeemable convertible preferred stock, Series A, $0.0001 par value, None and 10,351,968 shares authorized as of December 31, 2016 and September 30, 2017, respectively; 0 and 7,763,976 shares issued and outstanding as of December 31, 2016 and September 30, 2017, respectively; no shares issued and outstanding pro forma (unaudited); aggregate liquidation preference of $0 and $15,000 as of December 31, 2016 and September 30, 2017, respectively, and none pro forma (unaudited)	—	9,764	—
Stockholders' (deficit) equity:			
Common stock, $0.0001 par value, 7,000,000, 19,000,000 and 30,000,000 shares authorized as of December 31, 2016, September 30, 2017 actual and September 30, 2017 pro forma (unaudited), respectively; 3,772,726, 5,659,089 and 21,529,648 shares issued and outstanding as of December 31, 2016, September 30, 2017 actual and September 30, 2017 pro forma (unaudited), respectively; 2,082,860, 4,456,533 and 21,529,648 shares vested as of December 31, 2016, September 30, 2017 actual and September 30, 2017 pro forma (unaudited), respectively	1	1	2
Additional paid-in capital	—	1,680	66,389
Accumulated deficit	(1)	(10,725)	(9,346)
Total stockholders' (deficit) equity	—	(9,044)	57,045
Total liabilities, redeemable convertible preferred stock and stockholders' (deficit) equity	$ —	$ 4,215	$ 59,161

See accompanying notes to these financial statements.

resTORbio, Inc.
Statements of Operations
(In thousands, except share and per share data)

	July 5, 2016 (inception) through December 31, 2016	July 5, 2016 (inception) through September 30, 2016 (unaudited)	Nine Months Ended September 30, 2017
Operating expenses:			
Research and development	$ —	$ —	$ 10,047
General and administrative	1	1	1,312
Total operating expenses	1	1	11,359
Loss from operations	(1)	(1)	(11,359)
Other income, net	—	—	635
Net loss	$ (1)	$ (1)	$ (10,724)
Net loss per share, basic and diluted	$ (0.00)	$ (0.00)	$ (2.79)
Weighted-average common shares used in computing net loss per share, basic and diluted	1,978,137	1,919,841	3,839,306
Pro forma net loss per share, basic and diluted (unaudited)			$ (1.30)
Weighted-average common shares used in computing pro forma net loss per share, basic and diluted (unaudited)			8,230,457

See accompanying notes to these financial statements.

resTORbio, Inc.
Statements of Redeemable Convertible Preferred Stock and Stockholders' (Deficit) Equity
(In thousands, except share data)

	Series A Redeemable Convertible Preferred Stock		Series B Redeemable Convertible Preferred Stock		Common Stock		Additional Paid In Capital	Accumulated Deficit	Shareholders' (Deficit) Equity
	Shares	Amount	Shares	Amount	Shares	Amount			
Balance at July 5, 2016	—	$ —	—	$ —	—	$ —	$ —	$ —	$ —
Vesting of restricted shares	—	—	—	—	2,082,860	1	—	—	1
Net loss	—	—	—	—	—	—	—	(1)	(1)
Balance at December 31, 2016	—	$ —	—	$ —	2,082,860	$ 1	$ —	$ (1)	$ —
Issuance of common shares to PureTech (see Note 13)	—	—	—	—	1,886,363	—	—	—	—
Issuance of Series A redeemable convertible preferred stock, net of tranche liability	7,763,976	9,764	—	—	—	—	1,379	—	1,379
Vesting of restricted shares	—	—	—	—	487,310	—	—	—	—
Stock-based compensation expense	—	—	—	—	—	—	301	—	301
Net loss	—	—	—	—	—	—	—	(10,724)	(10,724)
Balance at September 30, 2017	7,763,976	$ 9,764	—	$ —	4,456,533	$ 1	$ 1,680	$ (10,725)	$ (9,044)
Issuance of Series A redeemable convertible preferred stock and corresponding extinguishment of tranche liability (unaudited)	7,763,975	15,000	—	—	—	—	—	1,379	1,379
Issuance of Series B redeemable convertible preferred stock, net of issuance costs of $54 (unaudited)	—	—	4,792,716	39,946	—	—	—	—	—
Conversion of redeemable convertible preferred shares into common shares (unaudited)	(15,527,951)	(24,764)	(4,792,716)	(39,946)	15,870,559	1	64,709	—	64,710
Accelerated vesting of restricted shares (unaudited)	—	—	—	—	1,202,556	—	—	—	—
Pro Forma Balance at September 30, 2017 (unaudited)	—	$ —	—	$ —	21,529,648	$ 2	$ 66,389	$ (9,346)	$ 57,045

See accompanying notes to these financial statements.

resTORbio, Inc.
Statements of Cash Flows
(In thousands)

	July 5, 2016 (inception) through December 31, 2016	July 5, 2016 (inception) through September 30, 2016 (unaudited)	Nine Months Ended September 30, 2017
Operating activities:			
Net loss	$ (1)	$ (1)	$ (10,724)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization expense	—	—	3
Stock-based compensation expense	—	—	301
Change in fair value of tranche liability (see Note 7)	—	—	(635)
Expense related to acquisition of intellectual property (see Note 6)	—	—	3,157
Changes in operating assets and liabilities:			
Prepaid expenses and other current assets	—	—	(214)
Accounts payable	—	—	1,094
Accrued liabilities	1	1	1,022
Net cash used in operating activities	—	—	(5,996)
Investing activities:			
Purchases of property and equipment	—	—	(39)
Net cash used in investing activities	—	—	(39)
Financing activities:			
Proceeds from issuance of Series A redeemable convertible preferred stock	—	—	10,000
Net cash provided by financing activities	—	—	10,000
Net increase in cash	—	—	3,965
Cash at beginning of period	—	—	—
Cash at end of period	$ —	$ —	$ 3,965

See accompanying notes to these financial statements.

resTORbio, Inc.
NOTES TO FINANCIAL STATEMENTS

1. Organization

resTORbio, Inc. ("the Company") was incorporated in the State of Delaware on July 5, 2016. The Company is a clinical-stage biopharmaceutical company focused on the development and commercialization of novel therapeutics for the treatment of aging-related diseases and conditions. The Company's principal operations are located in Boston, Massachusetts.

Since inception, the Company has been primarily involved in research and development activities. The Company devotes substantially all of its efforts to product research and development, initial market development and raising capital. The Company has not generated any product revenue related to its primary business purpose to date and is subject to a number of risks similar to those of other early stage companies, including dependence on key individuals, competition from other companies, the need for development of commercially viable products and the need to obtain adequate additional financing to fund the development of its product candidates. The Company is also subject to a number of risks similar to other companies in the life sciences industry, including regulatory approval of products, uncertainty of market acceptance of products, competition from substitute products and larger companies, the need to obtain additional financing, compliance with government regulations, protection of proprietary technology, dependence on third parties, product liability and dependence on key individuals.

Liquidity

In the course of its development activities, the Company has sustained operating losses and expects such losses to continue over the next several years. The Company's ultimate success depends on the outcome of its research and development activities. The Company has incurred net losses from operations since inception and has an accumulated deficit of $10.7 million as of September 30, 2017. The Company intends to raise additional capital through the issuance of additional equity, and potentially through strategic alliances with third parties. If financing is not available at adequate levels, the Company may need to reevaluate its operating plans. Management believes currently available resources, which includes the $15.0 million in gross proceeds the Company received in connection with the October 2017 issuance of 7,763,975 shares of the Company's Series A Preferred Stock, will provide sufficient funds to enable the Company to meet its operating plans for at least the next twelve months from the date these financial statements are issued. However, if the Company's anticipated operating results are not achieved in future periods, planned expenditures may need to be reduced in order to extend the time period over which the then-available resources would be able to fund the Company's operations.

2. Summary of Significant Accounting Policies

Basis of Presentation and Use of Estimates

The accompanying financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("U.S. GAAP"). The Company's fiscal year end is December 31st. Any reference in these notes to applicable guidance is meant to refer to the authoritative United States generally accepted accounting principles as found in the Accounting Standards Codification ("ASC") and Accounting Standards Updates ("ASUs") of the Financial Accounting Standards Board ("FASB"). The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities, as of the date of the financial statements, and the reported amounts of any expenses during the reporting period. On an ongoing basis, management evaluates its estimates, including those related to accrued liabilities, fair value of tranche liabilities, fair value of common stock, income taxes, and stock-based compensation expense. Management bases its estimates on historical experience, and on various other market-specific relevant assumptions that management

believes to be reasonable, under the circumstances. Actual results may differ from those estimates or assumptions.

Unaudited Interim Financial Information

The accompanying interim statements of operations and statements of cash flows for the period from July 5, 2016 (inception) to September 30, 2016 and the related footnote disclosures are unaudited. These unaudited interim financial statements have been prepared in accordance with U.S. GAAP. In management's opinion, the unaudited interim financial statements have been prepared on the same basis as the audited financial statements and include all adjustments (including normal recurring adjustments) necessary for the fair presentation of the Company's results of operations and its cash flows for the period from July 5, 2016 (inception) to September 30, 2016. The results for the period from July 5, 2016 (inception) to September 30, 2016 are not necessarily indicative of the results expected for the full fiscal year or any other interim period.

Unaudited Pro Forma Financial Information

On October 26, 2017, the Company's board of directors authorized the Company to file a registration statement with the Securities and Exchange Commission ("SEC") permitting the Company to sell shares of its common stock to the public. Upon the closing of a qualified (as defined in the Company's Certificate of Incorporation) initial public offering ("IPO"), all of the Company's redeemable convertible preferred stock will automatically convert into common stock and all unvested restricted shares will become vested. The unaudited pro forma balance sheet and statement of redeemable convertible preferred stock and stockholders' equity as of September 30, 2017 reflect the assumed conversion of all of the outstanding shares of Series A Redeemable Convertible Preferred Stock ("Series A Preferred Stock") into shares of common stock as well as the accelerated vesting of all restricted stock. In addition, the pro forma financials give effect to (i) the sale and issuance of $15.0 million (7,763,976 shares) of the Company's Series A Preferred Stock; (ii) the sale and issuance of $40.0 million (4,792,716 shares) of the Company's Series B Preferred Stock; and (iii) the automatic conversion of all of the shares of preferred stock into an aggregate of 15,870,559 shares of common stock. See Note 14 "Subsequent Events."

Unaudited pro forma net loss per share is computed using the weighted-average number of common shares outstanding after giving effect to the conversion of all Series A Preferred Stock into shares of the common stock, as well as the vesting of the unvested restricted shares, as if such conversion had occurred at the beginning of the period presented, or the date of original issuance, if later. The conversion of Series A Preferred Stock has been reflected assuming shares of Series A Preferred Stock convert into shares of fully paid common stock at the applicable conversion ratio. The pro forma basic and diluted net loss per share attributable to common stockholders does not include the effects of extinguishment of Series A Preferred Stock or the vesting of the unvested restricted shares. As the period of July 5, 2016 (inception) through December 31, 2016 and the nine months ended September 30, 2017 resulted in net losses, there is no income allocation required under the two-class method or dilution attributed to pro forma weighted average shares outstanding in the calculation of pro forma diluted loss per share attributable to common stockholders.

See Note 7 for further discussion of the Series A Preferred Stock conversion features, as well as a discussion of the rights and preferences of the redeemable convertible preferred stock.

Fair Value Measurements

Fair value is defined as the price at which an asset could be exchanged in a current transaction between knowledgeable, willing parties. A liability's fair value is defined as the amount that would be paid to transfer the liability to a new obligor, not the amount that would be paid to settle the liability with the creditor. Where available, fair value is based on observable market prices, or parameters derived from such prices. Where observable prices or inputs are not available, valuation models are applied. These valuation techniques involve some level of management estimation and judgment. The degree of management estimation and judgment is

dependent on the price transparency for the instruments, or market, and the instruments' complexity. The authoritative accounting guidance describes a fair value hierarchy based on three levels of inputs that may be used to measure fair value, of which the first two are considered observable and the last is considered unobservable. These levels of inputs are as follows:

Level 1—Observable inputs such as unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date.

Level 2—Inputs (other than quoted prices included in Level 1) are either directly or indirectly observable for the asset or liability. These include quoted prices for similar assets or liabilities in active markets and quoted prices for identical or similar assets or liabilities in markets that are not active.

Level 3—Unobservable inputs that reflect management's best estimate of what market participants would use in pricing the asset or liability at the measurement date. Consideration is given to the risk inherent in the valuation technique and the risk inherent in the inputs to the model.

To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgment exercised by the Company in determining fair value is greatest for instruments categorized in Level 3. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

Financial instruments measured at fair value on a recurring basis include the tranche liability associated with the redeemable convertible preferred stock (Note 7). The fair value of the financial liability was determined based on Level 3 inputs as described in Note 3. An entity may elect to measure many financial instruments and certain other items at fair value at specified election dates. Subsequent unrealized gains and losses on items for which the fair value option has been elected will be reported in net loss. The Company did not elect to measure any additional financial instruments or other items at fair value.

There have been no changes to the valuation methods utilized by the Company during the period from July 5, 2016 (inception) to December 31, 2016, the period from July 5, 2016 (inception) through September 30, 2016, or the nine months ended September 30, 2017. The Company evaluates transfers between levels at the end of each reporting period. There were no transfers of financial instruments between levels during the period from July 5, 2016 (inception) to December 31, 2016, the period from July 5, 2016 (inception) to September 30, 2016, or the nine months ended September 30, 2017.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to a concentration of credit risk consist of cash. The Company's cash is held by financial institutions in the United States. Amounts on deposit may at times exceed federally insured limits. Management believes that the financial institution is financially sound, and accordingly, minimal credit risk exists with respect to the financial institution.

Concentration of Manufacturing Risk

As of September 30, 2017, the Company had manufacturing arrangements with vendors for the supply of materials for use in preclinical and clinical studies. If the Company were to experience any disruptions in either party's ability or willingness to continue to provide manufacturing services, the Company may experience significant delays in its product development timelines and may incur substantial costs to secure alternative sources of manufacturing.

Property and Equipment

Property and equipment are stated at cost, less accumulated depreciation. Depreciation is recorded using the straight-line method over the estimated useful lives of the respective assets. Depreciation begins at the time the asset is placed in service. Maintenance and repairs that do not improve or extend the lives of the respective assets are expensed to operations as incurred. Upon sale or retirement of assets, the cost and related accumulated depreciation are removed from the balance sheet and the resulting gain or loss is reflected in the statement of operations.

The estimated useful lives of property and equipment are as follows:

	Useful Life (in years)
Laboratory and manufacturing equipment	2-8 years
Computer equipment and software	1-5 years

Impairment of Long-Lived Assets

The Company evaluates its long-lived assets, including property and equipment, for impairment whenever events or changes in circumstances indicate that the carrying value of these assets may not be recoverable. Recoverability of these assets is measured by comparison of the carrying amount of each asset to the future undiscounted cash flows the asset is expected to generate over its remaining life. If the asset is considered to be impaired, the amount of any impairment is measured as the difference between the carrying value and the fair value of the impaired asset. The Company has recorded no impairment of any long-lived assets during any of the periods presented.

Accrued Research and Development Costs

The Company accrues for estimated costs of research and development activities conducted by third-party service providers, which include the conduct of preclinical studies and clinical trials, and contract manufacturing activities. The Company records the estimated costs of research and development activities based upon the estimated amount of services provided, and includes these costs in accrued liabilities in the balance sheets and within research and development expense in the statements of operations. These costs are a significant component of the Company's research and development expenses. The Company accrues for these costs based on factors such as estimates of the work completed and in accordance with agreements established with its third-party service providers. The Company makes judgments and estimates in determining the accrued liabilities balance in each reporting period.

Research and Development Costs

Research and development costs are expensed as incurred and consist of personnel costs, lab supplies and other costs, as well as fees paid to third parties to conduct research and development activities on the Company's behalf. Amounts incurred in connection with license agreements are also included in research and development expenses. The Company records payments made to outside vendors for services performed or goods being delivered for use in research and development activities as either prepaid expenses or accrued expenses, depending on the timing of when services are performed or goods are delivered.

Equity-Based Compensation Expense

The Company recognizes equity-based compensation expense for awards of equity instruments to employees and non-employees based on the grant date fair value of those awards in accordance with FASB ASC Topic 718, *Stock Compensation* ("ASC 718"). ASC 718 requires all equity-based compensation awards to

employees and nonemployee directors, including grants of restricted shares and stock options, to be recognized as expense in the Statements of Operations based on their grant date fair values. The Company estimates the fair value of stock options using the Black-Scholes option pricing model. The Company uses the value of its common stock to determine the fair value of restricted shares.

The Company accounts for restricted stock and common stock options issued to nonemployees under FASB ASC Topic 505-50, *Equity-Based Payments to Non-Employees* ("ASC 505-50"). As such, the value of such options is periodically remeasured and income or expense is recognized over their vesting terms. Compensation cost related to awards with service-based vesting schedules is recognized using the straight-line method. The Company determines the fair value of the restricted stock and common stock granted to nonemployees as either the fair value of the consideration received or the fair value of the equity instruments issued.

The Black-Scholes option pricing model requires the input of certain subjective assumptions, including (i) the expected share price volatility, (ii) the expected term of the award, (iii) the risk-free interest rate and (iv) the expected dividend yield. Due to the lack of a public market for the trading of the Company's common stock and a lack of company-specific historical and implied volatility data, the Company has based its estimate of expected volatility on the historical volatility of a group of similar companies that are publicly traded. The historical volatility is calculated based on a period of time commensurate with the expected term assumption. The group of representative companies have characteristics similar to the Company, including stage of product development and focus on the life science industry. The Company uses the simplified method, which is the average of the final vesting tranche date and the contractual term, to calculate the expected term for options granted to employees as it does not have sufficient historical exercise data to provide a reasonable basis upon which to estimate the expected term. For options granted to non-employees, the Company utilizes the contractual term of the arrangement as the basis for the expected term assumption. The risk-free interest rate is based on a treasury instrument whose term is consistent with the expected term of the stock options. The Company uses an assumed dividend yield of zero as the Company has never paid dividends and has no current plans to pay any dividends on its common stock.

The Company expenses the fair value of its equity-based compensation awards granted to employees on a straight-line basis over the associated service period, which is generally the period in which the related services are received. The Company measures equity-based compensation awards granted to nonemployees at fair value as the awards vest and recognizes the resulting value as compensation expense at each financial reporting period. The Company accounts for award forfeitures as they occur.

Determination of Fair Value of Common and Preferred Shares and Tranche Rights Liability

As there has been no public market for our equity instruments to date, the estimated fair value of the Company's common and preferred shares has been determined by the board of directors as of the grant date, with input from management, considering the Company's most recently available third-party valuations of common shares and the board of directors' assessment of additional objective and subjective factors that it believed were relevant and which may have changed from the date of the most recent valuation through the date of the grant. These third-party valuations were performed in accordance with the guidance outlined in the American Institute of Certified Public Accountants' Accounting and Valuation Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*. Our common and preferred share valuations were prepared using either an option-pricing method, or OPM, or a probability-weighted expected return method, or PWERM, which uses a combination of market approaches and an income approach to estimate the Company's enterprise value. The OPM treats common securities and preferred securities as call options on the total equity value of a company, with exercise prices based on the value thresholds at which the allocation among the various holders of a company's securities changes. Under this method, the common and preferred shares have value only if the funds available for distribution to members are expected to exceed the value of the preferred security liquidation preference at the time of the liquidity event, such as a strategic sale or a merger. The PWERM is a scenario-based

methodology that estimates the fair value of common and preferred shares based upon an analysis of future values for the enterprise, assuming various outcomes. The common and preferred share values are based on the probability-weighted present value of expected future investment returns considering each of the possible outcomes available as well as the rights of each class of common and preferred securities. The future value of the common and preferred shares under each outcome is discounted back to the valuation date at an appropriate risk-adjusted discount rate and probability weighted to arrive at an indication of value for the common and preferred shares. The estimated fair value of the tranche liability was determined using the difference between the total purchase price of the Company's Series A Preferred Stock and the total fair value of the Series A Preferred Stock using a risk-adjusted forward contract model.

Income Taxes

The Company uses the asset and liability method of accounting for income taxes in accordance with FASB ASC Topic 740, *Income Taxes*. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial reporting and the tax basis of assets and liabilities, and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. The Company must then assess the likelihood that the resulting deferred tax assets will be realized. A valuation allowance is provided when it is more likely than not that some portion, or all of a deferred tax asset will not be realized. Due to the Company's lack of earnings history, the net deferred tax assets have been fully offset by a valuation allowance.

The Company recognizes benefits of uncertain tax positions if it is more likely than not that such positions will be sustained upon examination based solely on their technical merits, as the largest amount of benefit that is more likely than not to be realized upon the ultimate settlement. The Company's policy is to recognize interest and penalties related to the underpayment of income taxes as a component of income tax expense or benefit. To date, the Company has no uncertain tax positions and there have been no interest charges or penalties related to unrecognized tax benefits.

Net Loss per Share

Basic net loss per share is calculated by dividing the net loss by the weighted average number of shares of common stock outstanding during the period without consideration of common stock equivalents. Diluted net loss per common share is the same as basic net loss per common share for all periods presented, since the effects of potentially dilutive securities are antidilutive.

Recently Adopted Accounting Pronouncements

In August 2014, the FASB issued ASU 2014-15, *Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern* ("ASU 2014-15"). ASU 2014-15 requires management to evaluate relevant conditions, events, and certain management plans that are known or reasonably knowable that, when considered in the aggregate, raise substantial doubt about the entity's ability to continue as a going concern within one year after the date that the financial statements are issued, for both annual and interim periods. ASU 2014-15 also requires certain disclosures around management's plans and evaluation, as well as the plans, if any, that are intended to mitigate those conditions or events that will alleviate the substantial doubt. ASU 2014-15 is effective for fiscal years ending after December 15, 2016. The Company adopted this guidance on July 5, 2016 (inception).

In March 2016, the FASB issued ASU No. 2016-09, *Compensation—Stock Compensation (Topic 718)* ("ASU 2016-09"). The guidance changes how companies account for certain aspects of equity-based payments to employees. Entities will be required to recognize income tax effects of awards in the income statement when the awards vest or are settled. The guidance also allows an employer to repurchase more of an employee's shares than it can under current guidance for tax withholding purposes providing for withholding at the employee's

maximum rate as opposed to the minimum rate without triggering liability accounting and to make a policy election to account for forfeitures as they occur. The updated guidance is effective for annual periods beginning after December 15, 2017. Early adoption is permitted. The Company adopted this guidance on July 5, 2016 (inception) and made the policy election to account for forfeitures as they occur. No awards have been forfeited as of September 30, 2017.

Recently Issued Accounting Pronouncements

In November 2016, the FASB issued ASU 2016-18, *Statement of Cash Flows* ("ASU 2016-18"), which requires that amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. ASU 2016-18 is effective for fiscal years beginning after December 15, 2018 and should be applied using a retrospective transition method to each period presented. Early adoption is permitted. The Company does not expect the impact of ASU 2016-18 to be material to its financial statements.

In May 2017, the FASB issued ASU 2017-09, *Compensation—Stock Compensation* (Topic 718): Scope of Modification Accounting ("ASU 2017-09"). ASC 2017-09 provides guidance about which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting in Topic 718. The guidance is effective for annual periods beginning after December 15, 2017, with early adoption permitted, including adoption in any interim period for which financial statements have not yet been issued. The Company is currently evaluating the potential effects of adopting the provisions of ASU 2017-09.

In July 2017, the FASB issued ASU 2017-11, *Accounting for Certain Financial Instruments with Down Round Features* ("ASU 2017-11"), which updates the guidance related to the classification analysis of certain equity-linked financial instruments (or embedded features) with down round features. Under ASU 2017-11, a down round feature no longer precludes equity classification when assessing whether the instrument is indexed to an entity's own stock. As a result, a freestanding equity-linked financial instrument (or embedded conversion option) no longer would be accounted for as a derivative liability at fair value as a result of the existence of a down round feature. For freestanding equity classified financial instruments, the amendments require entities that present earnings per share (EPS) in accordance with Topic 260 to recognize the effect of the down round feature when it is triggered. That effect is treated as a dividend and as a reduction of income available to common shareholders in basic EPS. ASU 2017-11 is effective for public entities for all annual and interim periods beginning after December 15, 2019. Early adoption is permitted. The Company is currently evaluating the impact that the adoption of ASU 2017-11 will have on its financial statements.

3. Financial Instruments

There were no assets or liabilities measured at fair value as of December 31, 2016. Below is a summary of liabilities measured at fair value as of September 30, 2017:

	As of September 30, 2017 (In thousands)			
	Quoted Prices in Active Markets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Tranche rights liability	$ —	$ —	$ 1,379	$1,379

The tranche rights liability is considered a Level 3 liability because its fair value measurement is based, in part, on significant inputs not observed in the market. The Company determined the fair value of the liability as described in Note 7. Any reasonable changes in the assumptions used in the valuation could materially affect the financial results of the Company.

4. Property and equipment, net

Property and equipment, net consists of the following:

	As of	
	December 31, 2016	September 30, 2017
	(In thousands)	
Laboratory and manufacturing equipment	$ —	$ 38
Computer equipment and software	—	1
Total property and equipment	—	39
Less: accumulated depreciation	—	(3)
Property and equipment, net	$ —	$ 36

Depreciation expense was $0, $0 and $2,738, for the period from July 5, 2016 (inception) to December 31, 2016, the period from July 5, 2016 (inception) through September 30, 2016, and the nine months ended September 30, 2017, respectively.

5. Accrued Liabilities

Accrued liabilities consist of the following:

	As of	
	December 31, 2016	September 30, 2017
	(In thousands)	
Accrued payroll and related expenses	$ —	$ 245
Accrued research and development expenses	—	525
Other	—	252
Total accrued liabilities	$ —	$ 1,022

6. License Agreements

Novartis License Agreement

On March 23, 2017, the Company entered into an exclusive license agreement with Novartis International Pharmaceutical Ltd. (“Novartis”). Under the agreement, Novartis granted the Company an exclusive, field-restricted, worldwide license, to certain intellectual property rights owned or controlled by Novartis, to develop, commercialize and sell one or more therapeutic products comprising RTB101 or RTB101 in combination with everolimus in a fixed dose combination. The exclusive field under the license agreement is for the treatment, prevention and diagnosis of disease and other conditions in all indications in humans and animals.

As initial consideration for the licensed rights, the Company issued Novartis Institutes for Biomedical Research (“NIBR”) 2,587,992 shares of the Company’s Series A Preferred Stock. The fair value of the Novartis license was $3.2 million based on the fair value of the Series A Preferred Stock which was determined to be $1.22 per share based on an independent third-party valuation, and is recorded as research and development expenses in the statements of operations.

The agreement may be terminated by either party upon a material breach by the other party that is not cured within 60 days after written notice. The Company may terminate the agreement in its entirety or on a product-by-product or country-by-country basis with or without cause with 60 days’ prior written notice.

Novartis may terminate the portion of the agreement related to everolimus if the Company fails to use commercially reasonable efforts to research, develop and commercialize a product utilizing everolimus for a period of three years. Novartis may terminate the license agreement upon the Company's bankruptcy, insolvency, dissolution or winding up.

As additional consideration for the license, the Company is required to pay up to an aggregate of $4.3 million upon the satisfaction of clinical milestones, up to an aggregate of $24 million upon the satisfaction of regulatory milestones for the first indication approved, and up to an aggregate of $18 million upon the satisfaction of regulatory milestones for the second indication approved. In addition, the Company is required to pay up to an aggregate of $125 million upon the satisfaction of commercial milestones, based on the amount of annual net sales. The Company is also required to pay tiered royalties ranging from a mid single-digit percentage to a low teen-digit percentage on annual net sales of products. These royalty obligations last on a product-by-product and country-by-country basis until the latest of (i) the expiration of the last valid claim of a Novartis patent covering a subject product, (ii) the expiration of any regulatory exclusivity for the subject product in a country, or (iii) the 10th anniversary of the first commercial sale in the country, and are subject to a reduction after the expiration of the last valid claim of a Novartis patent or the introduction of a generic equivalent of a product in a country. In addition, if the Company sublicenses the rights under the license agreement, the Company is required to pay a certain percentage of sublicense revenue to Novartis. Novartis will no longer be entitled to sublicense revenue following the last visit of the 400th subject in any human clinical trial conducted by the Company or a sublicensee of the Company.

Milestone payments to Novartis will be recorded as research and development expenses in the statements of operations once achievement of each associated milestone has occurred or the achievement is considered probable. In May 2017, the Company initiated a Phase 2b clinical trial for a first indication, triggering the first milestone payment under the agreement. Accordingly, the Company paid the related $0.3 million payment in May 2017. As of September 30, 2017, none of the remaining development milestones, regulatory milestones, sales milestones, or royalties had been reached or were probable of achievement.

7. Redeemable Convertible Preferred Stock

As of September 30, 2017, the Company had 10,351,968 shares of preferred stock authorized, of which 7,763,976 shares were issued and outstanding and were designated as $0.0001 par value Series A Preferred Stock.

The Company's redeemable convertible preferred shares have been classified as temporary or mezzanine equity on the accompanying balance sheets in accordance with U.S. GAAP for the classification and measurement of redeemable securities as the Series A Preferred Stock are contingently redeemable at the option of the holder for reasons outside of the Company's control. As of September 30, 2017, there has been no accretion of the redeemable convertible preferred shares to redemption value as at that date the shares are not redeemable or probable of being redeemed.

On March 23, 2017, the Company entered into a Series A Preferred Stock Purchase Agreement with PureTech Health LLC ("PureTech") and NIBR. Under the agreement, in the initial March 2017 closing, PureTech purchased 2,846,791 shares of Series A Preferred Stock at a purchase price of $1.932 per share, resulting in aggregate gross proceeds of $5.5 million, and NIBR was issued 2,587,992 shares of Series A Preferred Stock as consideration for an exclusive, field-restricted, worldwide license, to certain intellectual property rights owned or controlled by Novartis, to develop, commercialize and sell one or more therapeutic products comprising RTB101, alone or in combination with everolimus in a fixed dose combination. PureTech also agreed to purchase up to 4,917,185 additional shares (the "Tranche Rights"), at $1.932 per share at future dates based on the occurrence of certain events as specified under the agreement. The fair value of the Series A Preferred Stock on the date of issuance was determined to be $1.22 per share based on an independent third-party valuation.

On March 23, 2017, the Company also entered into a side letter with PureTech under which PureTech agreed to purchase up to 5,175,984 additional shares at $1.932 per share at a future date based on the occurrence of certain events as specified under the letter. The Tranche Rights were evaluated under ASC 480 – *Distinguishing Liabilities from Equity* and it was determined that they met the requirements for separate accounting from the initial issuance of Series A Preferred Stock as freestanding financial instruments and are accounted for as liabilities. The Company adjusts the carrying value of the Tranche Rights to its estimated fair value at each reporting date up to the closing of each tranche financing. Increases or decreases in fair value of the Tranche Rights are recorded as other income (expense) in the statements of operations.

At the date of issuance, the Tranche Rights liability was recorded at fair value of $2.0 million as a liability on the balance sheet. From the date of issuance to September 30, 2017, the change in fair value of the Tranche Rights was $0.6 million and was recorded as other income in the statements of operations.

In September 2017, the Company received gross proceeds of $4.5 million in exchange for the issuance of 2,329,193 shares of Series A Preferred Stock at $1.932 per share pursuant to the second closing on August 29, 2017. The fair value of the Series A Preferred Stock on the date of issuance was determined to be $1.34 per share based on an independent third-party valuation.

The rights, privileges, and preferences of convertible preferred stock are summarized as follows:

Liquidation Preference

In the event of any voluntary or involuntary liquidation, dissolution, or winding up of the Company, or Deemed Liquidation Event (as defined below), the holders of shares of Series A Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Company available for distribution to its stockholders before any payment shall be made to the holders of common stock, an amount per share equal to the Series A Original Issue Price of $1.932, plus any dividends declared and unpaid thereon.

If upon any liquidation, dissolution, winding up of the Company or Deemed Liquidation Event, the assets of the Company available for distribution to shareholders is insufficient to pay the holders of shares of Series A Preferred Stock the full amount to which they shall be entitled, the holders of Series A Preferred Stock will share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

After payment of all preferential amounts required to be paid to the holders of preferred stock, the remaining funds and assets available for distribution to the shareholders of the Company will be distributed among the holders of Series A Preferred Stock and common stock, pro rata based on the number of shares held by each such holder, provided, however, that if the aggregate amount which the holders of Series A Preferred Stock are entitled to receive exceeds $3.864 per share, each holder of Series A Preferred Stock shall be entitled to receive the greater of (i) $3.864 or (ii) the amount such holder would have received if all shares of Series A Preferred Stock had been converted into common stock immediately prior.

The following events are defined as Deemed Liquidation Events unless the holders of a majority of the then outstanding shares of Series A Preferred Stock elect otherwise by written notice to the Company:

(i) a merger or consolidation; or

(ii) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Company of all or substantially all the assets or intellectual property of the Company.

Voting

Each holder of shares of Series A Preferred Stock is entitled to the number of votes equal to the number of whole shares of common stock into which such shares of Series A Preferred Stock could be converted and has voting rights and powers equal to the voting rights and powers of the common stock, and except as provided by law or by other provisions of the Certificate of Incorporation, shall vote together with the common stock as a single class on an as-converted basis on all matters as to which holders of common stock have the right to vote.

The holders of Series A Preferred Stock, voting together as a single class, are entitled to elect three members of the Company's board of directors. The holders of common stock, exclusively and as a separate class, are entitled to elect two members of the Company's board of directors.

Redemption

The Series A Preferred Stock may be redeemed upon a Deemed Liquidation Event. The Series A Preferred Stock may be redeemed at $1.932 per share, or the holders of Series A Preferred Stock may receive an amount equal to the amount entitled if the Series A Preferred Stock converted into shares of common stock on a 1.2804:1 basis on the redemption date. At September 30, 2017, the shares of Series A Preferred Stock were not redeemable and the likelihood of an occurrence of a Deemed Liquidation Event was not deemed to be probable.

Conversion

The holders of Series A Preferred Stock are subject to certain optional and mandatory conversion rights.

(i) *Optional Conversion Rights:* Each share of convertible preferred stock is convertible, at the option of the holder, into such number of fully paid shares of common stock as is determined by dividing the original issuance price by the conversion price in effect at the time of conversion. As of September 30, 2017, the conversion ratio was 1.2804:1 for the Series A Preferred Stock.

(ii) *Mandatory Conversion Rights:* Upon either (a) the closing of the sale of shares of common stock to the public at a price of at least $7.421 per share (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the common stock), in a firm-commitment underwritten public offering pursuant to an effective registration statement resulting in at least $25 million of gross proceeds to the Company or (b) the date and time, or the occurrence of an event, specified by vote or written consent of the holders of a majority of the then outstanding shares of Series A Preferred Stock, then all outstanding shares of Series A Preferred Stock shall automatically be converted into shares of common stock, at the then effective conversion rate.

The conversion price for Series A Preferred Stock is subject to adjustment upon certain events including certain dilutive issuances of shares, share subdivisions such as stock splits and stock dividends, combinations or other similar recapitalizations with respect to the common stock, or other similar events. At September 30, 2017 the Series A Preferred Stock had an original issuance price of $1.932 per share and a conversion price of $2.474.

Dividends

If the Company declares or makes any dividends to holders of common stock of the Company, each holder of Series A Preferred Stock shall be entitled to receive such dividend on an as-converted basis. Such dividends shall not accrue and shall not accumulate. No dividends had been declared as of September 30, 2017.

8. Common Stock

General

The voting, dividend and liquidation rights of the holders of common stock are subject to and qualified by the rights, powers, and preferences of the holders of the shares of Series A Preferred Stock. The common stock has the following characteristics:

Voting

The holders of the common stock are entitled to one vote for each share of common stock held at all meetings of stockholders and written actions in lieu of meetings, provided, however, that except as otherwise required by law, holders of common stock as such shall not be entitled to vote on any amendment to the Company's Certificate of Incorporation that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to the Company's Certificate of Incorporation or pursuant to Delaware General Corporation Law. There shall be no cumulative voting.

Dividends

The holders of shares of common stock are entitled to receive dividends, if and when declared by the Board of Directors. Cash dividends may not be declared or paid to the holders of common stock until paid on the Series A Preferred Stock. As of September 30, 2017, no dividends have been declared or paid since the Company's inception.

Liquidation

After payment to the holders of shares of Series A Preferred Stock of their liquidation preference, the holders of the common stock are entitled to share ratably in the Company's assets available for distribution to stockholders, in the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company or upon the occurrence of a Deemed Liquidation Event.

Reserve for future issuance

As of December 31, 2016, the Company had not reserved any shares of common stock for future issuance. As of September 30, 2017, the Company has reserved the following number of shares of common stock for future issuance upon the conversion or exercise of preferred stock or options or grant of equity awards:

	As of September 30, 2017
Redeemable convertible preferred stock, on an as-converted basis	6,063,711
Options issued and outstanding	111,320
Options available for future grants	426,594
Total	6,601,625

9. Stock-based Compensation

In 2017, the Company adopted the 2017 Stock Incentive Plan (the "Plan"). Under the Plan, shares of the Company's common stock have been reserved for the issuance of stock options to employees, directors, and consultants under terms and provisions established by the Board of Directors. A total of 537,914 shares were reserved for issuance under the Plan. Under the terms of the Plan, options may be granted at an exercise price not less than fair market value. The terms of options granted under the Plan may not exceed ten years. The Board shall determine the terms and conditions of a Restricted Stock Award, including the conditions for vesting and repurchase (or forfeiture) and the issue price, if any.

Stock-based Compensation Expense

Total stock-based compensation expense is recognized for stock options granted to employees and non-employees and has been reported in the Company's statements of operations as follows:

	July 5, 2016 (inception) through December 31, 2016	July 5, 2016 (inception) through September 30, 2016 (unaudited)	Nine Months Ended September 30, 2017
		(In thousands)	
Research and development	$ —	$ —	$ 152
General and administrative	—	—	149
Total stock-based compensation expense	$ —	$ —	$ 301

Stock Options

A following table summarizes stock option activity under the Plan:

	Shares Available for Grant	Number of Options Outstanding	Weighted-Average Exercise Price per Option	Weighted-Average Remaining Contract Term	Aggregate Intrinsic Value (In thousands)
Outstanding, December 31, 2016	—	—	$ —		
Shares reserved for issuance	537,914				
Options granted(1)	(111,320)	111,320	0.81		
Outstanding, September 30, 2017	426,594	111,320	0.81	9.68	$ 21
Exercisable, September 30, 2017		—	—		
Vested and expected to vest, September 30, 2017		111,320	0.81	9.68	$ 21

(1) The Company granted 46,860 stock options to non-employees during the nine months ended September 30, 2017.

The aggregate intrinsic values of options outstanding, exercisable, vested and expected to vest were calculated as the difference between the exercise price of the options and the estimated fair value of the Company's common stock, as determined by the board of directors, as of September 30, 2017. No options were exercised during the nine months ended September 30, 2017.

There were no stock options granted to employees or non-employees during the period from July 5, 2016 (inception) to December 31, 2016 or the period from July 5, 2016 (inception) to September 30, 2016. During the nine months ended September 30, 2017, the Company granted options to employees to purchase an aggregate of 64,460 common shares with a grant date fair value of $0.53. During the nine months ended September 30, 2017, the Company granted options to non-employees to purchase an aggregate of 46,860 common shares with a weighted-average grant date fair value of $0.67. The expense related to options granted to employees and non-employees was $2,606 and $2,352, respectively, for the nine months ended September 30, 2017.

As of September 30, 2017, the total unrecognized compensation expense related to unvested employee options was $31,339 which the Company expects to recognize over an estimated weighted-average period of 3.62 years. As of September 30, 2017, the total unrecognized compensation expense related to unvested nonemployee options was $35,774 which the Company expects to recognize over an estimated weighted-average period of 3.76 years.

The fair value of stock options for employees and non-employees was estimated using a Black-Scholes option pricing model with the following assumptions:

	Nine Months Ended September 30, 2017
Employees:	
Fair value of common stock	$ 0.79
Expected term (in years)	6.1
Expected volatility	74.4%
Risk-free interest rate	1.9%
Expected dividend yield	0.0%
Non-employees:	
Fair value of common stock	$ 0.79 - 1.00
Expected term (in years)	10.0
Expected volatility	74.6% - 76.9%
Risk-free interest rate	2.3%
Expected dividend yield	0.0%

Fair Value of Common Stock: Given the absence of a public trading market, the Board of Directors considered numerous objective and subjective factors to determine the fair value of common stock at each grant date. These factors included, but were not limited to, (i) contemporaneous valuations of common stock performed by independent third-party specialists; (ii) the prices for preferred stock sold to outside investors; (iii) the rights, preferences and privileges of preferred stock relative to common stock; (iv) the lack of marketability of common stock; (v) developments in the business; and (vi) the likelihood of achieving a liquidity event, such as an initial public offering or a merger or acquisition of the Company, given prevailing market conditions.

Restricted Stock

On July 11, 2016, certain founding non-employee directors purchased 3,772,726 common shares that are subject to a repurchase right upon termination or cessation of services at the original purchase price of $0.0001 per share, or $483. On April 4, 2017, the non-employee directors became employees of the Company. Compensation expense of such unvested shares was remeasured at fair value until vested at each reporting date. On April 4, 2017, compensation expense of such unvested shares was remeasured at fair value and fixed and is being recognized over the remaining period. The repurchase right lapses as vesting occurs.

A summary of restricted stock activity and related information follows:

	Number of Restricted Shares Outstanding
Unvested shares — July 5, 2016 (inception)	—
Issued	3,772,726
Vested	(2,082,860)
Unvested shares — December 31, 2016	1,689,866
Vested	(487,310)
Unvested shares — September 30, 2017	1,202,556

The Company recognized $0, $0, and $0.3 million of stock based compensation expense related to restricted shares during the period from July 5, 2016 (inception) to December 31, 2016, the period from July 5,

2016 (inception) to September 30, 2016, and the nine months ended September 30, 2017, respectively. As of September 30, 2017, there was $1.0 million of unrecognized stock based compensation expense related to unvested restricted stock. This amount is expected to be recognized over a remaining weighted-average period of 2.78 years.

10. Income Taxes

Provision (Benefit) for Income Taxes

For the period from July 5, 2016 (inception) to December 31, 2016, the period from July 5, 2016 (inception) to September 30, 2016, and the nine months ended September 30, 2017, the Company did not record a current or deferred income tax expense or benefit. The Company's loss before income taxes consists solely of a domestic loss.

A reconciliation of income tax expense computed at the statutory federal income tax rate to income taxes as reflected in the financial statements is as follows:

	July 5, 2016 (inception) through December 31, 2016	July 5, 2016 (inception) through September 30, 2016 (unaudited)	Nine Months Ended September 30, 2017
	(In thousands)		
Income tax expense at federal statutory rate	$ —	$ —	$ (3,646)
State taxes	—	—	(612)
Tax credits	—	—	(110)
Stock-based compensation	—	—	102
Other	—	—	(215)
Change in valuation allowance	—	—	4,481
Income tax expense	$ —	$ —	$ —
Effective tax rate	0.0%	0.0%	0.0%

Deferred Tax Assets and Liabilities

Deferred income taxes reflect the net tax effects of loss and credit carryforwards and temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of deferred income taxes were as follows as of December 31, 2016 and September 30, 2017:

	As of	
	December 31, 2016	September 30, 2017
	(In thousands)	
Deferred tax assets:		
Operating tax losses	$ —	$ 2,934
Capitalized license	—	1,358
Research credits	—	140
Accruals	—	96
Stock-based compensation	—	1
Total gross deferred tax assets	—	4,529
Less valuation allowance	—	(4,482)
Total deferred tax assets	—	47
Deferred tax liabilities:		
Depreciation and Amortization	—	(47)
Total gross deferred tax liability	—	(47)
Net deferred tax assets	$ —	$ —

Realization of deferred tax assets is dependent upon future earnings, if any, the timing and amount of which are uncertain. Due to the lack of earnings history, the net deferred tax assets have been fully offset by a valuation allowance.

Net Operating Loss and Tax Credit Carryforwards

As of December 31, 2016 and September 30, 2017, the Company had net operating loss carryforwards for federal income tax purposes of approximately $1,000 and $7.5 million, respectively which will begin to expire in 2036. As of December 31, 2016 and September 30, 2017, the Company had total state net operating loss carryforwards of approximately $1,000 and $7.4 million, respectively which will begin to expire in 2036. Utilization of some of the federal and state net operating loss and credit carryforwards are subject to annual limitations due to the “change of ownership” provisions under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, and similar state provisions. The annual limitations may result in the expiration of net operating losses and credits before utilization. The Company has not performed an ownership change analysis.

As of December 31, 2016 and September 30, 2017, the Company had federal research credits of $0 and $0.1 million, respectively which will begin to expire in 2037 and state research credits of $0 and approximately $45,000, respectively which will begin to expire in 2032. These tax credits are subject to the same limitations discussed above.

Unrecognized Tax Benefits

The Company has incurred net operating losses since inception and has no significant unrecognized tax benefits. The Company’s policy is to include interest and penalties related to unrecognized tax benefits, if any, within the provision for taxes in the statements of operations. If in the future the Company recognizes uncertain tax positions, the Company’s effective tax rate will be reduced. Currently, the Company has a full valuation

allowance against its net deferred tax asset which would impact the timing of the effective tax rate benefit should any of these uncertain tax positions be favorably settled in the future. Any adjustments to uncertain tax positions would result in an adjustment of net operating loss or tax credit carry forwards rather than resulting in a cash outlay. As of September 30, 2017, the Company had no unrecognized tax benefits and no accrued interest or penalties related to uncertain tax positions.

Income tax returns are filed in the U.S. and Massachusetts. The Company is not currently under examination. Due to net operating losses and research credit carryovers, all of the tax years remain open to examination.

11. Commitments and Contingences

Litigation

The Company is not a party to any litigation and does not have contingency reserves established for any litigation liabilities as of September 30, 2017.

12. Net Loss per Share

As described in Note 2, the Company computes basic and diluted earnings (losses) per share using a methodology that gives effect to the impact of outstanding participating securities (the “two-class” method). Basic net loss per share is calculated by dividing net loss by the weighted-average number of common shares outstanding during the period and excludes any dilutive effects of share-based awards. Diluted net loss per share is computed giving effect to all potential dilutive common shares, including common stock issuable upon exercise of stock options, convertible preferred stock, and unvested restricted common stock. As the Company had net losses for the period from July 5, 2016 (inception) to December 31, 2016, the nine months ended September 30, 2017, and the period from July 5, 2016 (inception) to September 30, 2016, there is no income allocation required under the two-class method or dilution attributed to weighted average shares outstanding in the calculation of diluted loss per share.

13. Related Party Transactions

Since the Company’s incorporation in July 2016, the Company has engaged in transactions with related parties. The transactions were on terms comparable to terms that could have been obtained from unrelated third parties.

During the nine months ended September 30, 2017, the Company issued 1,886,363 shares of common stock and made payments to PureTech for certain founding services and cost reimbursements. PureTech is a founder of the Company and holds shares of common stock and preferred stock of the Company. See Note 7.

The Company is a party to an intellectual property license agreement with Novartis. In addition, NIBR is a preferred stock shareholder of the Company. See Note 6. During the nine months ended September 30, 2017, the Company made payments to Novartis for milestones achieved pursuant to the license agreement and for the purchases of materials for use in the Company’s clinical trials.

Aggregate payments for the above related party transactions totaled $0.9 million for the nine months ended September 30, 2017. No payments were made to related parties during the periods from July 5, 2016 (inception) to December 31, 2016 or from July 5, 2016 (inception) to September 30, 2016.

14. Subsequent Events

For the purposes of the financial statements as of December 31, 2016 and September 30, 2017, and the period from July 5, 2016 (inception) to December 31, 2016, the period from July 5, 2016 (inception) to September 30, 2016, and the nine months ended September 30, 2017, the Company has evaluated subsequent events through October 26, 2017, the date the financial statements were originally issued, and has evaluated for disclosures and additional subsequent events occurring after such date through December 22, 2017, which is the date these financial statements were available for reissuance.

On October 11, 2017, the Company increased the number of authorized shares of common stock from 19,000,000 shares to 24,000,000 shares, and increased the number of authorized shares of Series A Preferred Stock from 10,351,968 shares to 15,527,951 shares. In addition, the Company increased the number of shares of common stock available for issuance under the Plan from 537,914 shares to 630,662 shares.

On October 12, 2017, the Company amended the Series A Preferred Stock Purchase Agreement to accelerate the third and fourth closings under the original agreement (as discussed in Note 7). The Company issued 7,763,975 shares of Series A Preferred Stock at $1.932 per share for aggregate gross proceeds of $15.0 million, of which $9.0 million was from PureTech and $6.0 million from a new investor. These amounts have been included in the pro forma balance sheet. Following these additional closings of the Series A Preferred Stock financing, the Tranche Rights have been terminated.

On October 27, 2017, the Company entered into the Series B Preferred Stock Purchase Agreement for the issuance and sale of up to 4,792,716 shares of Series B Preferred Stock at $8.346 per share. On November 29, 2017, the Company issued and sold 4,792,716 shares of Series B Preferred Stock at $8.346 per share for aggregate gross proceeds of $40.0 million (the “Series B Financing”), of which $20.0 million was from a Series A investor. These amounts have been included in the pro forma balance sheet.

In connection with the closing of the Series B Financing, the Company filed an amended and restated certificate of incorporation, pursuant to which it (i) increased the number of shares of Common Stock that the Company is authorized to issue to an aggregate of 30,000,000 shares, (ii) increased the number of shares of Preferred Stock that the Company is authorized to issue to an aggregate of 20,320,667 shares, (iii) authorized and created a new series of Preferred Stock designated as Series B Preferred Stock, consisting of an aggregate of 4,792,716 shares for issuance, (iv) established the rights, preferences, privileges, restrictions and other matters relating to the Series B Preferred Stock, and (v) made certain other changes in connection with the Series B Financing. The Company also increased the number of shares of Common Stock available for issuance under the Company’s 2017 Stock Incentive Plan from 630,662 to 1,866,009.

Reverse Stock Split

On January 12, 2018, the Company effected a one-for-1.2804 reverse stock split of its issued and outstanding shares of common stock and a proportional adjustment to the existing conversion ratios for each series of the Company’s Preferred Stock. Accordingly, all common stock share and per share amounts and preferred stock conversion prices and ratios for all periods presented in the accompanying financial statements and notes thereto have been adjusted retroactively, where applicable, to reflect this reverse stock split and adjustment of the preferred stock conversion ratios.

Through and including , 2018 (the 25th day after the date of this prospectus), all dealers effecting transactions in the common stock, whether or not participating in this offering, may be required to deliver a prospectus. This delivery requirement is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

5,666,667 Shares

Common Stock

PROSPECTUS

BofA Merrill Lynch

Leerink Partners

Evercore ISI

Wedbush PacGrow

, 2018

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

The following table sets forth the expenses to be incurred in connection with the offering described in this Registration Statement, other than underwriting discounts and commissions, all of which will be paid by us. All amounts are estimates except the Securities and Exchange Commission's registration fee, the Financial Industry Regulatory Authority, Inc., or FINRA, filing fee and the Nasdaq listing fee.

	Amount
Securities and Exchange Commission registration fee	$ 12,982
FINRA filing fee	16,140
Nasdaq listing fee	125,000
Accountants' fees and expenses	360,000
Legal fees and expenses	750,000
Transfer Agent's fees and expenses	5,000
Printing and engraving expenses	100,000
Miscellaneous fees and expenses	130,878
Total expenses	$ 1,500,000

Item 14. Indemnification of Directors and Officers

Section 102 of the General Corporation Law of the State of Delaware permits a corporation to eliminate the personal liability of its directors for monetary damages for a breach of fiduciary duty as a director, except where the director breached his or her duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. Upon completion of this offering, our certificate of incorporation will provide that none of our directors shall be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability, except to the extent that the General Corporation Law of the State of Delaware prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145 of the General Corporation Law of the State of Delaware provides that a corporation has the power to indemnify a director, officer, employee, or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlements actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he or she is or is threatened to be made a party by reason of such position, if such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Upon the completion of this offering, our certificate of incorporation will provide that we will indemnify each person who was or is a party or is threatened to be made a party or is involved in any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other

than an action by or in the right of us) by reason of the fact that he or she is or was, or has agreed to become, our director or officer, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (all such persons being referred to as an "Indemnitee"), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding and any appeal therefrom, if such Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, and, with respect to any criminal action or proceeding, he or she had no reasonable cause to believe his or her conduct was unlawful. Our certificate of incorporation that will be effective as of the closing date of this offering also provides that we will indemnify any Indemnitee who was or is a party to an action or suit by or in the right of us to procure a judgment in our favor by reason of the fact that the Indemnitee is or was, or has agreed to become, our director or officer, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise, or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees) and, to the extent permitted by law, amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding, and any appeal therefrom, if the Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, except that no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to us, unless a court determines that, despite such adjudication but in view of all of the circumstances, he or she is entitled to indemnification of such expenses. Notwithstanding the foregoing, to the extent that any Indemnitee has been successful, on the merits or otherwise, he or she will be indemnified by us against all expenses (including attorneys' fees) actually and reasonably incurred by him or her or on his or her behalf in connection therewith. If we do not assume the defense, expenses must be advanced to an Indemnitee under certain circumstances.

We plan to enter into indemnification agreements with each of our executive officers and directors. In general, these agreements provide that we will indemnify the director or executive officer to the fullest extent permitted by law for claims arising in his or her capacity as a director or executive officer of our company or in connection with their service at our request for another corporation or entity. The indemnification agreements also provide for procedures that will apply in the event that a director or executive officer makes a claim for indemnification and establish certain presumptions that are favorable to the director or executive officer.

We maintain a general liability insurance policy that covers certain liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers.

The underwriting agreement we will enter into in connection with the offering of common stock being registered hereby provides that the underwriters will indemnify, under certain conditions, our directors and officers (as well as certain other persons) against certain liabilities arising in connection with such offering.

Insofar as the forgoing provisions permit indemnification of directors, executive officers, or persons controlling us for liability arising under the Securities Act of 1933, as amended, or the Securities Act, we have been informed that, in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Item 15. Recent Sales of Unregistered Securities

Set forth below is information regarding shares of our common stock and shares of our preferred stock issued, and stock options granted, by us within the past three years that were not registered under the Securities Act. Included is the consideration, if any, we received for such shares and options and information relating to the section of the Securities Act, or rule of the Securities and Exchange Commission, under which exemption from registration was claimed.

(a) Issuance of Capital Stock

In July 2016, we issued and sold 1,886,363 shares of restricted common stock to each of Chen Schor and Joan Mannick at a price per share of $0.0001. In March 2017, we issued 1,886,363 shares of our common stock to PureTech Health in exchange for its provision of founding strategic medical, clinical and scientific advice, as well as shared administrative support and offices pursuant to a business services, personnel and information management agreement.

In March 2017, we issued and sold an aggregate of 5,434,783 shares of our Series A preferred stock in the first closing of our Series A preferred stock financing to PureTech Health and Novartis Institutes for BioMedical Research, Inc., or NIBR, at a price per share of $1.932. PureTech Health paid approximately $5.0 million for such Series A shares, and the remaining $482,011 of the purchase price was net settled against invoices paid by PureTech Health on our behalf prior to the closing of our Series A financing and as reimbursement for certain due diligence costs incurred in connection with the financing. The remaining shares were issued in consideration to NIBR for our entry into a license agreement with Novartis International Pharmaceutical Ltd, or Novartis.

In August 2017, we issued and sold 2,329,193 shares of our Series A preferred stock at a price per share of $1.932 in the second closing of our Series A preferred stock financing for an aggregate purchase price of approximately $4.5 million.

In October 2017, we issued and sold 7,763,95 shares of our Series A preferred stock at a price per share of $1.932 in the third closing of our Series A preferred stock financing for an aggregate purchase price of approximately $15.0 million.

In November 2017, we issued and sold 4,792,716 shares of our Series B preferred stock at a price per share of $8.346 for an aggregate purchase price of approximately $40.0 million.

No underwriters were involved in the foregoing issuances of securities. The securities described in this section (a) of Item 15 were issued to investors in reliance upon the exemption from the registration requirements of the Securities Act, as set forth in Section 4(a)(2) under the Securities Act and Regulation D promulgated thereunder relative to transactions by an issuer not involving any public offering, to the extent an exemption from such registration was required. The recipients of securities in the transactions described above represented that they were accredited investors and were acquiring the securities for their own account for investment purposes only and not with a view to, or for sale in connection with, any distribution thereof and that they could bear the risks of the investment and could hold the securities for an indefinite period of time and appropriate legends were affixed to the instruments representing such securities issued in such transactions.

(b) Stock Option Grants and Option Exercises

From inception to January 16, 2018, we granted options to purchase an aggregate of 306,988 shares of common stock, with exercise prices ranging from $0.79 to $13.17 per share, to employees and consultants pursuant to our 2017 stock incentive plan. None of these options have been exercised.

No underwriters were involved in the foregoing issuances of securities. The issuances of stock options described in this paragraph (b) of Item 15 were issued pursuant to written compensatory plans or arrangements with our employees, directors, consultants and advisors, in reliance on the exemption provided by Rule 701 promulgated under the Securities Act, or pursuant to Section 4(a)(2) under the Securities Act, relative to transactions by an issuer not involving any public offering, to the extent an exemption from such registration was required. All recipients either received adequate information about us or had access, through employment or other relationships, to such information.

All of the securities described in paragraphs (a) and (b) of this Item 15 are deemed restricted securities for purposes of the Securities Act. All of the certificates representing such securities included appropriate legends setting forth that the securities have not been registered and the applicable restrictions on transfer.

Item 16. Exhibits and Financial Statement Schedules

(a) Exhibits

The exhibits to the registration statement are listed in the Exhibit Index attached hereto and incorporated by reference herein.

(b) Financial Statement Schedules

No financial statement schedules are provided because the information called for is not required or is shown either in the financial statements or the related notes.

EXHIBIT INDEX

Exhibit Number	Description of Exhibit
1.1	Form of Underwriting Agreement
3.1*	Second Amended and Restated Certificate of Incorporation of the Registrant (as currently in effect)
3.2	Amendment to Second Amended and Restated Certificate of Incorporation of the Registrant (as currently in effect)
3.3*	Bylaws of the Registrant (as currently in effect)
3.4	Form of Restated Certificate of Incorporation of the Registrant (to be effective upon the closing of this offering)
3.5	Form of Amended and Restated Bylaws of the Registrant (to be effective upon the closing of this offering)
4.1	Specimen stock certificate evidencing the shares of common stock
4.2*	Amended and Restated Investors' Rights Agreement, dated as of November 29, 2017, among the Registrant and the other parties thereto
5.1	Opinion of Goodwin Procter LLP
10.1#*	2017 Stock Incentive Plan and forms of award agreements thereunder
10.2#	2018 Stock Incentive Plan and forms of award agreements thereunder
10.3#	Form of Director Indemnification Agreement
10.4#	Form of Officer Indemnification Agreement
10.5#	2018 Employee Stock Purchase Plan
10.6#	Non-Employee Director Compensation Policy
10.7+	License Agreement, dated as of March 23, 2017, by and between the Registrant and Novartis International Pharmaceutical Ltd.
10.8+*	First Amendment to the License Agreement, dated as of October 3, 2017, by and among the Registrant and Novartis International Pharmaceutical Ltd.
10.9*	Business Services, Personnel and Information Management Agreement, dated as of August 1, 2016, by and among the Registrant, PureTech Management, Inc., PureTech Health LLC and PureTech Health plc
10.10#*	Offer Letter, dated as of March 31, 2017, between the Registrant and Chen Schor
10.11#*	Offer Letter, dated as of March 31, 2017, between the Registrant and Joan Mannick
10.12#*	Offer Letter, dated as of October 5, 2017, between the Registrant and John McCabe
10.13#	Amendment to Offer Letter, by and between the Registrant and Joan Mannick
10.14#	Amendment to Offer Letter, by and between the Registrant and Chen Schor
10.15	Office Lease Agreement, dated as of January 8, 2018, by and between the Registrant and 500 Boylston & 222 Berkeley Owner (DE) LLC
21.1*	Subsidiaries of the Registrant
23.1	Consent of KPMG LLP, independent registered public accounting firm
23.2	Consent of Goodwin Procter LLP (included in Exhibit 5.1)
24.1*	Power of Attorney (included on signature page)

* Previously filed.

+ Confidential treatment requested as to certain portions, which portions have been omitted and filed separately with the Securities and Exchange Commission.

# Indicates a management contract or any compensatory plan, contract or arrangement.

Item 17. Undertakings

(a) The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement, certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

(b) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

(c) The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Boston, Commonwealth of Massachusetts, on this 16th day of January, 2018.

RESTORBIO, INC.

By: /s/ Chen Schor
Chen Schor
President and Chief Executive Officer

Power of Attorney

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Chen Schor Chen Schor	President, Chief Executive Officer and Director (principal executive officer)	January 16, 2018
/s/ John McCabe John McCabe	Vice President, Finance (principal financial officer and principal accounting officer)	January 16, 2018
* Paul Fonteyne	Director	January 16, 2018
* David Steinberg	Director	January 16, 2018
* Jonathan Silverstein	Director	January 16, 2018
* Lynne Sullivan	Director	January 16, 2018
* Daphne Zohar	Director	January 16, 2018

*By: /s/ Chen Schor
Attorney-in-fact

Exhibit 1.1

resTORbio, Inc.

(a Delaware corporation)

[●] Shares of Common Stock

UNDERWRITING AGREEMENT

Dated: [●]

resTORbio, Inc.

(a Delaware corporation)

[●] Shares of Common Stock

UNDERWRITING AGREEMENT

[●]

Merrill Lynch, Pierce, Fenner & Smith
Incorporated
Leerink Partners LLC
as Representatives of the several
Underwriters

c/o Merrill Lynch, Pierce, Fenner & Smith
Incorporated
One Bryant Park
New York, New York 10036

c/o Leerink Partners LLC
One Federal Street, 37th Floor
Boston, Massachusetts 02110

Ladies and Gentlemen:

resTORbio, Inc., a Delaware corporation (the "Company"), confirms its agreement with Merrill Lynch, Pierce, Fenner & Smith Incorporated ("Merrill Lynch") and Leerink Partners LLC ("Leerink") and each of the other Underwriters named in Schedule A hereto (collectively, the "Underwriters," which term shall also include any underwriter substituted as hereinafter provided in Section 10 hereof), for whom Merrill Lynch and Leerink are acting as representatives (in such capacity, the "Representatives"), with respect to (i) the sale by the Company and the purchase by the Underwriters, acting severally and not jointly, of the respective numbers of shares of Common Stock, par value $0.0001 per share, of the Company ("Common Stock") set forth in Schedule A hereto and (ii) the grant by the Company to the Underwriters, acting severally and not jointly, of the option described in Section 2(b) hereof to purchase all or any part of [●] additional shares of Common Stock. The aforesaid [●] shares of Common Stock (the "Initial Securities") to be purchased by the Underwriters and all or any part of the [●] shares of Common Stock subject to the option described in Section 2(b) hereof (the "Option Securities") are herein called, collectively, the "Securities."

The Company understands that the Underwriters propose to make a public offering of the Securities as soon as the Representatives deem advisable after this Agreement has been executed and delivered.

The Company has filed with the Securities and Exchange Commission (the "Commission") a registration statement on Form S-1 (No. 333-222373), including the related preliminary prospectus or prospectuses, covering the registration of the sale of the Securities under the Securities Act of 1933, as amended (the "1933 Act"). Promptly after execution and delivery of this Agreement, the Company will

prepare and file a prospectus in accordance with the provisions of Rule 430A ("Rule 430A") of the rules and regulations of the Commission under the 1933 Act (the "1933 Act Regulations") and Rule 424(b) ("Rule 424(b)") of the 1933 Act Regulations. The information included in such prospectus that was omitted from such registration statement at the time it became effective but that is deemed to be part of such registration statement at the time it became effective pursuant to Rule 430A(b) is herein called the "Rule 430A Information." Such registration statement, including the amendments thereto, the exhibits thereto and any schedules thereto, at the time it became effective, and including the Rule 430A Information, is herein called the "Registration Statement." Any registration statement filed pursuant to Rule 462(b) of the 1933 Act Regulations is herein called the "Rule 462(b) Registration Statement" and, after such filing, the term "Registration Statement" shall include the Rule 462(b) Registration Statement. Each prospectus used prior to the effectiveness of the Registration Statement, and each prospectus that omitted the Rule 430A Information that was used after such effectiveness and prior to the execution and delivery of this Agreement, is herein called a "preliminary prospectus." The final prospectus, in the form first furnished to the Underwriters for use in connection with the offering of the Securities, is herein called the "Prospectus." For purposes of this Agreement, all references to the Registration Statement, any preliminary prospectus, the Prospectus or any amendment or supplement to any of the foregoing shall be deemed to include the copy filed with the Commission pursuant to its Electronic Data Gathering, Analysis and Retrieval system or any successor system ("EDGAR").

As used in this Agreement:

"Applicable Time" means [:00 P./A.M.], New York City time, on [●], 2018 or such other time as agreed by the Company and the Representatives.

"General Disclosure Package" means any Issuer General Use Free Writing Prospectuses issued at or prior to the Applicable Time, the most recent preliminary prospectus that is distributed to investors prior to the Applicable Time and the information included on Schedule B-1 hereto, all considered together.

"Issuer Free Writing Prospectus" means any "issuer free writing prospectus," as defined in Rule 433 of the 1933 Act Regulations ("Rule 433"), including without limitation any "free writing prospectus" (as defined in Rule 405 of the 1933 Act Regulations ("Rule 405")) relating to the Securities that is (i) required to be filed with the Commission by the Company, (ii) a "road show that is a written communication" within the meaning of Rule 433(d)(8)(i), whether or not required to be filed with the Commission, or (iii) exempt from filing with the Commission pursuant to Rule 433(d)(5)(i) because it contains a description of the Securities or of the offering that does not reflect the final terms, in each case in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company's records pursuant to Rule 433(g).

"Issuer General Use Free Writing Prospectus" means any Issuer Free Writing Prospectus that is intended for general distribution to prospective investors (other than a "*bona fide* electronic road show," as defined in Rule 433 (the "Bona Fide Electronic Road Show")), as evidenced by its being specified in Schedule B-2 hereto.

"Issuer Limited Use Free Writing Prospectus" means any Issuer Free Writing Prospectus that is not an Issuer General Use Free Writing Prospectus.

"Testing-the-Waters Communication" means any oral or written communication with potential investors undertaken in reliance on Section 5(d) of the 1933 Act.

"Written Testing-the-Waters Communication" means any Testing-the-Waters Communication that is a written communication within the meaning of Rule 405 under the 1933 Act.

SECTION 1. Representations and Warranties.

(a) *Representations and Warranties by the Company*. The Company represents and warrants to each Underwriter as of the date hereof, the Applicable Time, the Closing Time (as defined below) and any Date of Delivery (as defined below), and agrees with each Underwriter, as follows:

(i) Registration Statement and Prospectuses. Each of the Registration Statement and any post-effective amendment thereto has become effective under the 1933 Act. No stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto has been issued under the 1933 Act, no order preventing or suspending the use of any preliminary prospectus or the Prospectus has been issued and no proceedings for any of those purposes have been instituted or are pending or, to the Company's knowledge, threatened by the Commission. The Company has complied with each request (if any) from the Commission for additional information.

Each of the Registration Statement and any post-effective amendment thereto, at the time it became effective, complied in all material respects with the requirements of the 1933 Act and the 1933 Act Regulations. Each preliminary prospectus, the Prospectus and any amendment or supplement thereto, at the time each was filed with the Commission, complied in all material respects with the requirements of the 1933 Act and the 1933 Act Regulations. Each preliminary prospectus delivered to the Underwriters for use in connection with this offering and the Prospectus was or will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

(ii) Accurate Disclosure. Neither the Registration Statement nor any amendment thereto, at its effective time, at the Closing Time or at any Date of Delivery, contained, contains or will contain an untrue statement of a material fact or omitted, omits or will omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. As of the Applicable Time, none of (A) the General Disclosure Package, (B) any individual Issuer Limited Use Free Writing Prospectus, when considered together with the General Disclosure Package, and (C) any individual Written Testing-the-Waters Communication, when considered together with the General Disclosure Package, included, includes or will include an untrue statement of a material fact or omitted, omits or will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. Neither the Prospectus nor any amendment or supplement thereto, as of its issue date, at the time of any filing with the Commission pursuant to Rule 424(b), at the Closing Time or at any Date of Delivery, included, includes or will include an untrue statement of a material fact or omitted, omits or will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.

The representations and warranties in this subsection shall not apply to statements in or omissions from the Registration Statement (or any amendment thereto), the General Disclosure Package or the Prospectus (or any amendment or supplement thereto) made in reliance upon and in conformity with written information furnished to the Company by any Underwriter through the Representatives expressly for use therein. For purposes of this Agreement, the only information so furnished shall be the information in the first paragraph under the heading "Underwriting–Commissions

and Discounts," the information in the second, third and fourth paragraphs under the heading "Underwriting–Price Stabilization, Short Positions and Penalty Bids" and the information under the heading "Underwriting–Electronic Offer, Sale and Distribution of Shares" in each case contained in the Prospectus (collectively, the "Underwriter Information").

(iii) Issuer Free Writing Prospectuses. No Issuer Free Writing Prospectus conflicts or will conflict with the information contained in the Registration Statement or the Prospectus, and any preliminary or other prospectus deemed to be a part thereof that has not been superseded or modified. The Company has made available a Bona Fide Electronic Road Show in compliance with Rule 433(d)(8)(ii) such that no filing of any "road show" (as defined in Rule 433(h)) is required in connection with the offering of the Securities.

(iv) Testing-the-Waters Materials. The Company (A) has not engaged in any Testing-the-Waters Communication other than Testing-the-Waters Communications with the consent of the Representatives with entities that it has reasonable basis to believe are qualified institutional buyers within the meaning of Rule 144A under the 1933 Act or institutions that are accredited investors within the meaning of Rule 501 under the 1933 Act and (B) has not authorized anyone other than the Representatives to engage in Testing-the-Waters Communications. The Company reconfirms that the Representatives have been authorized to act on its behalf in undertaking Testing-the-Waters Communications. The Company has not distributed any Written Testing-the-Waters Communications other than those listed on Schedule B-3 hereto.

(v) Company Not Ineligible Issuer. At the time of filing the Registration Statement and any post-effective amendment thereto, at the earliest time thereafter that the Company or another offering participant made a *bona fide* offer (within the meaning of Rule 164(h)(2) of the 1933 Act Regulations) of the Securities and at the date hereof, the Company was not and is not an "ineligible issuer," as defined in Rule 405, without taking account of any determination by the Commission pursuant to Rule 405 that it is not necessary that the Company be considered an ineligible issuer.

(vi) Emerging Growth Company Status. From the time of the initial confidential submission of the Registration Statement to the Commission (or, if earlier, the first date on which the Company engaged directly or through any Person authorized to act on its behalf in any Testing-the-Waters Communication) through the date hereof, the Company has been and is an "emerging growth company," as defined in Section 2(a) of the 1933 Act (an "Emerging Growth Company").

(vii) Independent Accountants. The accountants who certified the financial statements and supporting schedules included in the Registration Statement, the General Disclosure Package and the Prospectus are independent public accountants with respect to the Company as required by the 1933 Act, the 1933 Act Regulations and the Public Company Accounting Oversight Board.

(viii) Financial Statements. The financial statements included in the Registration Statement, the General Disclosure Package and the Prospectus, together with the related schedules and notes, present fairly, in all material respects, the financial position of the Company at the dates indicated and the statements of operations, stockholders' equity and cash flows of the Company for the periods specified; said financial statements have been prepared in conformity with U.S. generally accepted accounting principles ("GAAP") applied on a consistent basis throughout the periods involved except, in the case of unaudited financial statements, subject to normal year-end audit adjustments and the exclusion of certain footnotes as permitted by the

applicable rules of the Commission. The supporting schedules, if any, present fairly, in all material respects, in accordance with GAAP the information required to be stated therein. The selected financial data and the summary financial information included in the Registration Statement, the General Disclosure Package and the Prospectus present fairly, in all material respects, the information shown therein and have been compiled on a basis consistent with that of the audited financial statements included therein. Except as included therein, no historical or pro forma financial statements or supporting schedules are required to be included or incorporated by reference in the Registration Statement, the General Disclosure Package or the Prospectus under the 1933 Act or the 1933 Act Regulations.

(ix) No Material Adverse Change in Business. Except as otherwise stated therein, since the respective dates as of which information is given in the Registration Statement, the General Disclosure Package or the Prospectus, (A) there has been no material adverse change in the condition, financial or otherwise, or in the earnings, business operations or business prospects of the Company and its subsidiaries considered as one enterprise, whether or not arising in the ordinary course of business (a "Material Adverse Effect"), (B) there have been no transactions entered into by the Company or any of its subsidiaries, other than those in the ordinary course of business, which are material with respect to the Company and its subsidiaries considered as one enterprise, and (C) there has been no dividend or distribution of any kind declared, paid or made by the Company on any class of its capital stock.

(x) Good Standing of the Company. The Company has been duly organized and is validly existing as a corporation in good standing under the laws of the State of Delaware and has corporate power and authority to own, lease and operate its properties and to conduct its business as described in the Registration Statement, the General Disclosure Package and the Prospectus and to enter into and perform its obligations under this Agreement; and the Company is duly qualified as a foreign corporation to transact business and is in good standing in each other jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure so to qualify or to be in good standing would not result in a Material Adverse Effect.

(xi) Good Standing of Subsidiaries. Each "significant subsidiary" of the Company (as such term is defined in Rule 1-02 of Regulation S-X) (each, a "Subsidiary" and, collectively, the "Subsidiaries") has been duly organized and is validly existing in good standing under the laws of the jurisdiction of its incorporation or organization, has corporate or similar power and authority to own, lease and operate its properties and to conduct its business as described in the Registration Statement, the General Disclosure Package and the Prospectus and is duly qualified to transact business and is in good standing in each jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure to so qualify or to be in good standing would not result in a Material Adverse Effect. Except as otherwise disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, all of the issued and outstanding capital stock of each Subsidiary has been duly authorized and validly issued, is fully paid and non-assessable and is owned by the Company, directly or through subsidiaries, free and clear of any security interest, mortgage, pledge, lien, encumbrance, claim or equity. None of the outstanding shares of capital stock of any Subsidiary were issued in violation of the preemptive or similar rights of any securityholder of such Subsidiary. The only subsidiaries of the Company are the subsidiaries listed on Exhibit 21 to the Registration Statement.

(xii) Capitalization. The authorized, issued and outstanding shares of capital stock of the Company are as set forth in the Registration Statement, the General Disclosure Package and

the Prospectus in the column entitled "Actual" under the caption "Capitalization" (except for subsequent issuances, if any, pursuant to this Agreement, pursuant to reservations, agreements or employee benefit plans referred to in the Registration Statement, the General Disclosure Package and the Prospectus or pursuant to the exercise of convertible securities or options referred to in the Registration Statement, the General Disclosure Package and the Prospectus). The outstanding shares of capital stock of the Company have been duly authorized and validly issued and are fully paid and non-assessable. None of the outstanding shares of capital stock of the Company were issued in violation of the preemptive or other similar rights of any securityholder of the Company.

(xiii) Authorization of Agreement. This Agreement has been duly authorized, executed and delivered by the Company.

(xiv) Authorization and Description of Securities. The Securities to be purchased by the Underwriters from the Company have been duly authorized for issuance and sale to the Underwriters pursuant to this Agreement and, when issued and delivered by the Company pursuant to this Agreement against payment of the consideration set forth herein, will be validly issued and fully paid and non-assessable; and the issuance of the Securities is not subject to the preemptive or other similar rights of any securityholder of the Company that have not been duly and validly waived in writing as of the date of this Agreement. The Common Stock conforms in all material respects to all statements relating thereto contained in the Registration Statement, the General Disclosure Package and the Prospectus and such description conforms, in all material respects, to the rights set forth in the instruments defining the same. No holder of Securities will be subject to personal liability by reason of being such a holder.

(xv) Registration Rights. There are no persons with registration rights or other similar rights to have any securities registered for sale pursuant to the Registration Statement or otherwise registered for sale or sold by the Company under the 1933 Act pursuant to this Agreement, other than those rights that have been disclosed in the Registration Statement, the General Disclosure Package and the Prospectus and have been waived.

(xvi) Absence of Violations, Defaults and Conflicts. Neither the Company nor any of its subsidiaries is (A) in violation of its charter, by-laws or similar organizational document, (B) in default in the performance or observance of any obligation, agreement, covenant or condition contained in any contract, indenture, mortgage, deed of trust, loan or credit agreement, note, lease or other agreement or instrument to which the Company or any of its subsidiaries is a party or by which it or any of them may be bound or to which any of the properties or assets of the Company or any subsidiary is subject (collectively, "Agreements and Instruments"), except for such defaults that would not, singly or in the aggregate, result in a Material Adverse Effect, or (C) in violation of any law, statute, rule, regulation, judgment, order, writ or decree of any arbitrator, court, governmental body, regulatory body, administrative agency or other authority, body or agency having jurisdiction over the Company or any of its subsidiaries or any of their respective properties, assets or operations (each, a "Governmental Entity"), except for such violations that would not, singly or in the aggregate, result in a Material Adverse Effect. The execution, delivery and performance of this Agreement and the consummation of the transactions contemplated herein and in the Registration Statement, the General Disclosure Package and the Prospectus (including the issuance and sale of the Securities and the use of the proceeds from the sale of the Securities as described therein under the caption "Use of Proceeds") and compliance by the Company with its obligations hereunder have been duly authorized by all necessary corporate action and do not and will not, whether with or without the giving of notice or passage of time or both, conflict with or constitute a breach of, or default or Repayment Event (as defined below) under, or result in the creation or imposition of any lien, charge or encumbrance upon any

properties or assets of the Company or any subsidiary pursuant to, the Agreements and Instruments (except for such conflicts, breaches, defaults or Repayment Events or liens, charges or encumbrances that would not, singly or in the aggregate, result in a Material Adverse Effect), nor will such action result in any violation of the provisions of the charter, by-laws or similar organizational document of the Company or any of its subsidiaries or, except as would not result in a Material Adverse Effect, any law, statute, rule, regulation, judgment, order, writ or decree of any Governmental Entity. As used herein, a "Repayment Event" means any event or condition which gives the holder of any note, debenture or other evidence of indebtedness (or any person acting on such holder's behalf) the right to require the repurchase, redemption or repayment of all or a portion of such indebtedness by the Company or any of its subsidiaries.

(xvii) Absence of Labor Dispute. No labor dispute with the employees of the Company or any of its subsidiaries exists or, to the knowledge of the Company, is imminent, and the Company is not aware of any existing or imminent labor disturbance by the employees of any of its or any subsidiary's principal suppliers, manufacturers, customers or contractors, which, in either case, would reasonably be expected to result in a Material Adverse Effect.

(xviii) Absence of Proceedings. Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, there is no action, suit, proceeding, inquiry or investigation before or brought by any Governmental Entity now pending or, to the knowledge of the Company, threatened, against or affecting the Company or any of its subsidiaries, which would reasonably be expected to result in a Material Adverse Effect, or which might materially and adversely affect their respective properties or assets or the consummation of the transactions contemplated in this Agreement or the performance by the Company of its obligations hereunder; and the aggregate of all pending legal or governmental proceedings to which the Company or any such subsidiary is a party or of which any of their respective properties or assets is the subject which are not described in the Registration Statement, the General Disclosure Package and the Prospectus, including ordinary routine litigation incidental to the business, would not reasonably be expected to result in a Material Adverse Effect.

(xix) Accuracy of Exhibits. There are no contracts or documents which are required to be described in the Registration Statement, the General Disclosure Package or the Prospectus or to be filed as exhibits to the Registration Statement which have not been so described and filed as required.

(xx) Absence of Further Requirements. No filing with, or authorization, approval, consent, license, order, registration, qualification or decree of, any Governmental Entity is necessary or required for the performance by the Company of its obligations hereunder, in connection with the offering, issuance or sale of the Securities hereunder or the consummation of the transactions contemplated by this Agreement, except such as have been already obtained or as may be required under the 1933 Act, the 1933 Act Regulations, the rules of the Nasdaq Global Market, state securities laws or the rules of Financial Industry Regulatory Authority, Inc. ("FINRA").

(xxi) Possession of Licenses and Permits. The Company and its subsidiaries possess such permits, licenses, approvals, consents and other authorizations (collectively, "Governmental Licenses") issued by the appropriate Governmental Entities necessary to conduct the business now operated by them, including, without limitation, all such Governmental Licenses required by the U.S. Food and Drug Administration ("FDA"), except where the failure so to possess would not, singly or in the aggregate, reasonably be expected result in a Material Adverse Effect. The Company and its subsidiaries are in compliance with the terms and conditions of all

Governmental Licenses, except where the failure so to comply would not, singly or in the aggregate, reasonably be expected to result in a Material Adverse Effect. All of the Governmental Licenses are valid and in full force and effect, except when the invalidity of such Governmental Licenses or the failure of such Governmental Licenses to be in full force and effect would not, singly or in the aggregate, reasonably be expected to result in a Material Adverse Effect. Neither the Company nor any of its subsidiaries has received any notice of proceedings relating to the revocation or modification of any Governmental Licenses which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would reasonably be expected to result in a Material Adverse Effect.

(xxii) Studies, Tests and Trials. The pre-clinical and clinical studies (as applicable) conducted by, on behalf of or sponsored by the Company or its subsidiaries, or in which the Company or its subsidiaries or their product candidates participated, including, to the knowledge of the Company, such studies conducted by Novartis International Pharmaceutical Ltd. or its affiliates ("Novartis"), were and, if still pending are being, conducted in all material respects in accordance with standard medical and scientific research procedures and with all applicable local, state and federal laws, rules and regulations, including, without limitation, the Federal Food, Drug and Cosmetic Act and its applicable implementing regulations at 21 C.F.R. Parts 50, 54, 56, 58 and 312; the descriptions of the results of such studies contained in the Registration Statement, the General Disclosure Package and the Prospectus are accurate and complete in all material respects and fairly present the data derived from such studies; except to the extent disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, the Company is not aware of any studies, the results of which are inconsistent with or otherwise call into question the study results described or referred to in the Registration Statement, the General Disclosure Package or the Prospectus; and neither the FDA nor any applicable foreign regulatory agency has commenced, or, to the knowledge of the Company, threatened to initiate, any action to place a hold order on, or otherwise terminate, delay or suspend, any proposed or ongoing pre-clinical studies or clinical investigations conducted or proposed to be conducted by or on behalf of the Company.

(xxiii) Health Care Laws. The Company and each of its subsidiaries has operated and currently is in compliance in all material respects with all applicable Health Care Laws (defined herein), including, without limitation, the rules and regulations of the FDA, the U.S. Department of Health and Human Services Office of Inspector General, the Centers for Medicare & Medicaid Services, the Office for Civil Rights, the Department of Justice or any other governmental agency or body having jurisdiction over the Company or any of its properties, and has not engaged in activities which are, as applicable, cause for false claims liability, civil penalties, or mandatory or permissive exclusion from Medicare, Medicaid, or any other state or federal health care program. For purposes of this Agreement, "Health Care Laws" shall mean the federal Anti-kickback Statute (42 U.S.C. § 1320a-7b(b)), the Physician Payment Sunshine Act (42 U.S.C. § 1320a-7h), the civil False Claims Act (31 U.S.C. §§ 3729 et seq.), the criminal False Claims Act (42 U.S.C. § 1320a-7b(a)), all criminal laws relating to health care fraud and abuse, including but not limited to 18 U.S.C. Sections 286 and 287, and the health care fraud criminal provisions under the Health Insurance Portability and Accountability Act of 1996 (42 U.S.C. § 1320d et seq.) ("HIPAA"), the exclusion laws (42 U.S.C. § 1320a-7), the civil monetary penalties law (42 U.S.C. § 1320a-7a), HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act (42 U.S.C. §§ 17921 et seq.), the patient privacy, data security and breach notification provisions under HIPAA, the Federal Food, Drug, and Cosmetic Act (21 U.S.C. §§ 301 et seq.), Medicare (Title XVIII of the Social Security Act), Medicaid (Title XIX of the Social Security Act), the regulations promulgated pursuant to such laws, and any other similar local, state or federal law and regulations. The Company has not received any FDA Form 483, notice of adverse

finding, warning letter, untitled letter or other correspondence, communication or notice from the FDA or any other governmental or regulatory authority alleging or asserting noncompliance with any Health Care Laws applicable to the Company. The Company is not a party to nor has any ongoing reporting obligations pursuant to any corporate integrity agreements, deferred prosecution agreements, monitoring agreements, consent decrees, settlement orders, plans of correction or similar agreements with or imposed by any governmental or regulatory authority. Neither the Company, its subsidiaries nor any of their respective employees, officers, directors or, to the Company's knowledge, consultants has been excluded, suspended or debarred from participation in any U.S. state or federal health care program or human clinical research or, to the Company's knowledge, is subject to a governmental inquiry, investigation, proceeding, or other similar action that could reasonably be expected to result in debarment, suspension, or exclusion.

(xxiv) Title to Property. The Company and its subsidiaries do not own any real property and have good title to all other properties owned by them, free and clear of all mortgages, pledges, liens, security interests, claims, restrictions or encumbrances of any kind except such as (A) are described in the Registration Statement, the General Disclosure Package and the Prospectus or (B) would not, singly or in the aggregate, materially affect the value of such property and do not interfere with the use made and proposed to be made of such property by the Company or any of its subsidiaries; and all of the leases and subleases material to the business of the Company and its subsidiaries and under which the Company or any of its subsidiaries holds properties described in the Registration Statement, the General Disclosure Package or the Prospectus, are in full force and effect, and neither the Company nor any such subsidiary has received any notice of any material claim of any sort that has been asserted by anyone adverse to the rights of the Company or any subsidiary under any of the leases or subleases mentioned above, or affecting or questioning the rights of the Company or such subsidiary to the continued possession of the leased or subleased premises under any such lease or sublease.

(xxv) Possession of Intellectual Property. Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, the Company and its subsidiaries own or possess, or can acquire on reasonable terms, adequate patents, patent rights, licenses, approvals, inventions, copyrights, domain names, technology, trade secrets, know-how (including unpatented and/or unpatentable proprietary or confidential information, systems or procedures), trademarks, service marks, trade names or other intellectual property and similar rights, including registrations and applications for registration thereof (collectively, "Intellectual Property Rights") necessary or material to the conduct of the business now conducted or proposed in the Registration Statement, the General Disclosure Package and the Prospectus to be conducted by them, and the failure to own, possess or acquire such Intellectual Property Rights and the expected expiration of any such Intellectual Property Rights would not, individually or in the aggregate, have a Material Adverse Effect. To the Company's knowledge, none of the patents and patent applications owned or licensed by the Company or its subsidiaries are invalid or unenforceable, in whole or in part. To the Company's knowledge, none of the Intellectual Property Rights owned or licensed by the Company or its subsidiaries, other than patents and patent applications, are invalid or unenforceable, in whole or in part. To the knowledge of the Company, there are no unreleased liens or security interests which have been filed against any of the Intellectual Property Rights owned or licensed by the Company. Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, (i) the Company is not obligated to pay a material royalty, grant a license or provide other material consideration to any third party in connection with the Intellectual Property Rights owned by or licensed to the Company; (ii) to the Company's knowledge, there are no rights of third parties to any of the Intellectual Property Rights owned by or licensed to the Company or its subsidiaries, in any field of use, other than the respective licensor to the Company of such Intellectual Property Rights;

(iii) to the Company's knowledge, there is no material infringement, misappropriation breach, default or other violation, or the occurrence of any event that with notice or the passage of time would constitute any of the foregoing, by the Company or its subsidiaries of any third party Intellectual Property Rights or third parties of any of the Intellectual Property Rights of the Company or its subsidiaries; (iv) there is no pending or, to the Company's knowledge, threatened action, suit, proceeding or claim by others against the Company or its subsidiaries or, to the Company's knowledge against any person or entity, (a) challenging the Company's or any of its subsidiary's rights in or to, or the violation of any of the terms of, any of their Intellectual Property Rights; (b) challenging the validity, enforceability or scope of any such Intellectual Property Rights; or (c) that alleges the Company or any of its subsidiaries infringes, misappropriates or otherwise violates or conflicts with any Intellectual Property Rights or other proprietary rights of others, and, in each case, the Company is unaware of any facts which would form a reasonable basis for any such claim; (v) none of the Intellectual Property Rights owned by or licensed to the Company or its subsidiaries in their businesses has been obtained or is being used by the Company or its subsidiaries in violation of any contractual obligation binding on the Company or any of its subsidiaries in violation of the rights of any persons; and (vi) to the Company's knowledge, no employee or consultant of the Company or any of its subsidiaries is in or has ever been in violation of any term of any employment or consulting contract, patent disclosure agreement, invention assignment agreement, non-competition agreement, non-solicitation agreement, nondisclosure agreement or any restrictive covenant to or with a former employer or consultant where the basis of such violation relates to such employee's employment with or such consultant's services to the Company or any of its subsidiaries or actions undertaken by the employee or consultant while employed with or providing services to the Company or any of its subsidiaries. To the knowledge of the Company and as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, (1) neither the commercial development nor the sale of any of the proposed products or processes of the Company, as described in the Registration Statement, the General Disclosure Package and the Prospectus, infringes, misappropriates or otherwise violates, or would, upon the commercialization of such proposed products or processes, infringe, misappropriate or otherwise violate, any Intellectual Property Rights of any third party; and (2) each current and former employee and consultant of the Company (a) has executed an inventions assignment and confidentiality agreement with the Company, on or about the respective date of hire, and signed copies of such agreements have been made available to the Representatives and their counsel; and (b) has signed or agreed to assign to the Company any and all Intellectual Property Rights he or she may possess or may have possessed that are related to the Company's business, as currently conducted and as proposed to be conducted, as described in the Registration Statement, the General Disclosure Package and the Prospectus. All patents and patent applications owned by or licensed to the Company or under which the Company has rights have, to the knowledge of the Company, been duly and properly filed and maintained; to the knowledge of the Company, the parties prosecuting such applications have complied with their duty of candor and disclosure to the U.S. Patent and Trademark Office (the "USPTO") and any similar office or agency in the world in connection with such applications; and the Company is not aware of any facts required to be disclosed to the USPTO or similar office or agency that were not disclosed and which would preclude the grant of a patent in connection with any such application or could form the basis of a finding of invalidity with respect to any patents that have issued with respect to such applications.

(xxvi) Environmental Laws. Except as described in the Registration Statement, the General Disclosure Package and the Prospectus or would not, singly or in the aggregate, reasonably be expected to result in a Material Adverse Effect, (A) neither the Company nor any of its subsidiaries is in violation of any applicable federal, state, local or foreign statute, law, rule, regulation, ordinance, code, policy or rule of common law or any judicial or administrative

interpretation thereof, including any judicial or administrative order, consent, decree or judgment, relating to pollution or protection of human health, the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata) or wildlife, including, without limitation, laws and regulations relating to the release or threatened release of chemicals, pollutants, contaminants, wastes, toxic substances, hazardous substances, petroleum or petroleum products, asbestos-containing materials or mold (collectively, "Hazardous Materials") or to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials (collectively, "Environmental Laws"), (B) the Company and its subsidiaries have all permits, authorizations and approvals required under any applicable Environmental Laws and are each in compliance with their requirements, (C) there are no pending or, to the Company's knowledge, threatened administrative, regulatory or judicial actions, suits, demands, demand letters, claims, liens, notices of noncompliance or violation, investigations or proceedings relating to any Environmental Law against the Company or any of its subsidiaries and (D) to the Company's knowledge, there are no events or circumstances that would reasonably be expected to form the basis of an order for clean-up or remediation, or an action, suit or proceeding by any private party or Governmental Entity, against or affecting the Company or any of its subsidiaries relating to Hazardous Materials or any Environmental Laws.

(xxvii) Accounting Controls. The Company and each of its subsidiaries maintain effective internal control over financial reporting (as defined under Rule 13-a15 and 15d-15 under the rules and regulations (the "1934 Act Regulations") of the Commission under the Securities Exchange Act of 1934, as amended (the "1934 Act")) and a system of internal accounting controls sufficient to provide reasonable assurances that (A) transactions are executed in accordance with management's general or specific authorization; (B) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain accountability for assets; (C) access to assets is permitted only in accordance with management's general or specific authorization; and (D) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. Except as described in the Registration Statement, the General Disclosure Package and the Prospectus, since the end of the Company's most recent audited fiscal year, there has been (1) no material weakness in the Company's internal control over financial reporting (whether or not remediated) and (2) no change in the Company's internal control over financial reporting that has materially and adversely affected, or is reasonably likely to materially and adversely affect, the Company's internal control over financial reporting.

(xxviii) Compliance with the Sarbanes-Oxley Act. The Company has taken all necessary actions to ensure that, upon the effectiveness of the Registration Statement, it will be in compliance with all provisions of the Sarbanes-Oxley Act of 2002 and all rules and regulations promulgated thereunder or implementing the provisions thereof (the "Sarbanes-Oxley Act") that are then in effect and with which the Company is required to comply as of the effectiveness of the Registration Statement, and is actively taking steps to ensure that it will be in compliance with other provisions of the Sarbanes-Oxley Act not currently in effect, upon the effectiveness of such provisions, or which will become applicable to the Company at all times after the effectiveness of the Registration Statement.

(xxix) Payment of Taxes. All United States federal income tax returns of the Company and its subsidiaries required by law to be filed have been filed and all taxes shown by such returns or otherwise assessed, which are due and payable, have been paid, except assessments against which appeals have been or will be promptly taken and as to which adequate reserves have been provided. The United States federal income tax returns of the Company through the fiscal year ended December 31, 2016 have been settled and no assessment in connection therewith has been

made against the Company. The Company and its subsidiaries have filed all other tax returns that are required to have been filed by them through the date hereof pursuant to applicable foreign, state, local or other law except insofar as the failure to file such returns would not reasonably be expected to result in a Material Adverse Effect, and has paid all taxes due pursuant to such returns or pursuant to any assessment received by the Company and its subsidiaries, except for such taxes, if any, as are being contested in good faith and as to which adequate reserves have been established by the Company. The charges, accruals and reserves on the books of the Company in respect of any income and corporation tax liability for any years not finally determined are adequate to meet any assessments or re-assessments for additional income tax for any years not finally determined, except to the extent of any inadequacy that would not reasonably be expected to result in a Material Adverse Effect.

(xxx) Insurance. The Company and its subsidiaries carry or are entitled to the benefits of insurance, with financially sound and reputable insurers, in such amounts and covering such risks as is generally maintained by companies of established repute and comparable size engaged in the same or similar business, and all such insurance is in full force and effect. The Company has no reason to believe that it or any of its subsidiaries will not be able (A) to renew its existing insurance coverage as and when such policies expire or (B) to obtain comparable coverage from similar institutions as may be necessary or appropriate to conduct its business as now conducted and at a cost that would not reasonably be expected to result in a Material Adverse Effect. Neither of the Company nor any of its subsidiaries has been denied any insurance coverage which it has sought or for which it has applied.

(xxxi) Investment Company Act. The Company is not required, and upon the issuance and sale of the Securities as herein contemplated and the application of the net proceeds therefrom as described in the Registration Statement, the General Disclosure Package and the Prospectus will not be required, to register as an "investment company" under the Investment Company Act of 1940, as amended (the "1940 Act").

(xxxii) Absence of Manipulation. Neither the Company nor, to the knowledge of the Company, any affiliate of the Company has taken, nor will the Company or any affiliate take, directly or indirectly, any action which is designed, or would reasonably be expected, to cause or result in, or which constitutes, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Securities or to result in a violation of Regulation M under the 1934 Act.

(xxxiii) Foreign Corrupt Practices Act. None of the Company, any of its subsidiaries or, to the knowledge of the Company, any director, officer, agent, employee, affiliate or other person acting on behalf of the Company or any of its subsidiaries is aware of or has taken any action, directly or indirectly, that would result in a violation by such persons of the Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder (the "FCPA"), including, without limitation, making use of the mails or any means or instrumentality of interstate commerce corruptly in furtherance of an offer, payment, promise to pay or authorization of the payment of any money, or other property, gift, promise to give, or authorization of the giving of anything of value to any "foreign official" (as such term is defined in the FCPA) or any foreign political party or official thereof or any candidate for foreign political office, in contravention of the FCPA and the Company and, to the knowledge of the Company, its affiliates have conducted their businesses in compliance with the FCPA and have instituted and maintain policies and procedures designed to ensure, and which are reasonably expected to continue to ensure, continued compliance therewith.

(xxxiv) Money Laundering Laws. The operations of the Company and its subsidiaries are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the money laundering statutes of all jurisdictions, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any Governmental Entity (collectively, the "Money Laundering Laws"); and no action, suit or proceeding by or before any Governmental Entity involving the Company or any of its subsidiaries with respect to the Money Laundering Laws is pending or, to the knowledge of the Company, threatened.

(xxxv) OFAC. None of the Company, any of its subsidiaries or, to the knowledge of the Company, any director, officer, agent, employee, affiliate or representative of the Company or any of its subsidiaries is an individual or entity ("Person") currently the subject or target of any sanctions administered or enforced by the United States Government, including, without limitation, the U.S. Department of the Treasury's Office of Foreign Assets Control ("OFAC"), the United Nations Security Council ("UNSC"), the European Union, Her Majesty's Treasury ("HMT"), or other relevant sanctions authority (collectively, "Sanctions"), nor is the Company located, organized or resident in a country or territory that is the subject of Sanctions; and the Company will not directly or indirectly use the proceeds of the sale of the Securities, or lend, contribute or otherwise make available such proceeds to any subsidiaries, joint venture partners or other Person, to fund any activities of or business with any Person, or in any country or territory, that, at the time of such funding, is the subject of Sanctions or in any other manner that will result in a violation by any Person (including any Person participating in the transaction, whether as underwriter, advisor, investor or otherwise) of Sanctions.

(xxxvi) Lending Relationship. Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, the Company (i) does not have any material lending or other relationship with any bank or lending affiliate of any Underwriter and (ii) does not intend to use any of the proceeds from the sale of the Securities to repay any outstanding debt owed to any affiliate of any Underwriter.

(xxxvii) No Rated Securities. Neither the Company nor its subsidiaries have any debt securities or preferred stock that are rated by any "nationally recognized statistical rating agency" (as defined in Section 3(a)(62) of the 1934 Act).

(xxxviii) Statistical and Market-Related Data. Any statistical and market-related data included in the Registration Statement, the General Disclosure Package or the Prospectus are based on or derived from sources that the Company believes, after reasonable inquiry, to be reliable and accurate and, to the extent required, the Company has obtained the written consent to the use of such data from such sources.

(b) *Officer's Certificates*. Any certificate signed by any officer of the Company or any of its subsidiaries delivered to the Representatives or to counsel for the Underwriters shall be deemed a representation and warranty by the Company (and not by such officer in his or her personal capacity) to each Underwriter as to the matters covered thereby.

SECTION 2. Sale and Delivery to Underwriters; Closing.

(a) *Initial Securities*. On the basis of the representations and warranties herein contained and subject to the terms and conditions herein set forth, the Company agrees to sell to each Underwriter, severally and not jointly, and each Underwriter, severally and not jointly, agrees to purchase from the

Company, at the price per share set forth in Schedule A, that number of Initial Securities set forth in Schedule A opposite the name of such Underwriter, plus any additional number of Initial Securities which such Underwriter may become obligated to purchase pursuant to the provisions of Section 10 hereof, subject, in each case, to such adjustments among the Underwriters as the Representatives in their sole discretion shall make to eliminate any sales or purchases of fractional shares.

(b) *Option Securities*. In addition, on the basis of the representations and warranties herein contained and subject to the terms and conditions herein set forth, the Company hereby grant(s) an option to the Underwriters, severally and not jointly, to purchase up to an additional [●] shares of Common Stock, at the price per share set forth in Schedule A, less an amount per share equal to any dividends or distributions declared by the Company and payable on the Initial Securities but not payable on the Option Securities. The option hereby granted may be exercised for 30 days after the date hereof and may be exercised in whole or in part at any time from time to time upon notice by the Representatives to the Company setting forth the number of Option Securities as to which the several Underwriters are then exercising the option and the time and date of payment and delivery for such Option Securities. Any such time and date of delivery (a "Date of Delivery") shall be determined by the Representatives, but shall not be later than seven full business days after the exercise of said option, nor in any event prior to the Closing Time. If the option is exercised as to all or any portion of the Option Securities, each of the Underwriters, acting severally and not jointly, will purchase that proportion of the total number of Option Securities then being purchased which the number of Initial Securities set forth in Schedule A opposite the name of such Underwriter bears to the total number of Initial Securities, subject, in each case, to such adjustments as the Representatives in their sole discretion shall make to eliminate any sales or purchases of fractional shares.

(c) *Payment*. Payment of the purchase price for, and delivery of certificates or security entitlements for, the Initial Securities shall be made at the offices of Latham & Watkins LLP, 27th Floor, 200 Clarendon Street, Boston, Massachusetts 02116, or at such other place as shall be agreed upon by the Representatives and the Company, at 9:00 A.M. (New York City time) on the second (third, if the pricing occurs after 4:30 P.M. (New York City time) on any given day) business day after the date hereof (unless postponed in accordance with the provisions of Section 10), or such other time not later than ten business days after such date as shall be agreed upon by the Representatives and the Company (such time and date of payment and delivery being herein called "Closing Time"). Delivery of the Initial Securities at the Closing Time shall be made through the facilities of the Depository Trust Company unless the Representatives shall otherwise instruct.

(d) In addition, in the event that any or all of the Option Securities are purchased by the Underwriters, payment of the purchase price for, and delivery of certificates or security entitlements for, such Option Securities shall be made at the above-mentioned offices, or at such other place as shall be agreed upon by the Representatives and the Company, on each Date of Delivery as specified in the notice from the Representatives to the Company. Delivery of the Option Securities at the Date of Delivery shall be made through the facilities of the Depository Trust Company unless the Representative shall otherwise instruct.

Payment shall be made to the Company by wire transfer of immediately available funds to a bank account designated by the Company against delivery to the Representatives for the respective accounts of the Underwriters of certificates or security entitlements for the Securities to be purchased by them. It is understood that each Underwriter has authorized the Representatives, for their account, to accept delivery of, receipt for, and make payment of the purchase price for, the Initial Securities and the Option Securities, if any, which it has agreed to purchase. Merrill Lynch and Leerink, individually and not as representatives of the Underwriters, may (but shall not be obligated to) make payment of the purchase price for the Initial Securities or the Option Securities, if any, to be purchased by any Underwriter whose funds have not been received by the Closing Time or the relevant Date of Delivery, as the case may be, but such payment shall not relieve such Underwriter from its obligations hereunder.

SECTION 3. Covenants of the Company. The Company covenants with each Underwriter as follows:

(a) *Compliance with Securities Regulations and Commission Requests*. The Company, subject to Section 3(b), will comply with the requirements of Rule 430A, and will notify the Representatives as soon as practicable, and confirm the notice in writing, (i) when any post-effective amendment to the Registration Statement shall become effective or any amendment or supplement to the Prospectus shall have been filed, (ii) of the receipt of any comments from the Commission, (iii) of any request by the Commission for any amendment to the Registration Statement or any amendment or supplement to the Prospectus or for additional information, (iv) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or any post-effective amendment or of any order preventing or suspending the use of any preliminary prospectus or the Prospectus, or of the suspension of the qualification of the Securities for offering or sale in any jurisdiction, or of the initiation or threatening of any proceedings for any of such purposes or of any examination pursuant to Section 8(d) or 8(e) of the 1933 Act concerning the Registration Statement and (v) if the Company becomes the subject of a proceeding under Section 8A of the 1933 Act in connection with the offering of the Securities. The Company will effect all filings required under Rule 424(b), in the manner and within the time period required by Rule 424(b) (without reliance on Rule 424(b)(8)), and will take such steps as it deems reasonably necessary to ascertain promptly whether the form of prospectus transmitted for filing under Rule 424(b) was received for filing by the Commission and, in the event that it was not, it will promptly file such prospectus. The Company will use reasonable best efforts to prevent the issuance of any stop order, prevention or suspension and, if any such order is issued, to obtain the lifting thereof as soon as practicable.

(b) *Continued Compliance with Securities Laws*. The Company will comply with the 1933 Act and the 1933 Act Regulations so as to permit the completion of the distribution of the Securities as contemplated in this Agreement and in the Registration Statement, the General Disclosure Package and the Prospectus. If at any time when a prospectus relating to the Securities is (or, but for the exception afforded by Rule 172 of the 1933 Act Regulations ("Rule 172"), would be) required by the 1933 Act to be delivered in connection with sales of the Securities, any event shall occur or condition shall exist as a result of which it is necessary, in the opinion of counsel for the Underwriters or for the Company, to (i) amend the Registration Statement in order that the Registration Statement will not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading, (ii) amend or supplement the General Disclosure Package or the Prospectus in order that the General Disclosure Package or the Prospectus, as the case may be, will not include any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein not misleading in the light of the circumstances existing at the time it is delivered to a purchaser or (iii) amend the Registration Statement or amend or supplement the General Disclosure Package or the Prospectus, as the case may be, in order to comply with the requirements of the 1933 Act or the 1933 Act Regulations, the Company will promptly (A) give the Representatives notice of such event, (B) prepare any amendment or supplement as may be necessary to correct such statement or omission or to make the Registration Statement, the General Disclosure Package or the Prospectus comply with such requirements and, a reasonable amount of time prior to any proposed filing or use, furnish the Representatives with copies of any such amendment or supplement and (C) file with the Commission any such amendment or supplement; provided that the Company shall not file or use any such amendment or supplement to which the Representatives or counsel for the Underwriters shall reasonably object. The Company will furnish to the Underwriters such number of copies of such amendment or supplement as the Underwriters may reasonably request. The Company has given the

Representatives notice of any filings made pursuant to the 1934 Act or 1934 Act Regulations within 48 hours prior to the Applicable Time; the Company will give the Representatives notice of its intention to make any such filing from the Applicable Time to the Closing Time and will furnish the Representatives with copies of any such documents a reasonable amount of time prior to such proposed filing, as the case may be, and will not file or use any such document to which the Representatives or counsel for the Underwriters shall reasonably object.

(c) *Delivery of Registration Statements*. The Company has furnished or will deliver to the Representatives and counsel for the Underwriters, without charge, signed copies of the Registration Statement as originally filed and each amendment thereto (including exhibits filed therewith) and signed copies of all consents and certificates of experts, and will also deliver to the Representatives, without charge, a conformed copy of the Registration Statement as originally filed and each amendment thereto (without exhibits) for each of the Underwriters. The copies of the Registration Statement and each amendment thereto furnished to the Underwriters will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

(d) *Delivery of Prospectuses*. The Company has delivered to each Underwriter, without charge, as many copies of each preliminary prospectus as such Underwriter reasonably requested, and the Company hereby consents to the use of such copies for purposes permitted by the 1933 Act. The Company will furnish to each Underwriter, without charge, during the period when a prospectus relating to the Securities is (or, but for the exception afforded by Rule 172, would be) required to be delivered under the 1933 Act, such number of copies of the Prospectus (as amended or supplemented) as such Underwriter may reasonably request. The Prospectus and any amendments or supplements thereto furnished to the Underwriters will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

(e) *Blue Sky Qualifications*. The Company will use its reasonable best efforts, in cooperation with the Underwriters, to qualify the Securities for offering and sale under the applicable securities laws of such states and other jurisdictions (domestic or foreign) as the Representatives may designate and to maintain such qualifications in effect so long as required to complete the distribution of the Securities; provided, however, that the Company shall not be obligated to file any general consent to service of process or to qualify as a foreign corporation or as a dealer in securities in any jurisdiction in which it is not so qualified or to subject itself to taxation in respect of doing business in any jurisdiction in which it is not otherwise so subject.

(f) *Rule 158*. The Company will timely file such reports pursuant to the 1934 Act as are necessary in order to make generally available to its securityholders as soon as practicable an earnings statement for the purposes of, and to provide to the Underwriters the benefits contemplated by, the last paragraph of Section 11(a) of the 1933 Act.

(g) *Use of Proceeds*. The Company will use the net proceeds received by it from the sale of the Securities in the manner specified in the Registration Statement, the General Disclosure Package and the Prospectus under “Use of Proceeds.”

(h) *Listing*. The Company will use its reasonable best efforts to effect and maintain the listing of the Common Stock (including the Securities) on the Nasdaq Global Market.

(i) *Restriction on Sale of Securities*. During a period of 180 days from the date of the Prospectus, the Company will not, without the prior written consent of the Representatives, (i) directly or indirectly, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise transfer or dispose of any

shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock or file any registration statement under the 1933 Act with respect to any of the foregoing or (ii) enter into any swap or any other agreement or any transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of the Common Stock, whether any such swap or transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or other securities, in cash or otherwise. The foregoing sentence shall not apply to (A) the Securities to be sold hereunder, (B) any shares of Common Stock issued by the Company upon the exercise of an option or warrant, the vesting of a restricted stock unit or the conversion or exchange of a security outstanding on the date hereof and referred to in the Registration Statement, the General Disclosure Package and the Prospectus, (C) any shares of Common Stock or restricted Common Stock issued or restricted stock units or options to purchase Common Stock granted pursuant to existing employee benefit plans of the Company referred to in the Registration Statement, the General Disclosure Package and the Prospectus or (D) any shares of Common Stock issued pursuant to any non-employee director stock plan or dividend reinvestment plan referred to in the Registration Statement, the General Disclosure Package and the Prospectus, (E) the filing of a registration statement on Form S-8 or any successor form thereto with respect to the registration of securities to be offered under any employee benefit or equity incentive plans of the Company described in the Registration Statement, the General Disclosure Package and the Prospectus, (F) the entry into agreements providing for the issuance by the Company of shares of Common Stock or any security convertible into or exercisable for shares of Common Stock in connection with the acquisition by the Company or any of its subsidiaries of the securities, business, property or other assets of another person or entity pursuant to an employee benefit plan assumed by the Company in connection with such acquisition, and the issuance of any such securities pursuant to any such agreement, and (G) the entry into agreements providing for the issuance of shares of Common Stock or any security convertible into or exercisable for shares of Common Stock in connection with joint ventures, commercial relationships or other strategic transactions, and the issuance of any such securities pursuant to any such agreement; provided that in the case of clauses (F) and (G), the aggregate number of shares of Common Stock that the Company may sell or issue or agree to sell or issue pursuant to clauses (F) and (G) shall not exceed 5% of the total number of shares of the Common Stock issued and outstanding as of immediately prior to the completion of the transactions contemplated by this Agreement, and provided further that, in the case of clauses (B) through (G), the Company shall cause each recipient of such securities to execute and deliver, on or prior to the issuance of such securities, a lock-up agreement on substantially the same terms as the lock-up agreements described in Section 5(l) hereof to the extent and for the duration that such terms remain in effect at the time of the transfer, and (y) the Company shall authorize its transfer agent to decline to make any transfer of such shares in violation of such lock-up agreements.

(j) If the Representatives, in their sole discretion, agrees to release or waive the restrictions set forth in a lock-up agreement described in Section 5(i) hereof for an officer or director of the Company and provides the Company with notice of the impending release or waiver at least three business days before the effective date of the release or waiver, the Company agrees to announce the impending release or waiver by a press release substantially in the form of Exhibit B hereto through a major news service at least two business days before the effective date of the release or waiver.

(k) *Reporting Requirements*. The Company, during the period when a Prospectus relating to the Securities is (or, but for the exception afforded by Rule 172, would be) required to be delivered under the 1933 Act, will file all documents required to be filed with the Commission pursuant to the 1934 Act within the time periods required by the 1934 Act and 1934 Act Regulations. Additionally, the Company shall report the use of proceeds from the issuance of the Securities as may be required under Rule 463 under the 1933 Act.

(l) *Issuer Free Writing Prospectuses*. The Company agrees that, unless it obtains the prior written consent of the Representatives, it will not make any offer relating to the Securities that would

constitute an Issuer Free Writing Prospectus or that would otherwise constitute a "free writing prospectus," or a portion thereof, required to be filed by the Company with the Commission or retained by the Company under Rule 433; provided that the Representatives will be deemed to have consented to the Issuer Free Writing Prospectuses listed on Schedule B-2 hereto and any "road show that is a written communication" within the meaning of Rule 433(d)(8)(i) that has been reviewed by the Representatives. The Company represents that it has treated or agrees that it will treat each such free writing prospectus consented to, or deemed consented to, by the Representatives as an "issuer free writing prospectus," as defined in Rule 433, and that it has complied and will comply with the applicable requirements of Rule 433 with respect thereto, including timely filing with the Commission where required, legending and record keeping. If at any time following issuance of an Issuer Free Writing Prospectus there occurred or occurs an event or development as a result of which such Issuer Free Writing Prospectus conflicted or would conflict with the information contained in the Registration Statement, any preliminary prospectus or the Prospectus or included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing at that subsequent time, not misleading, the Company will promptly notify the Representatives and will promptly amend or supplement, at its own expense, such Issuer Free Writing Prospectus to eliminate or correct such conflict, untrue statement or omission.

(m) Testing-the-Waters Materials. If at any time following the distribution of any Written Testing-the-Waters Communication there occurred or occurs an event or development as a result of which such Written Testing-the-Waters Communication included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing at that subsequent time, not misleading, the Company will promptly notify the Representatives and will promptly amend or supplement, at its own expense, such Written Testing-the-Waters Communication to eliminate or correct such untrue statement or omission

(n) Emerging Growth Company Status. The Company will promptly notify the Representatives if the Company ceases to be an Emerging Growth Company at any time prior to the later of (i) completion of the distribution of the Securities within the meaning of the Securities Act and (ii) completion of the 180-day restricted period referred to in Section 3(i).

SECTION 4. Payment of Expenses.

(a) *Expenses*. The Company will pay or cause to be paid all expenses incident to the performance of its obligations under this Agreement, including (i) the preparation, printing and filing of the Registration Statement (including financial statements and exhibits) as originally filed and each amendment thereto, (ii) the preparation, printing and delivery to the Underwriters of copies of each preliminary prospectus, each Issuer Free Writing Prospectus and the Prospectus and any amendments or supplements thereto and the reasonable costs associated with electronic delivery of any of the foregoing by the Underwriters to investors in each case, in connection with the offer and sale of the Securities, (iii) the preparation, issuance and delivery of the certificates for the Securities to the Underwriters, including any stock or other transfer taxes and any stamp or other duties payable upon the sale, issuance or delivery of the Securities to the Underwriters, (iv) the fees and disbursements of the Company's counsel, accountants and other advisors, (v) the qualification of the Securities under securities laws in accordance with the provisions of Section 3(e) hereof, including filing fees and the reasonable and documented fees and disbursements of counsel for the Underwriters in connection therewith and in connection with the preparation of the Blue Sky Survey and any supplement thereto in an amount not to exceed $10,000, (vi) the fees and expenses of any transfer agent or registrar for the Securities, (vii) the costs and expenses of the Company relating to investor presentations on any "road show" undertaken in

connection with the marketing of the Securities, including without limitation, expenses associated with the production of road show slides and graphics, reasonable and documented fees and expenses of any consultants engaged with the prior written consent of the Company in connection with the road show presentations, travel and lodging expenses of the representatives of the Company (which, for the avoidance of doubt, does not included the Underwriters or their representatives for purposes of this Section 4(a)(vii) and officers of the Company and any such consultants, and the cost of transportation in connection with the road show; provided, that 50% of the cost of any aircraft chartered in connection with the road show shall be paid by the Underwriters, (viii) the filing fees incident to, and the reasonable and documented fees and disbursements of counsel to the Underwriters in connection with, the review by FINRA of the terms of the sale of the Securities (provided that the Company shall not be required to reimburse or pay more than $50,000 of the fees of such counsel) and, (ix) the fees and expenses incurred in connection with the listing of the Securities on the Nasdaq Global Market, and (x) the costs and expenses (including, without limitation, any damages or other amounts payable in connection with legal or contractual liability) associated with the reforming of any contracts for sale of the Securities made by the Underwriters caused by a breach of the representation contained in the third sentence of Section 1(a)(ii) provided, that, except to the extent expressly provided in this Agreement, the Underwriters shall pay their own fees and expenses.

(b) *Termination of Agreement*. If this Agreement is terminated by the Representatives in accordance with the provisions of Section 5, Section 9(a)(i) or (iii) or Section 10 hereof, the Company shall reimburse the Underwriters, and if this Agreement is terminated by the Representatives in accordance with the provisions of Section 10, the Company shall reimburse the non-defaulting Underwriters, for their reasonable and documented out-of-pocket expenses that were actually incurred, including the reasonable and documented fees and disbursements of counsel for the Underwriters. For the avoidance of doubt, in the case of termination by the Underwriters in accordance with the provisions of Section 10 hereof, the Company shall have no obligation to reimburse any defaulting Underwriter pursuant to this Section 4(b).

SECTION 5. Conditions of Underwriters' Obligations. The obligations of the several Underwriters hereunder are subject to the accuracy of the representations and warranties of the Company contained herein or in certificates of any officer of the Company or any of its subsidiaries delivered pursuant to the provisions hereof, to the performance by the Company of its covenants and other obligations hereunder, and to the following further conditions:

(a) *Effectiveness of Registration Statement; Rule 430A Information*. The Registration Statement, including any Rule 462(b) Registration Statement, has become effective and, at the Closing Time, no stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto has been issued under the 1933 Act, no order preventing or suspending the use of any preliminary prospectus or the Prospectus has been issued and no proceedings for any of those purposes have been instituted or are pending or, to the Company's knowledge, contemplated; and the Company has complied with each request (if any) from the Commission for additional information. A prospectus containing the Rule 430A Information shall have been filed with the Commission in the manner and within the time frame required by Rule 424(b) without reliance on Rule 424(b)(8) or a post-effective amendment providing such information shall have been filed with, and declared effective by, the Commission in accordance with the requirements of Rule 430A.

(b) *Opinion of Counsel for Company*. At the Closing Time, the Representatives shall have received the favorable opinion and 10b-5 statement, dated the Closing Time, of Goodwin Procter LLP, counsel for the Company, in form and substance satisfactory to counsel for the Underwriters previously agreed upon by the Representatives and such counsel, together with signed or reproduced copies of such letter for each of the other Underwriters.

(c) *Opinion of Special Intellectual Property Counsel for Company*. At the Closing Time, the Representatives shall have received the favorable opinion, dated the Closing Time, of Dechert LLP, special intellectual property counsel for the Company, in form and substance satisfactory to counsel for the Underwriters previously agreed upon by the Representatives and such counsel, together with signed or reproduced copies of such letter for each of the other Underwriters.

(d) *Opinion of Counsel for Underwriters*. At the Closing Time, the Representatives shall have received the favorable opinion and 10b-5 statement, dated the Closing Time, of Latham & Watkins LLP, counsel for the Underwriters, together with signed or reproduced copies of such letter for each of the other Underwriters.

(e) *Officers' Certificate*. At the Closing Time, there shall not have been, since the date hereof or since the respective dates as of which information is given in the Registration Statement, the General Disclosure Package or the Prospectus, any material adverse change in the condition, financial or otherwise, or in the earnings, business operations or business prospects of the Company and its subsidiaries considered as one enterprise, whether or not arising in the ordinary course of business, and the Representatives shall have received a certificate of the Chief Executive Officer or the President of the Company and of the chief financial or chief accounting officer of the Company, in their respective capacities as such officers only and on behalf of the Company, dated the Closing Time, to the effect that (i) there has been no such material adverse change, (ii) the representations and warranties of the Company in this Agreement are true and correct with the same force and effect as though expressly made at and as of the Closing Time, (iii) the Company has complied with all agreements and satisfied all conditions on its part to be performed or satisfied at or prior to the Closing Time, and (iv) no stop order suspending the effectiveness of the Registration Statement under the 1933 Act has been issued, no order preventing or suspending the use of any preliminary prospectus or the Prospectus has been issued and no proceedings for any of those purposes have been instituted or are pending or, to their knowledge, threatened by the Commission.

(f) *Accountant's Comfort Letter*. At the time of the execution of this Agreement, the Representatives shall have received from KPMG LLP a letter, dated such date, in form and substance satisfactory to the Representatives, together with signed or reproduced copies of such letter for each of the other Underwriters containing statements and information of the type ordinarily included in accountants' "comfort letters" to underwriters with respect to the financial statements and certain financial information contained in the Registration Statement, the General Disclosure Package and the Prospectus.

(g) *Bring-down Comfort Letter*. At the Closing Time, the Representatives shall have received from KPMG LLP a letter, dated as of the Closing Time, to the effect that they reaffirm the statements made in the letter furnished pursuant to subsection (f) of this Section, except that the specified date referred to shall be a date not more than three business days prior to the Closing Time.

(h) *Approval of Listing*. At the Closing Time, the Securities shall have been approved for listing on the Nasdaq Global Market, subject only to official notice of issuance.

(i) *No Objection*. FINRA has confirmed that it has not raised any objection with respect to the fairness and reasonableness of the underwriting terms and arrangements relating to the offering of the Securities.

(j) *Lock-up Agreements*. At the date of this Agreement, the Representatives shall have received an agreement substantially in the form of Exhibit A hereto signed by the persons listed on Schedule C hereto.

(k) *Conditions to Purchase of Option Securities*. In the event that the Underwriters exercise their option provided in Section 2(b) hereof to purchase all or any portion of the Option Securities, the representations and warranties of the Company contained herein and the statements in any certificates furnished by the Company and any of its subsidiaries hereunder shall be true and correct as of each Date of Delivery and, at the relevant Date of Delivery, the Representatives shall have received:

(i) Officers' Certificate. A certificate, dated such Date of Delivery, of the President or a Vice President of the Company and of the chief financial or chief accounting officer of the Company confirming that the certificate delivered at the Closing Time pursuant to Section 5(d) hereof remains true and correct as of such Date of Delivery.

(ii) Opinion of Counsel for Company. If requested by the Representatives, the favorable opinion and 10b-5 statement of Goodwin Procter LLP, counsel for the Company, together with the favorable opinion of Dechert LLP, special intellectual property counsel for the Company, each in form and substance satisfactory to counsel for the Underwriters, dated such Date of Delivery, relating to the Option Securities to be purchased on such Date of Delivery and otherwise to the same effect as the opinion required by Section 5(b) hereof.

(iii) Opinion of Counsel for Underwriters. If requested by the Representatives, the favorable opinion and 10b-5 statement of Latham & Watkins LLP, counsel for the Underwriters, dated such Date of Delivery, relating to the Option Securities to be purchased on such Date of Delivery and otherwise to the same effect as the opinion required by Section 5(d) hereof.

(iv) Bring-down Comfort Letter. If requested by the Representatives, a letter from KPMG LLP, in form and substance satisfactory to the Representatives and dated such Date of Delivery, substantially in the same form and substance as the letter furnished to the Representatives pursuant to Section 5(f) hereof, except that the "specified date" in the letter furnished pursuant to this paragraph shall be a date not more than three business days prior to such Date of Delivery.

(l) *Additional Documents*. At the Closing Time and at each Date of Delivery (if any) counsel for the Underwriters shall have been furnished with such customary documents and opinions as they may reasonably require for the purpose of enabling them to pass upon the issuance and sale of the Securities as herein contemplated, or in order to evidence the accuracy of any of the representations or warranties, or the fulfillment of any of the conditions, herein contained; and all customary proceedings taken by the Company in connection with the issuance and sale of the Securities as herein contemplated shall be reasonably satisfactory in form and substance to the Representatives and counsel for the Underwriters.

(m) *Termination of Agreement*. If any condition specified in this Section shall not have been fulfilled when and as required to be fulfilled, this Agreement, or, in the case of any condition to the purchase of Option Securities on a Date of Delivery which is after the Closing Time, the obligations of the several Underwriters to purchase the relevant Option Securities, may be terminated by the Representatives by written notice to the Company at any time at or prior to Closing Time or such Date of Delivery, as the case may be, and such termination shall be without liability of any party to any other party except as provided in Section 4 and except that Sections 1, 6, 7, 8, 14, 15 and 16 shall survive any such termination and remain in full force and effect.

SECTION 6. Indemnification.

(a) *Indemnification of Underwriters*. The Company agrees to indemnify and hold harmless each Underwriter, its affiliates (as such term is defined in Rule 501(b) under the 1933 Act (each, an "Affiliate")), its selling agents and each person, if any, who controls any Underwriter within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act as follows:

(i) against any and all loss, liability, claim, damage and expense whatsoever, as incurred, arising out of any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement (or any amendment thereto), including the Rule 430A Information, or the omission or alleged omission therefrom of a material fact required to be stated therein or necessary to make the statements therein not misleading or arising out of any untrue statement or alleged untrue statement of a material fact included (A) in any preliminary prospectus, any Issuer Free Writing Prospectus , any Written Testing-the-Waters Communication, the General Disclosure Package or the Prospectus (or any amendment or supplement thereto), or (B) in any materials or information provided to investors by, or with the approval of, the Company in connection with the marketing of the offering of the Securities ("Marketing Materials"), including any roadshow or investor presentations made to investors by the Company (whether in person or electronically), or the omission or alleged omission in any preliminary prospectus, Issuer Free Writing Prospectus, any Written Testing-the-Waters Communication, Prospectus or in any Marketing Materials of a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading;

(ii) against any and all loss, liability, claim, damage and expense whatsoever, as incurred, to the extent of the aggregate amount paid in settlement of any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or of any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission; provided that (subject to Section 6(d) below) any such settlement is effected with the written consent of the Company;

(iii) against any and all expense whatsoever, as incurred (including the fees and disbursements of counsel chosen by the Representatives), reasonably incurred in investigating, preparing or defending against any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission, to the extent that any such expense is not paid under (i) or (ii) above;

provided, however, that this indemnity agreement shall not apply to any loss, liability, claim, damage or expense to the extent arising out of any untrue statement or omission or alleged untrue statement or omission made in the Registration Statement (or any amendment thereto), including the Rule 430A Information, the General Disclosure Package or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with the Underwriter Information.

(b) *Indemnification of Company, Directors and Officers*. Each Underwriter severally agrees to indemnify and hold harmless the Company, its directors, each of its officers who signed the Registration Statement, and each person, if any, who controls the Company within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act, against any and all loss, liability, claim, damage and expense described in the indemnity contained in subsection (a) of this Section, as incurred, but only with respect to untrue statements or omissions, or alleged untrue statements or omissions, made in the Registration Statement (or any amendment thereto), including the Rule 430A Information, the General Disclosure Package or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with the Underwriter Information.

(c) *Actions against Parties; Notification.* Each indemnified party shall give notice as promptly as reasonably practicable to each indemnifying party of any action commenced against it in respect of which indemnity may be sought hereunder, but failure to so notify an indemnifying party shall not relieve such indemnifying party from any liability hereunder to the extent it is not materially prejudiced as a result thereof and in any event shall not relieve it from any liability which it may have otherwise than on account of this indemnity agreement. In the case of parties indemnified pursuant to Section 6(a) above, counsel to the indemnified parties shall be selected by the Representatives, and, in the case of parties indemnified pursuant to Section 6(b) above, counsel to the indemnified parties shall be selected by the Company. An indemnifying party may participate at its own expense in the defense of any such action ; provided, however, that counsel to the indemnifying party shall not (except with the consent of the indemnified party) also be counsel to the indemnified party. In no event shall the indemnifying parties be liable for fees and expenses of more than one counsel (in addition to any local counsel) separate from their own counsel for all indemnified parties in connection with any one action or separate but similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances. No indemnifying party shall, without the prior written consent of the indemnified parties, settle or compromise or consent to the entry of any judgment with respect to any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever in respect of which indemnification or contribution could be sought under this Section 6 or Section 7 hereof (whether or not the indemnified parties are actual or potential parties thereto), unless such settlement, compromise or consent (i) includes an unconditional release of each indemnified party from all liability arising out of such litigation, investigation, proceeding or claim and (ii) does not include a statement as to or an admission of fault, culpability or a failure to act by or on behalf of any indemnified party.

(d) *Settlement without Consent if Failure to Reimburse*. If at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for fees and expenses of counsel, such indemnifying party agrees that it shall be liable for any settlement of the nature contemplated by Section 6(a)(ii) effected without its written consent if (i) such settlement is entered into more than 45 days after receipt by such indemnifying party of the aforesaid request, (ii) such indemnifying party shall have received notice of the terms of such settlement at least 30 days prior to such settlement being entered into and (iii) such indemnifying party shall not have reimbursed such indemnified party in accordance with such request prior to the date of such settlement.

SECTION 7. Contribution. If the indemnification provided for in Section 6 hereof is for any reason unavailable to or insufficient to hold harmless an indemnified party in respect of any losses, liabilities, claims, damages or expenses referred to therein, then each indemnifying party shall contribute to the aggregate amount of such losses, liabilities, claims, damages and expenses incurred by such indemnified party, as incurred, (i) in such proportion as is appropriate to reflect the relative benefits received by the Company, on the one hand, and the Underwriters, on the other hand, from the offering of the Securities pursuant to this Agreement or (ii) if the allocation provided by clause (i) is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company, on the one hand, and of the Underwriters, on the other hand, in connection with the statements or omissions, which resulted in such losses, liabilities, claims, damages or expenses, as well as any other relevant equitable considerations.

The relative benefits received by the Company, on the one hand, and the Underwriters, on the other hand, in connection with the offering of the Securities pursuant to this Agreement shall be deemed to be in the same respective proportions as the total net proceeds from the offering of the Securities

pursuant to this Agreement (before deducting expenses) received by the Company, on the one hand, and the total underwriting discount received by the Underwriters, on the other hand, in each case as set forth on the cover of the Prospectus, bear to the aggregate initial public offering price of the Securities as set forth on the cover of the Prospectus.

The relative fault of the Company, on the one hand, and the Underwriters, on the other hand, shall be determined by reference to, among other things, whether any such untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company or by the Underwriters and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

The Company and the Underwriters agree that it would not be just and equitable if contribution pursuant to this Section 7 were determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation which does not take account of the equitable considerations referred to above in this Section 7. The aggregate amount of losses, liabilities, claims, damages and expenses incurred by an indemnified party and referred to above in this Section 7 shall be deemed to include any reasonable and documented legal or other expenses reasonably incurred by such indemnified party in investigating, preparing or defending against any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever based upon any such untrue or alleged untrue statement or omission or alleged omission.

Notwithstanding the provisions of this Section 7, no Underwriter shall be required to contribute any amount in excess of the underwriting commissions received by such Underwriter in connection with the Shares underwritten by it and distributed to the public.

No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the 1933 Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.

For purposes of this Section 7, each person, if any, who controls an Underwriter within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act and each Underwriter's Affiliates and selling agents shall have the same rights to contribution as such Underwriter, and each director of the Company, each officer of the Company who signed the Registration Statement, and each person, if any, who controls the Company within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act shall have the same rights to contribution as the Company. The Underwriters' respective obligations to contribute pursuant to this Section 7 are several in proportion to the number of Initial Securities set forth opposite their respective names in Schedule A hereto and not joint.

SECTION 8. Representations, Warranties and Agreements to Survive. All representations, warranties and agreements contained in this Agreement or in certificates of officers of the Company or any of its subsidiaries submitted pursuant hereto, shall remain operative and in full force and effect regardless of (i) any investigation made by or on behalf of any Underwriter or its Affiliates or selling agents, any person controlling any Underwriter, its officers or directors or any person controlling the Company and (ii) delivery of and payment for the Securities.

SECTION 9. Termination of Agreement.

(a) *Termination*. The Representatives may terminate this Agreement, by notice to the Company, at any time at or prior to the Closing Time (i) if there has been, in the judgment of the Representatives, since the time of execution of this Agreement or since the respective dates as of which information is given in the Registration Statement, the General Disclosure Package or the Prospectus, any

material adverse change in the condition, financial or otherwise, or in the earnings, business operations or business prospects of the Company and its subsidiaries considered as one enterprise, whether or not arising in the ordinary course of business, or (ii) if there has occurred any material adverse change in the financial markets in the United States or the international financial markets, any outbreak of hostilities or escalation thereof or other calamity or crisis or any change or development involving a prospective change in national or international political, financial or economic conditions, in each case the effect of which is such as to make it, in the judgment of the Representatives, impracticable or inadvisable to proceed with the completion of the offering or to enforce contracts for the sale of the Securities, or (iii) if trading in any securities of the Company has been suspended or materially limited by the Commission or the Nasdaq Global Market, or (iv) if trading generally on the NYSE MKT or the New York Stock Exchange or in the Nasdaq Global Market has been suspended or materially limited, or minimum or maximum prices for trading have been fixed, or maximum ranges for prices have been required, by any of said exchanges or by order of the Commission, FINRA or any other governmental authority, or (v) a material disruption has occurred in commercial banking or securities settlement or clearance services in the United States or with respect to Clearstream or Euroclear systems in Europe, or (vi) if a banking moratorium has been declared by either Federal or New York authorities.

(a) *Liabilities*. If this Agreement is terminated pursuant to this Section, such termination shall be without liability of any party to any other party except as provided in Section 4 hereof, and provided further that Sections 1, 6, 7, 8, 14, 15 and 16 shall survive such termination and remain in full force and effect.

SECTION 10. Default by One or More of the Underwriters. If one or more of the Underwriters shall fail at the Closing Time or a Date of Delivery to purchase the Securities which it or they are obligated to purchase under this Agreement (the "Defaulted Securities"), the Representatives shall have the right, within 24 hours thereafter, to make arrangements for one or more of the non-defaulting Underwriters, or any other underwriters, to purchase all, but not less than all, of the Defaulted Securities in such amounts as may be agreed upon and upon the terms herein set forth; if, however, the Representatives shall not have completed such arrangements within such 24-hour period, then:

(i) if the number of Defaulted Securities does not exceed 10% of the number of Securities to be purchased on such date, each of the non-defaulting Underwriters shall be obligated, severally and not jointly, to purchase the full amount thereof in the proportions that their respective underwriting obligations hereunder bear to the underwriting obligations of all non-defaulting Underwriters, or

(ii) if the number of Defaulted Securities exceeds 10% of the number of Securities to be purchased on such date, this Agreement or, with respect to any Date of Delivery which occurs after the Closing Time, the obligation of the Underwriters to purchase, and the Company to sell, the Option Securities to be purchased and sold on such Date of Delivery shall terminate without liability on the part of any non-defaulting Underwriter.

No action taken pursuant to this Section shall relieve any defaulting Underwriter from liability in respect of its default.

Any termination of this Agreement pursuant to this Section 10 shall be without liability on the part of the Company except to the extent set forth in Section 4(b); provided, that, Sections 1, 6, 7, 8, 14, 15 and 16 shall survive such termination and remain in full force and effect.

In the event of any such default which does not result in a termination of this Agreement or, in the case of a Date of Delivery which is after the Closing Time, which does not result in a termination of the

obligation of the Underwriters to purchase and the Company to sell the relevant Option Securities, as the case may be, either (i) the Representatives or (ii) the Company shall have the right to postpone Closing Time or the relevant Date of Delivery, as the case may be, for a period not exceeding seven days in order to effect any required changes in the Registration Statement, the General Disclosure Package or the Prospectus or in any other documents or arrangements. As used herein, the term "Underwriter" includes any person substituted for an Underwriter under this Section 10.

SECTION 11. Notices. All notices and other communications hereunder shall be in writing and shall be deemed to have been duly given if mailed or transmitted by any standard form of telecommunication. Notices to the Underwriters shall be directed to Merrill Lynch at One Bryant Park, New York, New York 10036, attention of Syndicate Department (facsimile: (646) 855-3073), with a copy to ECM Legal (facsimile: (212) 230-8730); notices to the Company shall be directed to it at 501 Boylston Street, Suite 6102, Boston, Massachusetts 02116, attention of the Chief Executive Officer.

SECTION 12. No Advisory or Fiduciary Relationship. The Company acknowledges and agrees that (a) the purchase and sale of the Securities pursuant to this Agreement, including the determination of the initial public offering price of the Securities and any related discounts and commissions, is an arm's-length commercial transaction between the Company, on the one hand, and the several Underwriters, on the other hand, (b) in connection with the offering of the Securities and the process leading thereto, each Underwriter is and has been acting solely as a principal and is not the agent or fiduciary of the Company, any of its subsidiaries or their respective stockholders, creditors, employees or any other party, (c) no Underwriter has assumed or will assume an advisory or fiduciary responsibility in favor of the Company with respect to the offering of the Securities or the process leading thereto (irrespective of whether such Underwriter has advised or is currently advising the Company or any of its subsidiaries on other matters) and no Underwriter has any obligation to the Company with respect to the offering of the Securities except the obligations expressly set forth in this Agreement, (d) the Underwriters and their respective affiliates may be engaged in a broad range of transactions that involve interests that differ from those of the Company and (e) the Underwriters have not provided any legal, accounting, regulatory or tax advice with respect to the offering of the Securities and the Company has consulted its own respective legal, accounting, regulatory and tax advisors to the extent it deemed appropriate.

SECTION 13. Parties. This Agreement shall each inure to the benefit of and be binding upon the Underwriters and the Company and their respective successors. Nothing expressed or mentioned in this Agreement is intended or shall be construed to give any person, firm or corporation, other than the Underwriters and the Company and their respective successors and the controlling persons and officers and directors referred to in Sections 6 and 7 and their heirs and legal representatives, any legal or equitable right, remedy or claim under or in respect of this Agreement or any provision herein contained. This Agreement and all conditions and provisions hereof are intended to be for the sole and exclusive benefit of the Underwriters and the Company and their respective successors, and said controlling persons and officers and directors and their heirs and legal representatives, and for the benefit of no other person, firm or corporation. No purchaser of Securities from any Underwriter shall be deemed to be a successor by reason merely of such purchase.

SECTION 14. Trial by Jury. The Company (on its behalf and, to the extent permitted by applicable law, on behalf of its stockholders and affiliates) and each of the Underwriters hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Agreement or the transactions contemplated hereby.

SECTION 15. GOVERNING LAW. THIS AGREEMENT AND ANY CLAIM, CONTROVERSY OR DISPUTE ARISING UNDER OR RELATED TO THIS AGREEMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF, THE STATE OF NEW YORK WITHOUT REGARD TO ITS CHOICE OF LAW PROVISIONS.

SECTION 16. Consent to Jurisdiction; Waiver of Immunity. Any legal suit, action or proceeding arising out of or based upon this Agreement or the transactions contemplated hereby ("Related Proceedings") shall be instituted in (i) the federal courts of the United States of America located in the City and County of New York, Borough of Manhattan or (ii) the courts of the State of New York located in the City and County of New York, Borough of Manhattan (collectively, the "Specified Courts"), and each party irrevocably submits to the exclusive jurisdiction (except for proceedings instituted in regard to the enforcement of a judgment of any such court (a "Related Judgment"), as to which such jurisdiction is non-exclusive) of such courts in any such suit, action or proceeding. Service of any process, summons, notice or document by mail to such party's address set forth above shall be effective service of process for any suit, action or other proceeding brought in any such court. The parties irrevocably and unconditionally waive any objection to the laying of venue of any suit, action or other proceeding in the Specified Courts and irrevocably and unconditionally waive and agree not to plead or claim in any such court that any such suit, action or other proceeding brought in any such court has been brought in an inconvenient forum.

SECTION 17. TIME. TIME SHALL BE OF THE ESSENCE OF THIS AGREEMENT. EXCEPT AS OTHERWISE SET FORTH HEREIN, SPECIFIED TIMES OF DAY REFER TO NEW YORK CITY TIME.

SECTION 18. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all such counterparts shall together constitute one and the same Agreement.

SECTION 19. Effect of Headings. The Section headings herein are for convenience only and shall not affect the construction hereof.

If the foregoing is in accordance with your understanding of our agreement, please sign and return to the Company a counterpart hereof, whereupon this instrument, along with all counterparts, will become a binding agreement among the Underwriters and the Company in accordance with its terms.

Very truly yours,

resTORbio, Inc.

By _____
Title:

CONFIRMED AND ACCEPTED,
as of the date first above written:

MERRILL LYNCH, PIERCE, FENNER & SMITH
INCORPORATED

By _____
Authorized Signatory

LEERINK PARTNERS LLC

By _____
Authorized Signatory

For themselves and as Representatives of the other Underwriters named in Schedule A hereto.

SCHEDULE A

The initial public offering price per share for the Securities shall be $●.

The purchase price per share for the Securities to be paid by the several Underwriters shall be $●, being an amount equal to the initial public offering price set forth above less $● per share, subject to adjustment in accordance with Section 2(b) for dividends or distributions declared by the Company and payable on the Initial Securities but not payable on the Option Securities.

Name of Underwriter	Number of Initial Securities
Merrill Lynch, Pierce, Fenner & Smith Incorporated	
Leerink Partners LLC	
Evercore Group L.L.C	
Wedbush Securities Inc.	
Total	[●]

SCHEDULE B-1

Pricing Terms

1. The Company is selling [●] shares of Common Stock.

2. The Company has granted an option to the Underwriters, severally and not jointly, to purchase up to an additional [●] shares of Common Stock.

3. The initial public offering price per share for the Securities shall be $●.

SCHEDULE B-2

Free Writing Prospectuses

[●]

SCHEDULE B-3

Testing-the-Waters-Communications

Company investor presentation slides used by the Company in certain “testing the waters” meetings conducted with a limited number of qualified institutional buyers and accredited investors beginning on December [●], 2017.

SCHEDULE C

List of Persons and Entities Subject to Lock-up

[To consist of all directors, officers and equityholders]

Exhibit A

Lock-Up Agreement

[Date]

Merrill Lynch, Pierce, Fenner & Smith
Incorporated
Leerink Partners LLC
as Representatives of the several
Underwriters

c/o Merrill Lynch, Pierce, Fenner & Smith
Incorporated
One Bryant Park
New York, New York 10036

c/o Leerink Partners LLC
One Federal Street, 37th Floor
Boston, Massachusetts 02110

Re: Proposed Public Offering by resTORbio, Inc.

Dear Sirs:

The undersigned, a securityholder, officer and/or director of resTORbio, Inc., a Delaware corporation (the "Company"), understands that Merrill Lynch, Pierce, Fenner & Smith Incorporated and Leerink Partners LLC, as representatives of the several underwriters (the "Representatives"), propose to enter into an Underwriting Agreement (the "Underwriting Agreement") with the Company providing for the public offering (the "Public Offering") of shares of the Company's common stock, par value $0.0001 per share (the "Common Stock") pursuant to a registration statement on Form S-1 to be filed with the Securities and Exchange Commission. In recognition of the benefit that such an offering will confer upon the undersigned as a securityholder, officer and/or director of the Company, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned agrees with each underwriter to be named in the Underwriting Agreement that, during the period beginning on the date hereof and ending on the date that is 180 days from the date of the Underwriting Agreement (the "Lock-Up Period"), the undersigned will not, without the prior written consent of the Representatives, (i) directly or indirectly, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise transfer or dispose of any shares of the Company's Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock (collectively, the "Lock-Up Securities"), whether now owned or hereafter acquired by the undersigned or with respect to which the undersigned has or hereafter acquires the power of disposition, or exercise any right with respect to the registration of any of the Lock-Up Securities, or file or cause to be filed any registration statement in connection therewith, under the Securities Act of 1933, as amended, or (ii) enter into any swap or any other agreement or any transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of the Lock-Up Securities, whether any such swap or transaction is to be settled by delivery of Common Stock or other securities, in cash or otherwise. If the undersigned is an officer or director of the Company, the undersigned further agrees that the foregoing provisions shall be equally applicable to any issuer-directed Securities the undersigned may purchase in the offering.

The Representatives agree that, at least three business days before the effective date of any release or waiver of the foregoing restrictions in connection with a transfer of shares of the Common Stock by any officer or director of the Company, the Representatives will notify the Company and the undersigned of the impending release or waiver. Upon the receipt of any such notice, the Company agrees to announce the impending release or waiver by press release through a major news service at least two business days before the effective date of the release or waiver. Any release or waiver granted by the Representatives hereunder to any such officer or director shall only be effective two business days after the publication date of such press release. The provisions of this paragraph will not apply if (i) the release or waiver is effected solely to permit a transfer not for consideration and (ii) the transferee has agreed in writing to be bound by the same terms described in this letter to the extent and for the duration that such terms remain in effect at the time of the transfer.

Notwithstanding the foregoing, and subject to the conditions below, the undersigned may transfer the Lock-Up Securities without the prior written consent of the Representatives under the circumstances set forth below, provided that with respect to any transfer described in clauses (i)-(v) or (viii) below, (1) the Representatives receive a signed lock-up agreement for the balance of the lock-up period from each donee, trustee, distributee, or transferee, as the case may be, (2) any such transfer shall not involve a disposition for value, (3) such transfers are not required to be reported with the Securities and Exchange Commission on Form 4 in accordance with Section 16 of the Securities Exchange Act of 1934, as amended, (other than a Form 5 after the expiration of the Lock-Up Period) and (4) the undersigned does not otherwise voluntarily effect any public filing or report regarding such transfers:

(i) as a *bona fide* gift or gifts; or

(ii) to any trust for the direct or indirect benefit of the undersigned or the immediate family of the undersigned (for purposes of this lock-up agreement, “immediate family” shall mean any relationship by blood, marriage or adoption, not more remote than first cousin); or

(iii) by will or intestate succession upon the death of the undersigned; or

(iv) as a distribution to limited partners, general partners, limited liability company members or stockholders of the undersigned; or

(v) to the undersigned’s affiliates or to any investment fund or other entity controlled or managed by or on behalf of the undersigned or one or more of its affiliates; or

(vi) to the Company upon a vesting event of the Company’s securities, pursuant to arrangements under which the Company has the option to repurchase such shares or a right of first refusal with respect to transfer of such shares or upon the exercise or conversion of options or warrants to purchase the Company’s securities, in each, on a “cashless” or “net exercise” basis or to cover tax withholding obligations of the undersigned in connection with such vesting or exercise, provided that (1) any filing under Section 16 of the Exchange Act made during the Lock-Up Period shall clearly indicate in the footnotes thereto that (A) the filing relates to the circumstances described above and (B) no Lock-Up Securities were sold by the reporting person other than such transfers to the Company as described above and (2) the undersigned does not otherwise voluntarily effect any other public filing or report regarding such transfers during the Lock-Up Period; or

(vii) in connection with the conversion of shares of preferred stock of the Company into shares of Common Stock of the Company, provided that any shares of Common Stock received upon such conversion remain subject to the terms of this lock-up agreement; or

(viii) by operation of law, including pursuant to a domestic order, a negotiated divorce settlement or other court order, provided that Lock-Up Securities received upon such transfer remain subject to the terms of this lock-up agreement; or

(ix) with the prior consent of the Representatives; or

(x) pursuant to a *bona fide* third party tender offer, merger, consolidation or other similar transaction made to all holders of Lock-Up Securities which results in any "person" (as defined in Section 13(d)(3) of the Exchange Act), or group of persons, other than the Company, becoming the beneficial owner (as defined in Rules 13d-3 and 13d-5 of the Exchange Act) of a majority of the outstanding voting securities of the Company (or the surviving entity), provided that in the event that the tender offer, merger, consolidation or other such transaction is not completed, the Lock-Up Securities owned by the undersigned shall remain subject to the restrictions contained in herein during the Lock-Up Period.

Furthermore, the undersigned may sell shares of Common Stock of the Company purchased by the undersigned in the Public Offering (other than any issuer-directed shares of Common Stock purchased in the Public Offering by an officer or director of the Company) or on the open market following the Public Offering if and only if (i) such sales are not required to be reported in any public report or filing with the Securities and Exchange Commission during the Lock-Up Period (other than a Form 5 after the expiration of the Lock-Up Period), or otherwise and (ii) the undersigned does not otherwise voluntarily effect any public filing or report regarding such sales.

In the event that during the Lock-Up Period, (x) the Representatives waive any prohibition on the transfer of any Lock-Up Securities held by any record or beneficial holder of the shares of capital stock of the Company, and (y) the undersigned is a Major Holder (as defined below), the Representatives shall be deemed to have also waived, on the same terms, the prohibitions set forth in this lock up agreement that would otherwise have applied to such Major Holder with respect to the same percentage of such Major Holder's Lock-Up Securities as the percentage of Lock-Up Securities subject to such waiver represents to the aggregate Lock-Up Securities held by such party receiving the waiver and which would have otherwise been subject to prohibition on transfer absent such waiver. The provisions of this paragraph will not apply: (1) unless and until the Representatives have first waived application of any prohibition on transfer with respect to Lock-Up Securities representing, in the aggregate, more than 1.0% of the Company's total outstanding shares of Common Stock (determined as of the date of such waiver); *provided that* in the case of directors and executive officers, any release shall only be granted due to financial hardship as determined by the Representatives in their sole judgment, (2) (a) if the waiver is effected solely to permit a transfer not involving a disposition for value and (b) the transferee has agreed in writing to be bound by the same terms described in this lock-up agreement to the extent and for the duration that such terms remain in effect at the time of the transfer; provided, that any subsequent release or waiver by the Representatives of the prohibition on transfer of Lock-Up Securities held by the transferee of a transfer pursuant to this clause (2)(b), shall be subject the provisions of this paragraph to the same extent as if the original transfer was not exempt under this clause (2)(b), or (3) if the release or waiver is granted to a holder of Lock-Up Securities in connection with an underwritten public offering, whether or not such offering is wholly or partially a secondary offering, of shares pursuant to a registration statement under the Securities Act, provided, that in the event of any release or waiver pursuant to this clause (3), the same percentage of the undersigned's Lock-Up Securities shall be

released, but only for the purpose of participating in such public offering. In the event that, as a result of this paragraph, any Lock-Up Securities held by the undersigned are released from the restrictions imposed by this lock-up agreement, the Company shall use commercially reasonable efforts to notify the undersigned within three business days thereafter that the same percentage of aggregate Lock-Up Securities held by such Major Holder has been released; provided that the failure to timely give such notice to the undersigned shall not give rise to any claim or liability against the Company or the Underwriters, including the Representatives, except, only with respect to any claim or liability against the Company but not any Underwriters, including the Representatives, in the event of fraud or willful misconduct of the Company. For purposes of this lock-up agreement, each of the following persons is a "Major Holder": each record or beneficial owner, as of the date hereof, of more than 0.75% of the outstanding shares of capital stock of the Company on an as converted to Common Stock basis (for purposes of determining record or beneficial ownership of a stockholder, all shares of capital stock held by investment funds affiliated with such stockholder shall be aggregated).

Nothing in this lock-up agreement shall preclude the establishment of a new trading plan meeting the requirements of Rule 10b5-1 under the Exchange Act, provided, that (i) no public report or filing under Section 16 of the Exchange Act shall be required during the Lock-Up Period, (ii) the undersigned does not otherwise voluntarily effect any public filing or report regarding the establishment of such plan during the Lock-Up Period, and (iii) no sales are made during the Lock-Up Period pursuant to such plan.

The undersigned also agrees and consents to the entry of stop transfer instructions with the Company's transfer agent and registrar against the transfer of the Lock-Up Securities except in compliance with the foregoing restrictions.

The undersigned understands that, if (1) the execution of the Underwriting Agreement in connection with the Public Offering shall not have occurred on or before April 30, 2018 (which date may be extended by an additional three months upon written notice from the Company to the undersigned), (2) the Company files an application to withdraw the registration statement relating to the public offering, (3) the Underwriting Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated prior to payment for and delivery of the Common Stock to be sold thereunder or (4) the Representatives, on behalf of the underwriters, advise the Company, or the Company advises the Representatives, in writing, prior to the execution of the Underwriting Agreement, that they have determined not to proceed with the Public Offering, the undersigned shall be released from all obligations under this agreement.

Very truly yours,

Signature: _____

Print Name: _____

Exhibit B

FORM OF PRESS RELEASE
TO BE ISSUED PURSUANT TO SECTION 3(j)

[Date]

resTORbio, Inc. (the "Company") announced today that the representatives of the several underwriters in the Company's recent public sale of [●] shares of common stock, are [waiving] [releasing] a lock-up restriction with respect to shares of the Company's common stock held by [certain officers or directors] [an officer or director] of the Company. The [waiver] [release] will take effect on , 20 , and the shares may be sold on or after such date.

This press release is not an offer for sale of the securities in the United States or in any other jurisdiction where such offer is prohibited, and such securities may not be offered or sold in the United States absent registration or an exemption from registration under the United States Securities Act of 1933, as amended.

Exhibit 3.2

CERTIFICATE OF AMENDMENT
TO THE
SECOND AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
RESTORBIO, INC.

(Pursuant to Section 242 of the
General Corporation Law of the State of Delaware)

resTORbio, Inc. (the "Corporation"), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "DGCL"), does hereby certify that:

1. The Corporation was originally incorporated on July 5, 2016, and the Second Amended and Restated Certificate of Incorporation was filed with the Secretary of State of Delaware on November 29, 2017 (the "Charter"). Pursuant to Section 242 of the DGCL, this Certificate of Amendment (this "Amendment") amends certain provisions of the Charter.

2. This Amendment has been approved and duly adopted by the Board of Directors of the Corporation.

3. This Amendment has been duly adopted in accordance with the provisions of Section 242 of the DGCL by written consent of the stockholders holding the requisite number of shares, with written notice to be given as required by Section 228 of the DGCL.

4. The Charter is hereby amended as follows:

The following is hereby inserted into Article FOURTH immediately before the first sentence therein:

"Effective upon the filing of this Certificate of Amendment to the Second Amended and Restated Certificate of Incorporation with the Secretary of State of the State of Delaware (the "Effective Time"), every 1.2804 shares of Common Stock then issued and outstanding or held in the treasury of the Corporation immediately prior to the Effective Time shall automatically be combined into one (1) share of Common Stock, without any further action by the holders of such shares (the "Reverse Stock Split"). The Reverse Stock Split will be effected on a certificate-by-certificate basis, and any fractional shares resulting from such combination shall be rounded down to the nearest whole share on a certificate-by-certificate basis. No fractional shares shall be issued in connection with the Reverse Stock Split. In lieu of any fractional shares to which a holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Common Stock as determined in good faith by the Corporation's Board of Directors. The Reverse Stock Split shall occur automatically without any further action by the holders of the shares of Common Stock and Preferred Stock affected thereby. All rights, preferences and privileges of the Common Stock and the Preferred Stock shall be appropriately adjusted to reflect the Reverse Stock Split in accordance with this Second Amended and Restated Certificate of Incorporation."

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, this Amendment, having been duly adopted in accordance with Section 242 of the DGCL, has been duly executed by a duly authorized officer of the corporation on this 16th day of January, 2018.

By: /s/ Chen Schor
Name: Chen Schor
Title: President and Chief Executive Officer

Exhibit 3.4

THIRD AMENDED AND RESTATED

CERTIFICATE OF INCORPORATION

OF

RESTORBIO, INC.

resTORbio, Inc., a corporation organized and existing under the laws of the State of Delaware (the "Corporation"), hereby certifies as follows:

1. The name of the Corporation is resTORbio, Inc. The date of the filing of its original Certificate of Incorporation with the Secretary of State of the State of Delaware was July 5, 2016 (the "Original Certificate").

2. This Third Amended and Restated Certificate of Incorporation (the "Certificate") amends, restates and integrates the provisions of the Second Amended and Restated Certificate of Incorporation that was filed with the Secretary of State of the State of Delaware on November 29, 2017 (the "Amended and Restated Certificate"), and was duly adopted in accordance with the provisions of Sections 228, 242 and 245 of the General Corporation Law of the State of Delaware (the "DGCL").

3. The text of the Amended and Restated Certificate is hereby amended and restated in its entirety to provide as herein set forth in full.

ARTICLE I

The name of the Corporation is resTORbio, Inc.

ARTICLE II

The address of the Corporation's registered office in the State of Delaware is c/o The Corporation Trust Company, 1209 Orange Street in the City of Wilmington, County of New Castle, 19801. The name of its registered agent at such address is The Corporation Trust Company.

ARTICLE III

The purpose of the Corporation is to engage in any lawful act or activity for which corporations may be organized under the DGCL.

ARTICLE IV

CAPITAL STOCK

The total number of shares of capital stock which the Corporation shall have authority to issue is One Hundred Sixty Million (160,000,000), of which (i) One Hundred Fifty Million (150,000,000) shares shall be a class designated as common stock, par value $0.0001 per share (the "Common Stock"), and (ii) Ten Million (10,000,000) shares shall be a class designated as undesignated preferred stock, par value $0.0001 per share (the "Undesignated Preferred Stock").

Except as otherwise provided in any certificate of designations of any series of Undesignated Preferred Stock, the number of authorized shares of the class of Common Stock or Undesignated Preferred Stock may from time to time be increased or decreased (but not below the number of shares of such class outstanding) by the affirmative vote of the holders of a majority in voting power of the outstanding shares of capital stock of the Corporation irrespective of the provisions of Section 242(b)(2) of the DGCL.

The powers, preferences and rights of, and the qualifications, limitations and restrictions upon, each class or series of stock shall be determined in accordance with, or as set forth below in, this Article IV.

A. COMMON STOCK

Subject to all the rights, powers and preferences of the Undesignated Preferred Stock and except as provided by law or in this Certificate (or in any certificate of designations of any series of Undesignated Preferred Stock):

(a) the holders of the Common Stock shall have the exclusive right to vote for the election of directors of the Corporation (the "Directors") and on all other matters requiring stockholder action, each outstanding share entitling the holder thereof to one vote on each matter properly submitted to the stockholders of the Corporation for their vote; provided, however, that, except as otherwise required by law, holders of Common Stock, as such, shall not be entitled to vote on any amendment to this Certificate (or on any amendment to a certificate of designations of any series of Undesignated Preferred Stock) that alters or changes the powers, preferences, rights or other terms of one or more outstanding series of Undesignated Preferred Stock if the holders of such affected series of Undesignated Preferred Stock are entitled to vote, either separately or together with the holders of one or more other such series, on such amendment pursuant to this Certificate (or pursuant to a certificate of designations of any series of Undesignated Preferred Stock) or pursuant to the DGCL;

(b) dividends may be declared and paid or set apart for payment upon the Common Stock out of any assets or funds of the Corporation legally available for the payment of dividends, but only when and as declared by the Board of Directors or any authorized committee thereof; and

(c) upon the voluntary or involuntary liquidation, dissolution or winding up of the Corporation, the net assets of the Corporation shall be distributed pro rata to the holders of the Common Stock.

B. UNDESIGNATED PREFERRED STOCK

The Board of Directors or any authorized committee thereof is expressly authorized, to the fullest extent permitted by law, to provide by resolution or resolutions for, out of the unissued shares of Undesignated Preferred Stock, the issuance of the shares of Undesignated Preferred Stock in one or more series of such stock, and by filing a certificate of designations pursuant to applicable law of the State of Delaware, to establish or change from time to time the number of shares of each such series, and to fix the designations, powers, including voting powers, full or limited, or no voting powers, preferences and the relative, participating, optional or other special rights of the shares of each series and any qualifications, limitations and restrictions thereof.

ARTICLE V

STOCKHOLDER ACTION

1. Action without Meeting. Any action required or permitted to be taken by the stockholders of the Corporation at any annual or special meeting of stockholders of the Corporation must be effected at a duly called annual or special meeting of stockholders and may not be taken or effected by a written consent of stockholders in lieu thereof. Notwithstanding anything herein to the contrary, the affirmative vote of not less than two thirds (2/3) of the outstanding shares of capital stock entitled to vote thereon, and the affirmative vote of not less than two thirds (2/3) of the outstanding shares of each class entitled to vote thereon as a class, shall be required to amend or repeal any provision of this Article V, Section 1.

2. Special Meetings. Except as otherwise required by statute and subject to the rights, if any, of the holders of any series of Undesignated Preferred Stock, special meetings of the stockholders of the Corporation may be called only by the Board of Directors acting pursuant to a resolution approved by the affirmative vote of a majority of the Directors then in office, and special meetings of stockholders may not be called by any other person or persons. Only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders of the Corporation.

ARTICLE VI

DIRECTORS

1. General. The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors except as otherwise provided herein or required by law.

2. Election of Directors. Election of Directors need not be by written ballot unless the By-laws of the Corporation (the "By-laws") shall so provide.

3. Number of Directors; Term of Office. The number of Directors of the Corporation shall be fixed solely and exclusively by resolution duly adopted from time to time by the Board of Directors. The Directors, other than those who may be elected by the holders of any series of Undesignated Preferred Stock, shall be classified, with respect to the term for which they severally hold office, into three classes. The initial Class I Directors of the Corporation shall be Jonathan Silverstein and David Steinberg; the initial Class II Directors of the Corporation shall be Lynne Sullivan and Daphne Zohar; and the initial Class III Directors of the Corporation shall be Paul Fonteyne and Chen Schor. The initial Class I Directors shall serve for a term expiring at the annual meeting of stockholders to be held in 2019, the initial Class II Directors shall serve for a term expiring at the annual meeting of stockholders to be held in 2020, and the initial Class III Directors shall serve for a term expiring at the annual meeting of stockholders to be held in 2021. The mailing address of each person who is to serve initially as a director is c/o resTORbio, Inc., 500 Boylston Street, Suite 1210, Boston, MA 02116. At each annual meeting of stockholders, Directors elected to succeed those Directors whose terms expire shall be elected for a term of office to expire at the third succeeding annual meeting of stockholders after their election. Notwithstanding the foregoing, the Directors elected to each class shall hold office until their successors are duly elected and qualified or until their earlier resignation, death or removal.

Notwithstanding the foregoing, whenever, pursuant to the provisions of Article IV of this Certificate, the holders of any one or more series of Undesignated Preferred Stock shall have the right, voting separately as a series or together with holders of other such series, to elect Directors at an annual or special meeting of stockholders, the election, term of office, filling of vacancies and other features of such directorships shall be governed by the terms of this Certificate and any certificate of designations applicable to such series.

Notwithstanding anything herein to the contrary, the affirmative vote of not less than two thirds (2/3) of the outstanding shares of capital stock entitled to vote thereon, and the affirmative vote of not less than two thirds (2/3) of the outstanding shares of each class entitled to vote thereon as a class, shall be required to amend or repeal any provision of this Article VI, Section 3.

4. Vacancies. Subject to the rights, if any, of the holders of any series of Undesignated Preferred Stock to elect Directors and to fill vacancies in the Board of Directors relating thereto, any and all vacancies in the Board of Directors, however occurring, including, without limitation, by reason of an increase in the size of the Board of Directors, or the death, resignation, disqualification or removal of a Director, shall be filled solely and exclusively by the affirmative vote of a majority of the remaining Directors then in office, even if less than a quorum of the Board of Directors, and not by the stockholders. Any Director appointed in accordance with the preceding sentence shall hold office for the remainder of the full term of the class of Directors in which the new directorship was created or the vacancy occurred and until such Director's successor shall have been duly elected and qualified or until his or her earlier resignation, death or removal. Subject to the rights, if any, of the holders of any series of

Undesignated Preferred Stock to elect Directors, when the number of Directors is increased or decreased, the Board of Directors shall, subject to Article VI.3 hereof, determine the class or classes to which the increased or decreased number of Directors shall be apportioned; provided, however, that no decrease in the number of Directors shall shorten the term of any incumbent Director. In the event of a vacancy in the Board of Directors, the remaining Directors, except as otherwise provided by law, shall exercise the powers of the full Board of Directors until the vacancy is filled.

5. Removal. Subject to the rights, if any, of any series of Undesignated Preferred Stock to elect Directors and to remove any Director whom the holders of any such series have the right to elect, any Director (including persons elected by Directors to fill vacancies in the Board of Directors) may be removed from office (i) only with cause and (ii) only by the affirmative vote of the holders of two thirds (2/3) of the outstanding shares of capital stock then entitled to vote at an election of Directors. At least forty-five (45) days prior to any annual or special meeting of stockholders at which it is proposed that any Director be removed from office, written notice of such proposed removal and the alleged grounds thereof shall be sent to the Director whose removal will be considered at the meeting.

ARTICLE VII

LIMITATION OF LIABILITY

A Director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a Director, except for liability (a) for any breach of the Director's duty of loyalty to the Corporation or its stockholders, (b) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (c) under Section 174 of the DGCL or (d) for any transaction from which the Director derived an improper personal benefit. If the DGCL is amended after the effective date of this Certificate to authorize corporate action further eliminating or limiting the personal liability of Directors, then the liability of a Director of the Corporation shall be eliminated or limited to the fullest extent permitted by the DGCL, as so amended.

Any amendment, repeal or modification of this Article VII by either of (i) the stockholders of the Corporation or (ii) an amendment to the DGCL, shall not adversely affect any right or protection existing at the time of such amendment, repeal or modification with respect to any acts or omissions occurring before such amendment, repeal or modification of a person serving as a Director at the time of such amendment, repeal or modification.

Notwithstanding anything herein to the contrary, the affirmative vote of not less than two thirds (2/3) of the outstanding shares of capital stock entitled to vote thereon, and the affirmative vote of not less than two thirds (2/3) of the outstanding shares of each class entitled to vote thereon as a class, shall be required to amend or repeal any provision of this Article VII.

ARTICLE VIII

AMENDMENT OF BY-LAWS

1. Amendment by Directors. Except as otherwise provided by law, the By-laws of the Corporation may be amended or repealed by the Board of Directors by the affirmative vote of a majority of the Directors then in office.

2. Amendment by Stockholders. Except as otherwise provided therein, the By-laws of the Corporation may be amended or repealed at any annual meeting of stockholders, or special meeting of stockholders called for such purpose, by the affirmative vote of a majority of the outstanding shares of capital stock entitled to vote on such amendment or repeal, voting together as a single class.

ARTICLE IX

AMENDMENT OF CERTIFICATE OF INCORPORATION

The Corporation reserves the right to amend or repeal this Certificate in the manner now or hereafter prescribed by statute and this Certificate, and all rights conferred upon stockholders herein are granted subject to this reservation. Except as otherwise required by this Certificate or by law, whenever any vote of the holders of capital stock of the Corporation is required to amend or repeal any provision of this Certificate, such amendment or repeal shall require the affirmative vote of the majority of the outstanding shares of capital stock entitled to vote on such amendment or repeal, and the affirmative vote of the majority of the outstanding shares of each class entitled to vote thereon as a class, at a duly constituted meeting of stockholders called expressly for such purpose.

[End of Text]

THIS THIRD AMENDED AND RESTATED CERTIFICATE OF INCORPORATION is executed as of this ___ day of January, 2018.

RESTORBIO, INC.

By: _____
Name: Chen Schor
Title: President and Chief Executive Officer

[Signature Page to resTORbio, Inc. Third Amended and Restated Certificate of Incorporation]

Exhibit 3.5

AMENDED AND RESTATED

BY-LAWS

OF

RESTORBIO, INC.

(the "Corporation")

ARTICLE I

Stockholders

SECTION 1. Annual Meeting. The annual meeting of stockholders (any such meeting being referred to in these By-laws as an "Annual Meeting") shall be held at the hour, date and place within or without the United States which is fixed by the Board of Directors, which time, date and place may subsequently be changed at any time by vote of the Board of Directors. If no Annual Meeting has been held for a period of thirteen (13) months after the Corporation's last Annual Meeting, a special meeting in lieu thereof may be held, and such special meeting shall have, for the purposes of these By-laws or otherwise, all the force and effect of an Annual Meeting. Any and all references hereafter in these By-laws to an Annual Meeting or Annual Meetings also shall be deemed to refer to any special meeting(s) in lieu thereof.

SECTION 2. Notice of Stockholder Business and Nominations.

(a) Annual Meetings of Stockholders.

(1) Nominations of persons for election to the Board of Directors of the Corporation and the proposal of other business to be considered by the stockholders may be brought before an Annual Meeting (i) by or at the direction of the Board of Directors or (ii) by any stockholder of the Corporation who was a stockholder of record at the time of giving of notice provided for in this By-law, who is entitled to vote at the meeting, who is present (in person or by proxy) at the meeting and who complies with the notice procedures set forth in this By-law as to such nomination or business. For the avoidance of doubt, the foregoing clause (ii) shall be the exclusive means for a stockholder to bring nominations or business properly before an Annual Meeting (other than matters properly brought under Rule 14a-8 (or any successor rule) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")), and such stockholder must comply with the notice and other procedures set forth in Article I, Section 2(a)(2) and (3) of this By-law to bring such nominations or business properly before an Annual Meeting. In addition to the other requirements set forth in this By-law, for any proposal of business to be considered at an Annual Meeting, it must be a proper subject for action by stockholders of the Corporation under Delaware law.

(2) For nominations or other business to be properly brought before an Annual Meeting by a stockholder pursuant to clause (ii) of Article I, Section 2(a)(1) of this By-law, the stockholder must (i) have given Timely Notice (as defined below)

thereof in writing to the Secretary of the Corporation, (ii) have provided any updates or supplements to such notice at the times and in the forms required by this By-law and (iii) together with the beneficial owner(s), if any, on whose behalf the nomination or business proposal is made, have acted in accordance with the representations set forth in the Solicitation Statement (as defined below) required by this By-law. To be timely, a stockholder's written notice shall be received by the Secretary at the principal executive offices of the Corporation not later than the close of business on the ninetieth (90th) day nor earlier than the close of business on the one hundred twentieth (120th) day prior to the one-year anniversary of the preceding year's Annual Meeting; provided, however, that in the event the Annual Meeting is first convened more than thirty (30) days before or more than sixty (60) days after such anniversary date, or if no Annual Meeting were held in the preceding year, notice by the stockholder to be timely must be received by the Secretary of the Corporation not later than the close of business on the later of the ninetieth (90th) day prior to the scheduled date of such Annual Meeting or the tenth (10th) day following the day on which public announcement of the date of such meeting is first made (such notice within such time periods shall be referred to as "Timely Notice"). Notwithstanding anything to the contrary provided herein, for the first Annual Meeting following the initial public offering of common stock of the Corporation, a stockholder's notice shall be timely if received by the Secretary at the principal executive offices of the Corporation not later than the close of business on the later of the ninetieth (90th) day prior to the scheduled date of such Annual Meeting or the tenth (10th) day following the day on which public announcement of the date of such Annual Meeting is first made or sent by the Corporation. Such stockholder's Timely Notice shall set forth:

(A) as to each person whom the stockholder proposes to nominate for election or reelection as a director, (i) the name, age, business address and residence address of the nominee, (ii) the principal occupation or employment of the nominee, (iii) the class and number of shares of the corporation that are held of record or are beneficially owned by the nominee and any derivative positions held or beneficially held by the nominee, (iv) whether and the extent to which any hedging or other transaction or series of transactions has been entered into by or on behalf of the nominee with respect to any securities of the corporation, and a description of any other agreement, arrangement or understanding (including any short position or any borrowing or lending of shares), the effect or intent of which is to mitigate loss to, or to manage the risk or benefit of share price changes for, or to increase or decrease the voting power of the nominee, (v) a description of all arrangements or understandings between or among the stockholder and each nominee and any other person or persons (naming such person or persons) pursuant to which the nominations are to be made by the stockholder or concerning the nominee's potential service on the Board of Directors, (vi) a written statement executed by the nominee acknowledging that as a director of the corporation, the nominee will owe fiduciary duties under Delaware law with respect to the corporation and its stockholders, and (vii) all information relating to such person that is required to be disclosed in solicitations of proxies for election of directors in an election contest, or is otherwise required, in each case pursuant to Regulation 14A under the Exchange Act (including such person's written consent to being named in the proxy statement as a nominee and to serving as a director if elected);

(B) as to any other business that the stockholder proposes to bring before the meeting, a brief description of the business desired to be brought before the meeting, the reasons for conducting such business at the meeting, the text, if any, of any resolutions or By-law amendment proposed for adoption, and any material interest in such business of each Proposing Person (as defined below);

(C) (i) the name and address of the stockholder giving the notice, as they appear on the Corporation's books, and the names and addresses of the other Proposing Persons (if any) and (ii) as to each Proposing Person, the following information: (a) the class or series and number of all shares of capital stock of the Corporation which are, directly or indirectly, owned beneficially or of record by such Proposing Person or any of its affiliates or associates (as such terms are defined in Rule 12b-2 promulgated under the Exchange Act), including any shares of any class or series of capital stock of the Corporation as to which such Proposing Person or any of its affiliates or associates has a right to acquire beneficial ownership at any time in the future, (b) all Synthetic Equity Interests (as defined below) in which such Proposing Person or any of its affiliates or associates, directly or indirectly, holds an interest including a description of the material terms of each such Synthetic Equity Interest, including without limitation, identification of the counterparty to each such Synthetic Equity Interest and disclosure, for each such Synthetic Equity Interest, as to (x) whether or not such Synthetic Equity Interest conveys any voting rights, directly or indirectly, in such shares to such Proposing Person, (y) whether or not such Synthetic Equity Interest is required to be, or is capable of being, settled through delivery of such shares and (z) whether or not such Proposing Person and/or, to the extent known, the counterparty to such Synthetic Equity Interest has entered into other transactions that hedge or mitigate the economic effect of such Synthetic Equity Interest, (c) any proxy (other than a revocable proxy given in response to a public proxy solicitation made pursuant to, and in accordance with, the Exchange Act), agreement, arrangement, understanding or relationship pursuant to which such Proposing Person has or shares a right to, directly or indirectly, vote any shares of any class or series of capital stock of the Corporation, (d) any rights to dividends or other distributions on the shares of any class or series of capital stock of the Corporation, directly or indirectly, owned beneficially by such Proposing Person that are separated or separable from the underlying shares of the Corporation, and (e) any performance-related fees (other than an asset based fee) that such Proposing Person, directly or indirectly, is entitled to based on any increase or decrease in the value of shares of any class or series of capital stock of the Corporation or any Synthetic Equity Interests (the disclosures to be made pursuant to the foregoing clauses (a) through (e) are referred to, collectively, as "Material Ownership Interests") and (iii) a description of the material terms of all agreements, arrangements or understandings (whether or not in writing) entered into by any Proposing Person or any of its affiliates or associates with any other person for the purpose of acquiring, holding, disposing or voting of any shares of any class or series of capital stock of the Corporation;

(D) (i) a description of all agreements, arrangements or understandings by and among any of the Proposing Persons, or by and among any Proposing Persons and any other person (including with any proposed nominee(s)), pertaining to the nomination(s), or other business proposed to be brought before the meeting of stockholders (which description shall identify the name of each other person who is party to such an agreement, arrangement or understanding), and (ii) identification of the names and addresses of other stockholders (including beneficial owners) known by any of the Proposing Persons to support such nominations or other business proposal(s), and to the extent known the class and number of all shares of the Corporation's capital stock owned beneficially or of record by such other stockholder(s) or other beneficial owner(s); and

(E) a statement whether or not the stockholder giving the notice and/or the other Proposing Person(s), if any, will deliver a proxy statement and form of proxy to holders of, in the case of a business proposal, at least the percentage of voting power of all of the shares of capital stock of the Corporation required under applicable law to approve the proposal or, in the case of a nomination or nominations, at least the percentage of voting power of all of the shares of capital stock of the Corporation reasonably believed by such Proposing Person to be sufficient to elect the nominee or nominees proposed to be nominated by such stockholder (such statement, the "Solicitation Statement").

For purposes of this Article I of these By-laws, the term "Proposing Person" shall mean the following persons: (i) the stockholder of record providing the notice of nominations or business proposed to be brought before a stockholders' meeting, and (ii) the beneficial owner(s), if different, on whose behalf the nominations or business proposed to be brought before a stockholders' meeting is made. For purposes of this Section 2 of Article I of these By-laws, the term "Synthetic Equity Interest" shall mean any transaction, agreement or arrangement (or series of transactions, agreements or arrangements), including, without limitation, any derivative, swap, hedge, repurchase or so-called "stock borrowing" agreement or arrangement, the purpose or effect of which is to, directly or indirectly: (a) give a person or entity economic benefit and/or risk similar to ownership of shares of any class or series of capital stock of the Corporation, in whole or in part, including due to the fact that such transaction, agreement or arrangement provides, directly or indirectly, the opportunity to profit or avoid a loss from any increase or decrease in the value of any shares of any class or series of capital stock of the Corporation, (b) mitigate loss to, reduce the economic risk of or manage the risk of share price changes for, any person or entity with respect to any shares of any class or series of capital stock of the Corporation, (c) otherwise provide in any manner the opportunity to profit or avoid a loss from any decrease in the value of any shares of any class or series of capital stock of the Corporation, or (d) increase or decrease the voting power of any person or entity with respect to any shares of any class or series of capital stock of the Corporation.

(3) A stockholder providing Timely Notice of nominations or business proposed to be brought before an Annual Meeting shall further update and supplement such notice, if necessary, so that the information (including, without limitation, the Material Ownership Interests information) provided or required to be provided in such notice pursuant to this By-law shall be true and correct as of the record date for the meeting and as of the date that is ten (10) business days prior to such Annual Meeting, and such update and supplement shall be received by the Secretary at the principal executive offices of the Corporation not later than the close of business on the fifth (5th) business day after the record date for the Annual Meeting (in the case of the update and supplement required to be made as of the record date), and not later than the close of business on the eighth (8th) business day prior to the date of the Annual Meeting (in the case of the update and supplement required to be made as of ten (10) business days prior to the meeting).

(4) Notwithstanding anything in the second sentence of Article I, Section 2(a)(2) of this By-law to the contrary, in the event that the number of directors to be elected to the Board of Directors of the Corporation is increased and there is no public announcement naming all of the nominees for director or specifying the size of the increased Board of Directors made by the Corporation at least ten (10) days before the last day a stockholder may deliver a notice of nomination in accordance with the second sentence of Article I, Section 2(a)(2), a stockholder's notice required by this By-law shall also be considered timely, but only with respect to nominees for any new positions created by such increase, if it shall be received by the Secretary of the Corporation not later than the close of business on the tenth (10th) day following the day on which such public announcement is first made by the Corporation.

(b) General.

(1) Only such persons who are nominated in accordance with the provisions of this By-law shall be eligible for election and to serve as directors and only such business shall be conducted at an Annual Meeting as shall have been brought before the meeting in accordance with the provisions of this By-law or in accordance with Rule 14a-8 under the Exchange Act. The Board of Directors or a designated committee thereof shall have the power to determine whether a nomination or any business proposed to be brought before the meeting was made in accordance with the provisions of this By-law. If neither the Board of Directors nor such designated committee makes a determination as to whether any stockholder proposal or nomination was made in accordance with the provisions of this By-law, the presiding officer of the Annual Meeting shall have the power and duty to determine whether the stockholder proposal or nomination was made in accordance with the provisions of this By-law. If the Board of Directors or a designated committee thereof or the presiding officer, as applicable, determines that any stockholder proposal or nomination was not made in accordance with the provisions of this By-law, such proposal or nomination shall be disregarded and shall not be presented for action at the Annual Meeting.

(2) Except as otherwise required by law, nothing in this Article I, Section 2 shall obligate the Corporation or the Board of Directors to include in any proxy statement

or other stockholder communication distributed on behalf of the Corporation or the Board of Directors information with respect to any nominee for director or any other matter of business submitted by a stockholder.

(3) Notwithstanding the foregoing provisions of this Article I, Section 2, if the nominating or proposing stockholder (or a qualified representative of the stockholder) does not appear at the Annual Meeting to present a nomination or any business, such nomination or business shall be disregarded, notwithstanding that proxies in respect of such vote may have been received by the Corporation. For purposes of this Article I, Section 2, to be considered a qualified representative of the proposing stockholder, a person must be authorized by a written instrument executed by such stockholder or an electronic transmission delivered by such stockholder to act for such stockholder as proxy at the meeting of stockholders and such person must produce such written instrument or electronic transmission, or a reliable reproduction of the written instrument or electronic transmission, to the presiding officer at the meeting of stockholders.

(4) For purposes of this By-law, "public announcement" shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or comparable national news service or in a document publicly filed by the Corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the Exchange Act.

(5) Notwithstanding the foregoing provisions of this By-law, a stockholder shall also comply with all applicable requirements of the Exchange Act and the rules and regulations thereunder with respect to the matters set forth in this By-law. Nothing in this By-law shall be deemed to affect any rights of (i) stockholders to have proposals included in the Corporation's proxy statement pursuant to Rule 14a-8 (or any successor rule), as applicable, under the Exchange Act and, to the extent required by such rule, have such proposals considered and voted on at an Annual Meeting or (ii) the holders of any series of Undesignated Preferred Stock to elect directors under specified circumstances.

(c) Notwithstanding anything herein to the contrary, the affirmative vote of not less than two thirds (2/3) of the outstanding shares of capital stock entitled to vote thereon, and the affirmative vote of not less than two thirds (2/3) of the outstanding shares of each class entitled to vote thereon as a class, shall be required to amend or repeal any provision of this Article I, Section 2; provided, however, that if the Board of Directors recommends that stockholders approve such amendment or repeal at such meeting of stockholders, such amendment or repeal shall only require the affirmative vote of a majority of the outstanding shares entitled to vote on such amendment or repeal, voting together as a single class.

SECTION 3. Special Meetings. Except as otherwise required by statute and subject to the rights, if any, of the holders of any series of Undesignated Preferred Stock, special meetings of the stockholders of the Corporation may be called only by the Board of Directors acting pursuant to a resolution approved by the affirmative vote of a majority of the Directors then in office. The Board of Directors may postpone or reschedule any previously scheduled special meeting of stockholders. Only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders of the Corporation. Nominations

of persons for election to the Board of Directors of the Corporation and stockholder proposals of other business shall not be brought before a special meeting of stockholders to be considered by the stockholders unless such special meeting is held in lieu of an annual meeting of stockholders in accordance with Article I, Section 1 of these By-laws, in which case such special meeting in lieu thereof shall be deemed an Annual Meeting for purposes of these By-laws and the provisions of Article I, Section 2 of these By-laws shall govern such special meeting.

Notwithstanding anything herein to the contrary, the affirmative vote of not less than two thirds (2/3) of the outstanding shares of capital stock entitled to vote thereon, and the affirmative vote of not less than two thirds (2/3) of the outstanding shares of each class entitled to vote thereon as a class, shall be required to amend or repeal any provision of this Article I, Section 3; provided, however, that if the Board of Directors recommends that stockholders approve such amendment or repeal at such meeting of stockholders, such amendment or repeal shall only require the affirmative vote of a majority of the outstanding shares entitled to vote on such amendment or repeal, voting together as a single class.

SECTION 4. Notice of Meetings; Adjournments.

(a) A notice of each Annual Meeting stating the hour, date and place, if any, of such Annual Meeting and the means of remote communication, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such meeting, shall be given not less than ten (10) days nor more than sixty (60) days before the Annual Meeting, to each stockholder entitled to vote thereat by delivering such notice to such stockholder or by mailing it, postage prepaid, addressed to such stockholder at the address of such stockholder as it appears on the Corporation's stock transfer books. Without limiting the manner by which notice may otherwise be given to stockholders, any notice to stockholders may be given by electronic transmission in the manner provided in Section 232 of the Delaware General Corporation Law ("DGCL").

(b) Unless otherwise required by the DGCL, notice of all special meetings of stockholders shall be given in the same manner as provided for Annual Meetings, except that the notice of all special meetings shall state the purpose or purposes for which the meeting has been called.

(c) Notice of an Annual Meeting or special meeting of stockholders need not be given to a stockholder if a waiver of notice is executed, or waiver of notice by electronic transmission is provided, before or after such meeting by such stockholder or if such stockholder attends such meeting, unless such attendance is for the express purpose of objecting at the beginning of the meeting to the transaction of any business because the meeting was not lawfully called or convened.

(d) The Board of Directors may postpone and reschedule any previously scheduled Annual Meeting or special meeting of stockholders and any record date with respect thereto, regardless of whether any notice or public disclosure with respect to any such meeting has been sent or made pursuant to Section 2 of this Article I of these By-laws or otherwise. In no event shall the public announcement of an adjournment, postponement or rescheduling of any previously scheduled meeting of stockholders commence a new time period for the giving of a stockholder's notice under this Article I of these By-laws.

(e) When any meeting is convened, the presiding officer may adjourn the meeting if (i) no quorum is present for the transaction of business, (ii) the Board of Directors determines that adjournment is necessary or appropriate to enable the stockholders to consider fully information which the Board of Directors determines has not been made sufficiently or timely available to stockholders, or (iii) the Board of Directors determines that adjournment is otherwise in the best interests of the Corporation. When any Annual Meeting or special meeting of stockholders is adjourned to another hour, date or place, notice need not be given of the adjourned meeting other than an announcement at the meeting at which the adjournment is taken of the hour, date and place, if any, to which the meeting is adjourned and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such adjourned meeting; provided, however, that if the adjournment is for more than thirty (30) days from the meeting date, or if after the adjournment a new record date is fixed for the adjourned meeting, notice of the adjourned meeting and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such adjourned meeting shall be given to each stockholder of record entitled to vote thereat and each stockholder who, by law or under the Certificate of Incorporation of the Corporation (as the same may hereafter be amended and/or restated, the "Certificate") or these By-laws, is entitled to such notice.

SECTION 5. Quorum. A majority of the outstanding shares entitled to vote, present in person or represented by proxy, shall constitute a quorum at any meeting of stockholders. If less than a quorum is present at a meeting, the holders of voting stock representing a majority of the voting power present at the meeting or the presiding officer may adjourn the meeting from time to time, and the meeting may be held as adjourned without further notice, except as provided in Section 4 of this Article I. At such adjourned meeting at which a quorum is present, any business may be transacted which might have been transacted at the original meeting. The stockholders present at a duly constituted meeting may continue to transact business until adjournment, notwithstanding the withdrawal of enough stockholders to leave less than a quorum.

SECTION 6. Voting and Proxies. Stockholders shall have one vote for each share of stock entitled to vote owned by them of record according to the stock ledger of the Corporation as of the record date, unless otherwise provided by law or by the Certificate. Stockholders may vote either (i) in person, (ii) by written proxy or (iii) by a transmission permitted by Section 212(c) of the DGCL. Any copy, facsimile telecommunication or other reliable reproduction of the writing or transmission permitted by Section 212(c) of the DGCL may be substituted for or used in lieu of the original writing or transmission for any and all purposes for which the original writing or transmission could be used, provided that such copy, facsimile telecommunication or other reproduction shall be a complete reproduction of the entire original writing or transmission. Proxies shall be filed in accordance with the procedures established for the meeting of stockholders. Except as otherwise limited therein or as otherwise provided by law, proxies authorizing a person to vote at a specific meeting shall entitle the persons authorized thereby to vote at any adjournment of such meeting, but they shall not be valid after final adjournment of such meeting. A proxy with respect to stock held in the name of two or more

persons shall be valid if executed by or on behalf of any one of them unless at or prior to the exercise of the proxy the Corporation receives a specific written notice to the contrary from any one of them.

SECTION 7. Action at Meeting. When a quorum is present at any meeting of stockholders, any matter before any such meeting (other than an election of a director or directors) shall be decided by a majority of the votes properly cast for and against such matter, except where a larger vote is required by law, by the Certificate or by these By-laws. Any election of directors by stockholders shall be determined by a plurality of the votes properly cast on the election of directors.

SECTION 8. Stockholder Lists. The Secretary or an Assistant Secretary (or the Corporation's transfer agent or other person authorized by these By-laws or by law) shall prepare and make, at least ten (10) days before every Annual Meeting or special meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for a period of at least ten (10) days prior to the meeting as provided in the manner, and subject to the terms, set forth in Section 219 of the DGCL (or any successor provision). The list shall also be open to the examination of any stockholder during the whole time of the meeting as provided by law.

SECTION 9. Presiding Officer. The Board of Directors shall designate a representative to preside over all Annual Meetings or special meetings of stockholders, provided that if the Board of Directors does not so designate such a presiding officer, then the Chairman of the Board, if one is elected, shall preside over such meetings. If the Board of Directors does not so designate such a presiding officer and there is no Chairman of the Board or the Chairman of the Board is unable to so preside or is absent, then the Chief Executive Officer, if one is elected, shall preside over such meetings, provided further that if there is no Chief Executive Officer or the Chief Executive Officer is unable to so preside or is absent, then the President shall preside over such meetings. The presiding officer at any Annual Meeting or special meeting of stockholders shall have the power, among other things, to adjourn such meeting at any time and from time to time, subject to Sections 4 and 5 of this Article I. The order of business and all other matters of procedure at any meeting of the stockholders shall be determined by the presiding officer.

SECTION 10. Inspectors of Elections. The Corporation shall, in advance of any meeting of stockholders, appoint one or more inspectors to act at the meeting and make a written report thereof. The Corporation may designate one or more persons as alternate inspectors to replace any inspector who fails to act. If no inspector or alternate is able to act at a meeting of stockholders, the presiding officer shall appoint one or more inspectors to act at the meeting. Any inspector may, but need not, be an officer, employee or agent of the Corporation. Each inspector, before entering upon the discharge of his or her duties, shall take and sign an oath faithfully to execute the duties of inspector with strict impartiality and according to the best of his or her ability. The inspectors shall perform such duties as are required by the DGCL, including the counting of all votes and ballots. The inspectors may appoint or retain other persons or entities to assist the inspectors in the performance of the duties of the inspectors. The presiding officer may review all determinations made by the inspectors, and in so doing the

presiding officer shall be entitled to exercise his or her sole judgment and discretion and he or she shall not be bound by any determinations made by the inspectors. All determinations by the inspectors and, if applicable, the presiding officer, shall be subject to further review by any court of competent jurisdiction.

ARTICLE II

Directors

SECTION 1. Powers. The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors except as otherwise provided by the Certificate or required by law.

SECTION 2. Number and Terms. The number of directors of the Corporation shall be fixed solely and exclusively by resolution duly adopted from time to time by the Board of Directors. The directors shall hold office in the manner provided in the Certificate.

SECTION 3. Qualification. No director need be a stockholder of the Corporation.

SECTION 4. Vacancies. Vacancies in the Board of Directors shall be filled in the manner provided in the Certificate.

SECTION 5. Removal. Directors may be removed from office only in the manner provided in the Certificate.

SECTION 6. Resignation. A director may resign at any time by electronic transmission or by giving written notice to the Chairman of the Board, if one is elected, the President or the Secretary. A resignation shall be effective upon receipt, unless the resignation otherwise provides.

SECTION 7. Regular Meetings. The regular annual meeting of the Board of Directors shall be held, without notice other than this Section 7, on the same date and at the same place as the Annual Meeting following the close of such meeting of stockholders. Other regular meetings of the Board of Directors may be held at such hour, date and place as the Board of Directors may by resolution from time to time determine and publicize by means of reasonable notice given to any director who is not present at the meeting at which such resolution is adopted.

SECTION 8. Special Meetings. Special meetings of the Board of Directors may be called, orally or in writing, by or at the request of a majority of the directors, the Chairman of the Board, if one is elected, or the President. The person calling any such special meeting of the Board of Directors may fix the hour, date and place thereof.

SECTION 9. Notice of Meetings. Notice of the hour, date and place of all special meetings of the Board of Directors shall be given to each director by the Secretary or an Assistant Secretary, or in case of the death, absence, incapacity or refusal of such persons, by the Chairman of the Board, if one is elected, or the President or such other officer designated by the Chairman of the Board, if one is elected, or the President. Notice of any special meeting of the Board of Directors shall be given to each director in person, by telephone, or by facsimile,

electronic mail or other form of electronic communication, sent to his or her business or home address, at least twenty-four (24) hours in advance of the meeting, or by written notice mailed to his or her business or home address, at least forty-eight (48) hours in advance of the meeting. Such notice shall be deemed to be delivered when hand-delivered to such address, read to such director by telephone, deposited in the mail so addressed, with postage thereon prepaid if mailed, dispatched or transmitted if sent by facsimile transmission or by electronic mail or other form of electronic communications. A written waiver of notice signed or electronically transmitted before or after a meeting by a director and filed with the records of the meeting shall be deemed to be equivalent to notice of the meeting. The attendance of a director at a meeting shall constitute a waiver of notice of such meeting, except where a director attends a meeting for the express purpose of objecting at the beginning of the meeting to the transaction of any business because such meeting is not lawfully called or convened. Except as otherwise required by law, by the Certificate or by these By-laws, neither the business to be transacted at, nor the purpose of, any meeting of the Board of Directors need be specified in the notice or waiver of notice of such meeting.

SECTION 10. Quorum. At any meeting of the Board of Directors, a majority of the total number of directors shall constitute a quorum for the transaction of business, but if less than a quorum is present at a meeting, a majority of the directors present may adjourn the meeting from time to time, and the meeting may be held as adjourned without further notice. Any business which might have been transacted at the meeting as originally noticed may be transacted at such adjourned meeting at which a quorum is present. For purposes of this section, the total number of directors includes any unfilled vacancies on the Board of Directors.

SECTION 11. Action at Meeting. At any meeting of the Board of Directors at which a quorum is present, the vote of a majority of the directors present shall constitute action by the Board of Directors, unless otherwise required by law, by the Certificate or by these By-laws.

SECTION 12. Action by Consent. Any action required or permitted to be taken at any meeting of the Board of Directors may be taken without a meeting if all members of the Board of Directors consent thereto in writing or by electronic transmission and the writing or writings or electronic transmission or transmissions are filed with the records of the meetings of the Board of Directors. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form. Such consent shall be treated as a resolution of the Board of Directors for all purposes.

SECTION 13. Manner of Participation. Directors may participate in meetings of the Board of Directors by means of conference telephone or other communications equipment by means of which all directors participating in the meeting can hear each other, and participation in a meeting in accordance herewith shall constitute presence in person at such meeting for purposes of these By-laws.

SECTION 14. Presiding Director. The Board of Directors shall designate a representative to preside over all meetings of the Board of Directors, provided that if the Board of Directors does not so designate such a presiding director or such designated presiding director is unable to so preside or is absent, then the Chairman of the Board, if one is elected, shall preside over all meetings of the Board of Directors. If both the designated presiding director, if

one is so designated, and the Chairman of the Board, if one is elected, are unable to preside or are absent, the Board of Directors shall designate an alternate representative to preside over a meeting of the Board of Directors.

SECTION 15. Committees. The Board of Directors, by vote of a majority of the directors then in office, may elect one or more committees, including, without limitation, a Compensation Committee, a Nominating & Corporate Governance Committee and an Audit Committee, and may delegate thereto some or all of its powers except those which by law, by the Certificate or by these By-laws may not be delegated. Except as the Board of Directors may otherwise determine, any such committee may make rules for the conduct of its business, but unless otherwise provided by the Board of Directors or in such rules, its business shall be conducted so far as possible in the same manner as is provided by these By-laws for the Board of Directors. All members of such committees shall hold such offices at the pleasure of the Board of Directors. The Board of Directors may abolish any such committee at any time. Any committee to which the Board of Directors delegates any of its powers or duties shall keep records of its meetings and shall report its action to the Board of Directors.

SECTION 16. Compensation of Directors. Directors shall receive such compensation for their services as shall be determined by a majority of the Board of Directors, or a designated committee thereof, provided that directors who are serving the Corporation as employees and who receive compensation for their services as such, shall not receive any salary or other compensation for their services as directors of the Corporation.

ARTICLE III

Officers

SECTION 1. Enumeration. The officers of the Corporation shall consist of a President, a Treasurer, a Secretary and such other officers, including, without limitation, a Chairman of the Board of Directors, a Chief Executive Officer and one or more Vice Presidents (including Executive Vice Presidents or Senior Vice Presidents), Assistant Vice Presidents, Assistant Treasurers and Assistant Secretaries, as the Board of Directors may determine.

SECTION 2. Election. At the regular annual meeting of the Board of Directors following the Annual Meeting, the Board of Directors shall elect the President, the Treasurer and the Secretary. Other officers may be elected by the Board of Directors at such regular annual meeting of the Board of Directors or at any other regular or special meeting.

SECTION 3. Qualification. No officer need be a stockholder or a director. Any person may occupy more than one office of the Corporation at any time.

SECTION 4. Tenure. Except as otherwise provided by the Certificate or by these By-laws, each of the officers of the Corporation shall hold office until the regular annual meeting of the Board of Directors following the next Annual Meeting and until his or her successor is elected and qualified or until his or her earlier resignation or removal.

SECTION 5. Resignation. Any officer may resign by delivering his or her written or electronically transmitted resignation to the Corporation addressed to the President or the Secretary, and such resignation shall be effective upon receipt, unless the resignation otherwise provides.

SECTION 6. Removal. Except as otherwise provided by law or by resolution of the Board of Directors, the Board of Directors may remove any officer with or without cause by the affirmative vote of a majority of the directors then in office.

SECTION 7. Absence or Disability. In the event of the absence or disability of any officer, the Board of Directors may designate another officer to act temporarily in place of such absent or disabled officer.

SECTION 8. Vacancies. Any vacancy in any office may be filled for the unexpired portion of the term by the Board of Directors.

SECTION 9. President. The President shall, subject to the direction of the Board of Directors, have such powers and shall perform such duties as the Board of Directors may from time to time designate.

SECTION 10. Chairman of the Board. The Chairman of the Board, if one is elected, shall have such powers and shall perform such duties as the Board of Directors may from time to time designate.

SECTION 11. Chief Executive Officer. The Chief Executive Officer, if one is elected, shall have such powers and shall perform such duties as the Board of Directors may from time to time designate.

SECTION 12. Vice Presidents and Assistant Vice Presidents. Any Vice President (including any Executive Vice President or Senior Vice President) and any Assistant Vice President shall have such powers and shall perform such duties as the Board of Directors or the Chief Executive Officer may from time to time designate.

SECTION 13. Treasurer and Assistant Treasurers. The Treasurer shall, subject to the direction of the Board of Directors and except as the Board of Directors or the Chief Executive Officer may otherwise provide, have general charge of the financial affairs of the Corporation and shall cause to be kept accurate books of account. The Treasurer shall have custody of all funds, securities, and valuable documents of the Corporation. He or she shall have such other duties and powers as may be designated from time to time by the Board of Directors or the Chief Executive Officer. Any Assistant Treasurer shall have such powers and perform such duties as the Board of Directors or the Chief Executive Officer may from time to time designate.

SECTION 14. Secretary and Assistant Secretaries. The Secretary shall record all the proceedings of the meetings of the stockholders and the Board of Directors (including committees of the Board of Directors) in books kept for that purpose. In his or her absence from any such meeting, a temporary secretary chosen at the meeting shall record the proceedings thereof. The Secretary shall have charge of the stock ledger (which may, however, be kept by any transfer or other agent of the Corporation). The Secretary shall have custody of the seal of the Corporation, and the Secretary, or an Assistant Secretary shall have authority to affix it to any instrument requiring it, and, when so affixed, the seal may be attested by his or her signature

or that of an Assistant Secretary. The Secretary shall have such other duties and powers as may be designated from time to time by the Board of Directors or the Chief Executive Officer. In the absence of the Secretary, any Assistant Secretary may perform his or her duties and responsibilities. Any Assistant Secretary shall have such powers and perform such duties as the Board of Directors or the Chief Executive Officer may from time to time designate.

SECTION 15. Other Powers and Duties. Subject to these By-laws and to such limitations as the Board of Directors may from time to time prescribe, the officers of the Corporation shall each have such powers and duties as generally pertain to their respective offices, as well as such powers and duties as from time to time may be conferred by the Board of Directors or the Chief Executive Officer.

ARTICLE IV

Capital Stock

SECTION 1. Certificates of Stock. Each stockholder shall be entitled to a certificate of the capital stock of the Corporation in such form as may from time to time be prescribed by the Board of Directors. Such certificate shall be signed by any two authorized officers of the Corporation. The Corporation seal and the signatures by the Corporation's officers, the transfer agent or the registrar may be facsimiles. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed on such certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if he or she were such officer, transfer agent or registrar at the time of its issue. Every certificate for shares of stock which are subject to any restriction on transfer and every certificate issued when the Corporation is authorized to issue more than one class or series of stock shall contain such legend with respect thereto as is required by law. Notwithstanding anything to the contrary provided in these Bylaws, the Board of Directors of the Corporation may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be uncertificated shares (except that the foregoing shall not apply to shares represented by a certificate until such certificate is surrendered to the Corporation), and by the approval and adoption of these Bylaws the Board of Directors has determined that all classes or series of the Corporation's stock may be uncertificated, whether upon original issuance, re-issuance, or subsequent transfer.

SECTION 2. Transfers. Subject to any restrictions on transfer and unless otherwise provided by the Board of Directors, shares of stock that are represented by a certificate may be transferred on the books of the Corporation by the surrender to the Corporation or its transfer agent of the certificate theretofore properly endorsed or accompanied by a written assignment or power of attorney properly executed, with transfer stamps (if necessary) affixed, and with such proof of the authenticity of signature as the Corporation or its transfer agent may reasonably require. Shares of stock that are not represented by a certificate may be transferred on the books of the Corporation by submitting to the Corporation or its transfer agent such evidence of transfer and following such other procedures as the Corporation or its transfer agent may require.

SECTION 3. Record Holders. Except as may otherwise be required by law, by the Certificate or by these By-laws, the Corporation shall be entitled to treat the record holder of

stock as shown on its books as the owner of such stock for all purposes, including the payment of dividends and the right to vote with respect thereto, regardless of any transfer, pledge or other disposition of such stock, until the shares have been transferred on the books of the Corporation in accordance with the requirements of these By-laws.

SECTION 4. Record Date. In order that the Corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date: (a) in the case of determination of stockholders entitled to vote at any meeting of stockholders, shall, unless otherwise required by law, not be more than sixty (60) nor less than ten (10) days before the date of such meeting and (b) in the case of any other action, shall not be more than sixty (60) days prior to such other action. If no record date is fixed: (i) the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held; and (ii) the record date for determining stockholders for any other purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

SECTION 5. Replacement of Certificates. In case of the alleged loss, destruction or mutilation of a certificate of stock of the Corporation, a duplicate certificate may be issued in place thereof, upon such terms as the Board of Directors may prescribe.

ARTICLE V

Indemnification

SECTION 1. Definitions. For purposes of this Article:

(a) “Corporate Status” describes the status of a person who is serving or has served (i) as a Director of the Corporation, (ii) as an Officer of the Corporation, (iii) as a Non-Officer Employee of the Corporation, or (iv) as a director, partner, trustee, officer, employee or agent of any other corporation, partnership, limited liability company, joint venture, trust, employee benefit plan, foundation, association, organization or other legal entity which such person is or was serving at the request of the Corporation. For purposes of this Section 1(a), a Director, Officer or Non-Officer Employee of the Corporation who is serving or has served as a director, partner, trustee, officer, employee or agent of a Subsidiary shall be deemed to be serving at the request of the Corporation. Notwithstanding the foregoing, “Corporate Status” shall not include the status of a person who is serving or has served as a director, officer, employee or agent of a constituent corporation absorbed in a merger or consolidation transaction with the Corporation with respect to such person’s activities prior to said transaction, unless specifically authorized by the Board of Directors or the stockholders of the Corporation;

(b) “Director” means any person who serves or has served the Corporation as a director on the Board of Directors of the Corporation;

(c) “Disinterested Director” means, with respect to each Proceeding in respect of which indemnification is sought hereunder, a Director of the Corporation who is not and was not a party to such Proceeding;

(d) “Expenses” means all attorneys’ fees, retainers, court costs, transcript costs, fees of expert witnesses, private investigators and professional advisors (including, without limitation, accountants and investment bankers), travel expenses, duplicating costs, printing and binding costs, costs of preparation of demonstrative evidence and other courtroom presentation aids and devices, costs incurred in connection with document review, organization, imaging and computerization, telephone charges, postage, delivery service fees, and all other disbursements, costs or expenses of the type customarily incurred in connection with prosecuting, defending, preparing to prosecute or defend, investigating, being or preparing to be a witness in, settling or otherwise participating in, a Proceeding;

(e) “Liabilities” means judgments, damages, liabilities, losses, penalties, excise taxes, fines and amounts paid in settlement;

(f) “Non-Officer Employee” means any person who serves or has served as an employee or agent of the Corporation, but who is not or was not a Director or Officer;

(g) “Officer” means any person who serves or has served the Corporation as an officer of the Corporation appointed by the Board of Directors of the Corporation;

(h) “Proceeding” means any threatened, pending or completed action, suit, arbitration, alternate dispute resolution mechanism, inquiry, investigation, administrative hearing or other proceeding, whether civil, criminal, administrative, arbitrative or investigative; and

(i) “Subsidiary” shall mean any corporation, partnership, limited liability company, joint venture, trust or other entity of which the Corporation owns (either directly or through or together with another Subsidiary of the Corporation) either (i) a general partner, managing member or other similar interest or (ii) (A) fifty percent (50%) or more of the voting power of the voting capital equity interests of such corporation, partnership, limited liability company, joint venture or other entity, or (B) fifty percent (50%) or more of the outstanding voting capital stock or other voting equity interests of such corporation, partnership, limited liability company, joint venture or other entity.

SECTION 2. Indemnification of Directors and Officers.

(a) Subject to the operation of Section 4 of this Article V of these By-laws, each Director and Officer shall be indemnified and held harmless by the Corporation to the fullest extent authorized by the DGCL, as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits the Corporation to provide broader indemnification rights than such law permitted the Corporation to provide prior to such amendment), and to the extent authorized in this Section 2.

(1) Actions, Suits and Proceedings Other than By or In the Right of the Corporation. Each Director and Officer shall be indemnified and held harmless by the Corporation against any and all Expenses and Liabilities that are incurred or paid by such Director or Officer or on such Director's or Officer's behalf in connection with any Proceeding or any claim, issue or matter therein (other than an action by or in the right of the Corporation), which such Director or Officer is, or is threatened to be made, a party to or participant in by reason of such Director's or Officer's Corporate Status, if such Director or Officer acted in good faith and in a manner such Director or Officer reasonably believed to be in or not opposed to the best interests of the Corporation and, with respect to any criminal proceeding, had no reasonable cause to believe his or her conduct was unlawful.

(2) Actions, Suits and Proceedings By or In the Right of the Corporation. Each Director and Officer shall be indemnified and held harmless by the Corporation against any and all Expenses that are incurred by such Director or Officer or on such Director's or Officer's behalf in connection with any Proceeding or any claim, issue or matter therein by or in the right of the Corporation, which such Director or Officer is, or is threatened to be made, a party to or participant in by reason of such Director's or Officer's Corporate Status, if such Director or Officer acted in good faith and in a manner such Director or Officer reasonably believed to be in or not opposed to the best interests of the Corporation; provided, however, that no indemnification shall be made under this Section 2(a)(2) in respect of any claim, issue or matter as to which such Director or Officer shall have been finally adjudged by a court of competent jurisdiction to be liable to the Corporation, unless, and only to the extent that, the Court of Chancery or another court in which such Proceeding was brought shall determine upon application that, despite adjudication of liability, but in view of all the circumstances of the case, such Director or Officer is fairly and reasonably entitled to indemnification for such Expenses that such court deems proper.

(3) Survival of Rights. The rights of indemnification provided by this Section 2 shall continue as to a Director or Officer after he or she has ceased to be a Director or Officer and shall inure to the benefit of his or her heirs, executors, administrators and personal representatives.

(4) Actions by Directors or Officers. Notwithstanding the foregoing, the Corporation shall indemnify any Director or Officer seeking indemnification in connection with a Proceeding initiated by such Director or Officer only if such Proceeding (including any parts of such Proceeding not initiated by such Director or

Officer) was authorized in advance by the Board of Directors of the Corporation, unless such Proceeding was brought to enforce such Officer's or Director's rights to indemnification or, in the case of Directors, advancement of Expenses under these By-laws in accordance with the provisions set forth herein.

SECTION 3. Indemnification of Non-Officer Employees. Subject to the operation of Section 4 of this Article V of these By-laws, each Non-Officer Employee may, in the discretion of the Board of Directors of the Corporation, be indemnified by the Corporation to the fullest extent authorized by the DGCL, as the same exists or may hereafter be amended, against any or all Expenses and Liabilities that are incurred by such Non-Officer Employee or on such Non-Officer Employee's behalf in connection with any threatened, pending or completed Proceeding, or any claim, issue or matter therein, which such Non-Officer Employee is, or is threatened to be made, a party to or participant in by reason of such Non-Officer Employee's Corporate Status, if such Non-Officer Employee acted in good faith and in a manner such Non-Officer Employee reasonably believed to be in or not opposed to the best interests of the Corporation and, with respect to any criminal proceeding, had no reasonable cause to believe his or her conduct was unlawful. The rights of indemnification provided by this Section 3 shall exist as to a Non-Officer Employee after he or she has ceased to be a Non-Officer Employee and shall inure to the benefit of his or her heirs, personal representatives, executors and administrators. Notwithstanding the foregoing, the Corporation may indemnify any Non-Officer Employee seeking indemnification in connection with a Proceeding initiated by such Non-Officer Employee only if such Proceeding was authorized in advance by the Board of Directors of the Corporation.

SECTION 4. Determination. Unless ordered by a court, no indemnification shall be provided pursuant to this Article V to a Director, to an Officer or to a Non-Officer Employee unless a determination shall have been made that such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the Corporation and, with respect to any criminal Proceeding, such person had no reasonable cause to believe his or her conduct was unlawful. Such determination shall be made by (a) a majority vote of the Disinterested Directors, even though less than a quorum of the Board of Directors, (b) a committee comprised of Disinterested Directors, such committee having been designated by a majority vote of the Disinterested Directors (even though less than a quorum), (c) if there are no such Disinterested Directors, or if a majority of Disinterested Directors so directs, by independent legal counsel in a written opinion, or (d) by the stockholders of the Corporation.

SECTION 5. Advancement of Expenses to Directors Prior to Final Disposition.

(a) The Corporation shall advance all Expenses incurred by or on behalf of any Director in connection with any Proceeding in which such Director is involved by reason of such Director's Corporate Status within thirty (30) days after the receipt by the Corporation of a written statement from such Director requesting such advance or advances from time to time, whether prior to or after final disposition of such Proceeding. Such statement or statements shall reasonably evidence the Expenses incurred by such Director and shall be preceded or accompanied by an undertaking by or on behalf of such Director to repay any Expenses so advanced if it shall ultimately be determined that such Director is not entitled to be indemnified against such Expenses. Notwithstanding the foregoing, the Corporation shall advance all

Expenses incurred by or on behalf of any Director seeking advancement of expenses hereunder in connection with a Proceeding initiated by such Director only if such Proceeding (including any parts of such Proceeding not initiated by such Director) was (i) authorized by the Board of Directors of the Corporation, or (ii) brought to enforce such Director's rights to indemnification or advancement of Expenses under these By-laws.

(b) If a claim for advancement of Expenses hereunder by a Director is not paid in full by the Corporation within thirty (30) days after receipt by the Corporation of documentation of Expenses and the required undertaking, such Director may at any time thereafter bring suit against the Corporation to recover the unpaid amount of the claim and if successful in whole or in part, such Director shall also be entitled to be paid the expenses of prosecuting such claim. The failure of the Corporation (including its Board of Directors or any committee thereof, independent legal counsel, or stockholders) to make a determination concerning the permissibility of such advancement of Expenses under this Article V shall not be a defense to an action brought by a Director for recovery of the unpaid amount of an advancement claim and shall not create a presumption that such advancement is not permissible. The burden of proving that a Director is not entitled to an advancement of expenses shall be on the Corporation.

(c) In any suit brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the Corporation shall be entitled to recover such expenses upon a final adjudication that the Director has not met any applicable standard for indemnification set forth in the DGCL.

SECTION 6. Advancement of Expenses to Officers and Non-Officer Employees Prior to Final Disposition.

(a) The Corporation may, at the discretion of the Board of Directors of the Corporation, advance any or all Expenses incurred by or on behalf of any Officer or any Non-Officer Employee in connection with any Proceeding in which such person is involved by reason of his or her Corporate Status as an Officer or Non-Officer Employee upon the receipt by the Corporation of a statement or statements from such Officer or Non-Officer Employee requesting such advance or advances from time to time, whether prior to or after final disposition of such Proceeding. Such statement or statements shall reasonably evidence the Expenses incurred by such Officer or Non-Officer Employee and shall be preceded or accompanied by an undertaking by or on behalf of such person to repay any Expenses so advanced if it shall ultimately be determined that such Officer or Non-Officer Employee is not entitled to be indemnified against such Expenses.

(b) In any suit brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the Corporation shall be entitled to recover such expenses upon a final adjudication that the Officer or Non-Officer Employee has not met any applicable standard for indemnification set forth in the DGCL.

SECTION 7. Contractual Nature of Rights.

(a) The provisions of this Article V shall be deemed to be a contract between the Corporation and each Director and Officer entitled to the benefits hereof at any time while this

Article V is in effect, in consideration of such person's past or current and any future performance of services for the Corporation. Neither amendment, repeal or modification of any provision of this Article V nor the adoption of any provision of the Certificate of Incorporation inconsistent with this Article V shall eliminate or reduce any right conferred by this Article V in respect of any act or omission occurring, or any cause of action or claim that accrues or arises or any state of facts existing, at the time of or before such amendment, repeal, modification or adoption of an inconsistent provision (even in the case of a proceeding based on such a state of facts that is commenced after such time), and all rights to indemnification and advancement of Expenses granted herein or arising out of any act or omission shall vest at the time of the act or omission in question, regardless of when or if any proceeding with respect to such act or omission is commenced. The rights to indemnification and to advancement of expenses provided by, or granted pursuant to, this Article V shall continue notwithstanding that the person has ceased to be a director or officer of the Corporation and shall inure to the benefit of the estate, heirs, executors, administrators, legatees and distributes of such person.

(b) If a claim for indemnification hereunder by a Director or Officer is not paid in full by the Corporation within sixty (60) days after receipt by the Corporation of a written claim for indemnification, such Director or Officer may at any time thereafter bring suit against the Corporation to recover the unpaid amount of the claim, and if successful in whole or in part, such Director or Officer shall also be entitled to be paid the expenses of prosecuting such claim. The failure of the Corporation (including its Board of Directors or any committee thereof, independent legal counsel, or stockholders) to make a determination concerning the permissibility of such indemnification under this Article V shall not be a defense to an action brought by a Director or Officer for recovery of the unpaid amount of an indemnification claim and shall not create a presumption that such indemnification is not permissible. The burden of proving that a Director or Officer is not entitled to indemnification shall be on the Corporation.

(c) In any suit brought by a Director or Officer to enforce a right to indemnification hereunder, it shall be a defense that such Director or Officer has not met any applicable standard for indemnification set forth in the DGCL.

SECTION 8. Non-Exclusivity of Rights. The rights to indemnification and to advancement of Expenses set forth in this Article V shall not be exclusive of any other right which any Director, Officer, or Non-Officer Employee may have or hereafter acquire under any statute, provision of the Certificate or these By-laws, agreement, vote of stockholders or Disinterested Directors or otherwise.

SECTION 9. Insurance. The Corporation may maintain insurance, at its expense, to protect itself and any Director, Officer or Non-Officer Employee against any liability of any character asserted against or incurred by the Corporation or any such Director, Officer or Non-Officer Employee, or arising out of any such person's Corporate Status, whether or not the Corporation would have the power to indemnify such person against such liability under the DGCL or the provisions of this Article V.

SECTION 10. Other Indemnification. The Corporation's obligation, if any, to indemnify or provide advancement of Expenses to any person under this Article V as a result of such person serving, at the request of the Corporation, as a director, partner, trustee, officer, employee or

agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise shall be reduced by any amount such person may collect as indemnification or advancement of Expenses from such other corporation, partnership, joint venture, trust, employee benefit plan or enterprise (the "Primary Indemnitor"). Any indemnification or advancement of Expenses under this Article V owed by the Corporation as a result of a person serving, at the request of the Corporation, as a director, partner, trustee, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise shall only be in excess of, and shall be secondary to, the indemnification or advancement of Expenses available from the applicable Primary Indemnitor(s) and any applicable insurance policies.

ARTICLE VI

Miscellaneous Provisions

SECTION 1. Fiscal Year. The fiscal year of the Corporation shall be determined by the Board of Directors.

SECTION 2. Seal. The Board of Directors shall have power to adopt and alter the seal of the Corporation.

SECTION 3. Execution of Instruments. All deeds, leases, transfers, contracts, bonds, notes and other obligations to be entered into by the Corporation in the ordinary course of its business without director action may be executed on behalf of the Corporation by the Chairman of the Board, if one is elected, the President or the Treasurer or any other officer, employee or agent of the Corporation as the Board of Directors or the executive committee of the Board may authorize.

SECTION 4. Voting of Securities. Unless the Board of Directors otherwise provides, the Chairman of the Board, if one is elected, the President or the Treasurer may waive notice of and act on behalf of the Corporation (including with regard to voting and actions by written consent), or appoint another person or persons to act as proxy or attorney in fact for the Corporation with or without discretionary power and/or power of substitution, at any meeting of stockholders or shareholders of any other corporation or organization, any of whose securities are held by the Corporation.

SECTION 5. Resident Agent. The Board of Directors may appoint a resident agent upon whom legal process may be served in any action or proceeding against the Corporation.

SECTION 6. Corporate Records. The original or attested copies of the Certificate, By-laws and records of all meetings of the incorporators, stockholders and the Board of Directors and the stock transfer books, which shall contain the names of all stockholders, their record addresses and the amount of stock held by each, may be kept outside the State of Delaware and shall be kept at the principal office of the Corporation, at an office of its counsel, at an office of its transfer agent or at such other place or places as may be designated from time to time by the Board of Directors.

SECTION 7. Certificate. All references in these By-laws to the Certificate shall be deemed to refer to the Second Amended and Restated Certificate of Incorporation of the Corporation, as amended and/or restated and in effect from time to time.

SECTION 8. Exclusive Jurisdiction of Delaware Courts. Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the Corporation, (ii) any action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee of the Corporation to the Corporation or the Corporation's stockholders, (iii) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law or the Certificate or By-laws, or (iv) any action asserting a claim against the Corporation governed by the internal affairs doctrine. Any person or entity purchasing or otherwise acquiring any interest in shares of capital stock of the Corporation shall be deemed to have notice of and consented to the provisions of this Section 8.

SECTION 9. Amendment of By-laws.

(a) Amendment by Directors. Except as provided otherwise by law, these By-laws may be amended or repealed by the Board of Directors by the affirmative vote of a majority of the directors then in office.

(b) Amendment by Stockholders. Except as otherwise required by these By-laws or by law, these By-laws may be amended or repealed at any Annual Meeting, or special meeting of stockholders called for such purpose in accordance with these By-Laws, by the affirmative vote of a majority of the outstanding shares entitled to vote on such amendment or repeal, voting together as a single class. Notwithstanding the foregoing, stockholder approval shall not be required unless mandated by the Certificate, these By-laws, or other applicable law.

SECTION 10. Notices. If mailed, notice to stockholders shall be deemed given when deposited in the mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the records of the Corporation. Without limiting the manner by which notice otherwise may be given to stockholders, any notice to stockholders may be given by electronic transmission in the manner provided in Section 232 of the DGCL.

SECTION 11. Waivers. A written waiver of any notice, signed by a stockholder or director, or waiver by electronic transmission by such person, whether given before or after the time of the event for which notice is to be given, shall be deemed equivalent to the notice required to be given to such person. Neither the business to be transacted at, nor the purpose of, any meeting need be specified in such a waiver.

Adopted December 21, 2017, subject to and effective upon the closing of the Corporation's initial public offering on its Registration Statement on Form S-1.

ZQ|CERT#|COY|CLS|RGSTRY|ACCT#|TRANSTYPE|RUN#|TRANS#

COMMON STOCK

PAR VALUE $0.0001

COMMON STOCK

resTORbio

Certificate Number

ZQ00000000

Shares

resTORbio, Inc.

INCORPORATED UNDER THE LAWS OF THE STATE OF DELAWARE

THIS CERTIFIES THAT

MR. SAMPLE & MRS. SAMPLE & MR. SAMPLE & MRS. SAMPLE

SEE REVERSE FOR CERTAIN DEFINITIONS

CUSIP 76133L 10 3

is the owner of

ZERO HUNDRED THOUSAND ZERO HUNDRED AND ZERO

THIS CERTIFICATE IS TRANSFERABLE IN CITIES DESIGNATED BY THE TRANSFER AGENT, AVAILABLE ONLINE AT www.computershare.com

FULLY-PAID AND NON-ASSESSABLE SHARES OF COMMON STOCK OF

resTORbio, Inc. (hereinafter called the "Company"), transferable on the books of the Company in person or by duly authorized attorney, upon surrender of this Certificate properly endorsed. This Certificate and the shares represented hereby, are issued and shall be held subject to all of the provisions of the Articles of Incorporation, as amended, and the By-Laws, as amended, of the Company (copies of which are on file with the Company and with the Transfer Agent), to all of which each holder, by acceptance hereof, assents. This Certificate is not valid unless countersigned and registered by the Transfer Agent and Registrar.

Witness the facsimile seal of the Company and the facsimile signatures of its duly authorized officers.

DATED DD-MMM-YYYY

FACSIMILE SIGNATURE TO COME

President

resTORbio, Inc. INCORPORATED SEAL July 5, 2016 DELAWARE

COUNTERSIGNED AND REGISTERED:
COMPUTERSHARE TRUST COMPANY, N.A.
TRANSFER AGENT AND REGISTRAR,

FACSIMILE SIGNATURE TO COME

Secretary

By _____
AUTHORIZED SIGNATURE

SECURITY INSTRUCTIONS ON REVERSE

1234567

resTORbio

PO BOX 43004, Providence, RI 02940-3004

MR A SAMPLE
DESIGNATION (IF ANY)
ADD 1
ADD 2
ADD 3
ADD 4

CUSIP XXXXXX XX X
Holder ID XXXXXXXXXX
Insurance Value 1,000,000.00
Number of Shares 123456
DTC 12345678 1234567890 12345

Certificate Numbers	Num/No.	Denom.	Total
1234567890123456789	1	1	1
1234567890123456789	2	2	2
1234567890123456789	3	3	3
1234567890123456789	4	4	4
1234567890123456789	5	5	5
1234567890123456789	6	6	6
Total Transaction			7

resTORbio, INC.

THE COMPANY WILL FURNISH WITHOUT CHARGE TO EACH SHAREHOLDER WHO SO REQUESTS, A SUMMARY OF THE POWERS, DESIGNATIONS, PREFERENCES AND RELATIVE, PARTICIPATING, OPTIONAL OR OTHER SPECIAL RIGHTS OF EACH CLASS OF STOCK OF THE COMPANY AND THE QUALIFICATIONS, LIMITATIONS OR RESTRICTIONS OF SUCH PREFERENCES AND RIGHTS, AND THE VARIATIONS IN RIGHTS, PREFERENCES AND LIMITATIONS DETERMINED FOR EACH SERIES, WHICH ARE FIXED BY THE ARTICLES OF INCORPORATION OF THE COMPANY, AS AMENDED, AND THE RESOLUTIONS OF THE BOARD OF DIRECTORS OF THE COMPANY, AND THE AUTHORITY OF THE BOARD OF DIRECTORS TO DETERMINE VARIATIONS FOR FUTURE SERIES. SUCH REQUEST MAY BE MADE TO THE OFFICE OF THE SECRETARY OF THE COMPANY OR TO THE TRANSFER AGENT. THE BOARD OF DIRECTORS MAY REQUIRE THE OWNER OF A LOST OR DESTROYED STOCK CERTIFICATE, OR HIS LEGAL REPRESENTATIVES, TO GIVE THE COMPANY A BOND TO INDEMNIFY IT AND ITS TRANSFER AGENTS AND REGISTRARS AGAINST ANY CLAIM THAT MAY BE MADE AGAINST THEM ON ACCOUNT OF THE ALLEGED LOSS OR DESTRUCTION OF ANY SUCH CERTIFICATE.

The following abbreviations, when used in the inscription on the face of this certificate, shall be construed as though they were written out in full according to applicable laws or regulations:

TEN COM - as tenants in common	UNIF GIT MIN ACT -	(Cust) Custodian (Minor)
TEN ENT - as tenants by the entireties		under Uniform Gifts to Minors Act (State)
JT TEN - as joint tenants with right of survivorship and not as tenants in common	UNIF TRF MIN ACT -	(Cust) Custodian (until age) (Minor) under Uniform Transfers to Minors Act (State)

Additional abbreviations may also be used though not in the above list.

PLEASE INSERT SOCIAL SECURITY OR OTHER IDENTIFYING NUMBER OF ASSIGNEE

For value received, _____ hereby sell, assign and transfer unto

(PLEASE PRINT OR TYPEWRITE NAME AND ADDRESS, INCLUDING POSTAL ZIP CODE, OF ASSIGNEE)

_____ Shares

of the common stock represented by the within Certificate, and do hereby irrevocably constitute and appoint

_____ Attorney

to transfer the said stock on the books of the within-named Company with full power of substitution in the premises.

Dated: _____ 20____

Signature: _____

Signature: _____

Notice: The signature to this assignment must correspond with the name as written upon the face of the certificate, in every particular, without alteration or enlargement, or any change whatever.

Signature(s) Guaranteed: Medallion Guarantee Stamp

THE SIGNATURE(S) SHOULD BE GUARANTEED BY AN ELIGIBLE GUARANTOR INSTITUTION (Banks, Stockbrokers, Savings and Loan Associations and Credit Unions) WITH MEMBERSHIP IN AN APPROVED SIGNATURE GUARANTEE MEDALLION PROGRAM, PURSUANT TO S.E.C. RULE 17Ad-15.

SECURITY INSTRUCTIONS

THIS IS WATERMARKED PAPER. DO NOT ACCEPT WITHOUT NOTING WATERMARK. HOLD TO LIGHT TO VERIFY WATERMARK.

The IRS requires that the named transfer agent ("we") report the cost basis of certain shares or units acquired after January 1, 2011. If your shares or units are covered by the legislation, and you requested to sell or transfer the shares or units using a specific cost basis calculation method, then we have processed as you requested. If you did not specify a cost basis calculation method, then we have defaulted to the first in, first out (FIFO) method. Please consult your tax advisor if you need additional information about cost basis.

If you do not keep in contact with the issuer or do not have any activity in your account for the time period specified by state law, your property may become subject to state unclaimed property laws and transferred to the appropriate state.

1534201

Exhibit 5.1

January 16, 2018

resTORbio, Inc.
500 Boylston Street, 12th Floor
Boston, MA 02116

Re: Securities Registered under Registration Statement on Form S-1

Ladies and Gentlemen:

We have acted as counsel to you in connection with your filing of a Registration Statement on Form S-1 (File No. 333-222373) (as amended or supplemented, the "Registration Statement") pursuant to the Securities Act of 1933, as amended (the "Securities Act"), relating to the registration of the offering by resTORbio, Inc., a Delaware corporation (the "Company") of up to 6,516,667 shares (the "Shares") of the Company's Common Stock, $0.0001 par value share, including Shares purchasable by the underwriters upon their exercise of an over-allotment option granted to the underwriters by the Company. The Shares are being sold to the several underwriters named in, and pursuant to, an underwriting agreement among the Company and such underwriters (the "Underwriting Agreement").

We have reviewed such documents and made such examination of law as we have deemed appropriate to give the opinions set forth below. We have relied, without independent verification, on certificates of public officials and, as to matters of fact material to the opinions set forth below, on certificates of officers of the Company.

The opinion set forth below is limited to the Delaware General Corporation Law.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized and, upon issuance and delivery against payment therefor in accordance with the terms of the Underwriting Agreement, the Shares will be validly issued, fully paid and non-assessable.

We hereby consent to the inclusion of this opinion as Exhibit 5.1 to the Registration Statement and to the references to our firm under the caption "Legal Matters" in the Registration Statement. In giving our consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations thereunder.

Very truly yours,

/s/ Goodwin Procter LLP

GOODWIN PROCTER LLP

Exhibit 10.2

RESTORBIO, INC.

2018 STOCK OPTION AND INCENTIVE PLAN

SECTION 1. GENERAL PURPOSE OF THE PLAN; DEFINITIONS

The name of the plan is the resTORbio, Inc. 2018 Stock Option and Incentive Plan (the "Plan"). The purpose of the Plan is to encourage and enable the officers, employees, Non-Employee Directors and Consultants of resTORbio, Inc. (the "Company") and its Subsidiaries upon whose judgment, initiative and efforts the Company largely depends for the successful conduct of its businesses to acquire a proprietary interest in the Company. It is anticipated that providing such persons with a direct stake in the Company's welfare will assure a closer identification of their interests with those of the Company and its stockholders, thereby stimulating their efforts on the Company's behalf and strengthening their desire to remain with the Company.

The following terms shall be defined as set forth below:

"*2017 Plan*" means the resTORbio, Inc. 2017 Stock Incentive Plan, as amended.

"*Act*" means the Securities Act of 1933, as amended, and the rules and regulations thereunder.

"*Administrator*" means either the Board or the compensation committee of the Board or a similar committee performing the functions of the compensation committee and which is comprised of not less than two Non-Employee Directors who are independent.

"*Award*" or "*Awards,*" except where referring to a particular category of grant under the Plan, shall include Incentive Stock Options, Non-Qualified Stock Options, Stock Appreciation Rights, Restricted Stock Units, Restricted Stock Awards, Unrestricted Stock Awards, Cash-Based Awards, Performance Share Awards and Dividend Equivalent Rights.

"*Award Certificate*" means a written or electronic document setting forth the terms and provisions applicable to an Award granted under the Plan. Each Award Certificate is subject to the terms and conditions of the Plan.

"*Board*" means the Board of Directors of the Company.

"*Cash-Based Award*" means an Award entitling the recipient to receive a cash-denominated payment.

"*Code*" means the Internal Revenue Code of 1986, as amended, and any successor Code, and related rules, regulations and interpretations.

"*Consultant*" means any natural person that provides bona fide services to the Company, and such services are not in connection with the offer or sale of securities in a capital-raising transaction and do not directly or indirectly promote or maintain a market for the Company's securities.

"*Dividend Equivalent Right*" means an Award entitling the grantee to receive credits based on cash dividends that would have been paid on the shares of Stock specified in the Dividend Equivalent Right (or other award to which it relates) if such shares had been issued to and held by the grantee.

"*Effective Date*" means the date on which the Plan becomes effective as set forth in Section 21.

"*Exchange Act*" means the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder.

"*Fair Market Value*" of the Stock on any given date means the fair market value of the Stock determined in good faith by the Administrator; provided, however, that if the Stock is admitted to quotation on the National Association of Securities Dealers Automated Quotation System ("Nasdaq"), Nasdaq Global Market or another national securities exchange, the determination shall be made by reference to market quotations. If there are no market quotations for such date, the determination shall be made by reference to the last date preceding such date for which there are market quotations; provided further, however, that if the date for which Fair Market Value is determined is the date of the pricing of the Company's Initial Public Offering, the Fair Market Value shall be the "Price to the Public" (or equivalent) set forth on the cover page for the final prospectus relating to the Company's Initial Public Offering.

"*Incentive Stock Option*" means any Stock Option designated and qualified as an "incentive stock option" as defined in Section 422 of the Code.

"*Initial Public Offering*" means the first underwritten, firm commitment public offering pursuant to an effective registration statement under the Act covering the offer and sale by the Company of its equity securities, or such other event as a result of or following which the Stock shall be publicly held.

"*Non-Employee Director*" means a member of the Board who is not also an employee of the Company or any Subsidiary.

"*Non-Qualified Stock Option*" means any Stock Option that is not an Incentive Stock Option.

"*Option*" or "*Stock Option*" means any option to purchase shares of Stock granted pursuant to Section 5.

"*Performance Criteria*" means the criteria that the Administrator selects for purposes of establishing the Performance Goal or Performance Goals for an individual for a Performance Cycle. The Performance Criteria (which shall be applicable to the organizational level specified by the Administrator, including, but not limited to, the Company or a unit, division, group, or Subsidiary of the Company) that will be used to establish Performance Goals are limited to the following: total stockholder return, earnings before interest, taxes, depreciation and

amortization, net income (loss) (either before or after interest, taxes, depreciation and/or amortization), changes in the market price of the Stock, economic value-added, sales or revenue, coverage decisions, research and development, publication, clinical or regulatory milestones, acquisitions or strategic transactions, including licenses, collaborations, joint ventures or promotional arrangements, operating income (loss), cash flow (including, but not limited to, operating cash flow and free cash flow), return on capital, assets, equity, or investment, return on sales, gross or net profit levels, productivity, expense, margins, operating efficiency, customer satisfaction, working capital, earnings (loss) per share of Stock, sales or market shares and number of customers, any of which may be measured either in absolute terms or as compared to any incremental increase or as compared to results of a peer group. The Administrator may appropriately adjust any evaluation performance under a Performance Criterion to exclude any of the following events that occurs during a Performance Cycle: (i) asset write-downs or impairments, (ii) litigation or claim judgments or settlements, (iii) the effect of changes in tax law, accounting principles or other such laws or provisions affecting reporting results, (iv) accruals for reorganizations and restructuring programs, and (v) any item of an unusual nature or of a type that indicates infrequency of occurrence, or both, including those described in the Financial Accounting Standards Board's authoritative guidance and/or in management's discussion and analysis of financial condition of operations appearing the Company's annual report to stockholders for the applicable year.

"*Performance Cycle*" means one or more periods of time, which may be of varying and overlapping durations, as the Administrator may select, over which the attainment of one or more Performance Criteria will be measured for the purpose of determining a grantee's right to and the payment of a Restricted Stock Award, Restricted Stock Units, Performance Share Award or Cash-Based Award, the vesting and/or payment of which is subject to the attainment of one or more Performance Goals.

"*Performance Goals*" means, for a Performance Cycle, the specific goals established in writing by the Administrator for a Performance Cycle based upon the Performance Criteria.

"*Performance Share Award*" means an Award entitling the recipient to acquire shares of Stock upon the attainment of specified Performance Goals.

"*Restricted Shares*" means the shares of Stock underlying a Restricted Stock Award that remain subject to a risk of forfeiture or the Company's right of repurchase.

"*Restricted Stock Award*" means an Award of Restricted Shares subject to such restrictions and conditions as the Administrator may determine at the time of grant.

"*Restricted Stock Units*" means an Award of stock units subject to such restrictions and conditions as the Administrator may determine at the time of grant.

"*Sale Event*" shall mean (i) the sale of all or substantially all of the assets of the Company on a consolidated basis to an unrelated person or entity, (ii) a merger, reorganization or consolidation pursuant to which the holders of the Company's outstanding voting power and outstanding stock immediately prior to such transaction do not own a majority of the outstanding voting power and outstanding stock or other equity interests of the resulting or successor entity

(or its ultimate parent, if applicable) immediately upon completion of such transaction, (iii) the sale of all of the Stock of the Company to an unrelated person, entity or group thereof acting in concert, or (iv) any other transaction in which the owners of the Company's outstanding voting power immediately prior to such transaction do not own at least a majority of the outstanding voting power of the Company or any successor entity immediately upon completion of the transaction other than as a result of the acquisition of securities directly from the Company.

"*Sale Price*" means the value as determined by the Administrator of the consideration payable, or otherwise to be received by stockholders, per share of Stock pursuant to a Sale Event.

"*Section 409A*" means Section 409A of the Code and the regulations and other guidance promulgated thereunder.

"*Stock*" means the Common Stock, par value $0.0001 per share, of the Company, subject to adjustments pursuant to Section 3.

"*Stock Appreciation Right*" means an Award entitling the recipient to receive shares of Stock having a value equal to the excess of the Fair Market Value of the Stock on the date of exercise over the exercise price of the Stock Appreciation Right multiplied by the number of shares of Stock with respect to which the Stock Appreciation Right shall have been exercised.

"*Subsidiary*" means any corporation or other entity (other than the Company) in which the Company has at least a 50 percent interest, either directly or indirectly.

"*Ten Percent Owner*" means an employee who owns or is deemed to own (by reason of the attribution rules of Section 424(d) of the Code) more than 10 percent of the combined voting power of all classes of stock of the Company or any parent or subsidiary corporation.

"*Unrestricted Stock Award*" means an Award of shares of Stock free of any restrictions.

SECTION 2. ADMINISTRATION OF PLAN; ADMINISTRATOR AUTHORITY TO SELECT GRANTEES AND DETERMINE AWARDS

(a) Administration of Plan. The Plan shall be administered by the Administrator.

(b) Powers of Administrator. The Administrator shall have the power and authority to grant Awards consistent with the terms of the Plan, including the power and authority:

(i) to select the individuals to whom Awards may from time to time be granted;

(ii) to determine the time or times of grant, and the extent, if any, of Incentive Stock Options, Non-Qualified Stock Options, Stock Appreciation Rights, Restricted Stock Awards, Restricted Stock Units, Unrestricted Stock Awards, Cash-Based Awards, Performance Share Awards and Dividend Equivalent Rights, or any combination of the foregoing, granted to any one or more grantees;

(iii) to determine the number of shares of Stock to be covered by any Award;

(iv) to determine and modify from time to time the terms and conditions, including restrictions, not inconsistent with the terms of the Plan, of any Award, which terms and conditions may differ among individual Awards and grantees, and to approve the forms of Award Certificates;

(v) to accelerate at any time the exercisability or vesting of all or any portion of any Award;

(vi) subject to the provisions of Section 5(c), to extend at any time the period in which Stock Options may be exercised; and

(vii) at any time to adopt, alter and repeal such rules, guidelines and practices for administration of the Plan and for its own acts and proceedings as it shall deem advisable; to interpret the terms and provisions of the Plan and any Award (including related written instruments); to make all determinations it deems advisable for the administration of the Plan; to decide all disputes arising in connection with the Plan; and to otherwise supervise the administration of the Plan.

All decisions and interpretations of the Administrator shall be binding on all persons, including the Company and Plan grantees.

(c) Delegation of Authority to Grant Awards. Subject to applicable law, the Administrator, in its discretion, may delegate to the Chief Executive Officer of the Company (the "CEO") all or part of the Administrator's authority and duties with respect to the granting of Awards to individuals who are not subject to the reporting and other provisions of Section 16 of the Exchange Act. Any such delegation by the Administrator shall include a limitation as to the amount of Stock underlying Awards that may be granted during the period of the delegation and shall contain guidelines as to the determination of the exercise price and the vesting criteria. The Administrator may revoke or amend the terms of a delegation at any time but such action shall not invalidate any prior actions of the Administrator's delegate or delegates that were consistent with the terms of the Plan.

(d) Award Certificate. Awards under the Plan shall be evidenced by Award Certificates that set forth the terms, conditions and limitations for each Award which may include, without limitation, the term of an Award and the provisions applicable in the event employment or service terminates.

(e) Indemnification. Neither the Board nor the Administrator, nor any member of either or any delegate thereof, shall be liable for any act, omission, interpretation, construction or determination made in good faith in connection with the Plan, and the members of the Board and the Administrator (and any delegate thereof) shall be entitled in all cases to indemnification and reimbursement by the Company in respect of any claim, loss, damage or expense (including, without limitation, reasonable attorneys' fees) arising or resulting therefrom to the fullest extent permitted by law and/or under the Company's articles or bylaws or any directors' and officers' liability insurance coverage which may be in effect from time to time and/or any indemnification agreement between such individual and the Company.

(f) Foreign Award Recipients. Notwithstanding any provision of the Plan to the contrary, in order to comply with the laws in other countries in which the Company and its Subsidiaries operate or have employees or other individuals eligible for Awards, the Administrator, in its sole discretion, shall have the power and authority to: (i) determine which Subsidiaries shall be covered by the Plan; (ii) determine which individuals outside the United States are eligible to participate in the Plan; (iii) modify the terms and conditions of any Award granted to individuals outside the United States to comply with applicable foreign laws; (iv) establish subplans and modify exercise procedures and other terms and procedures, to the extent the Administrator determines such actions to be necessary or advisable (and such subplans and/or modifications shall be attached to this Plan as appendices); provided, however, that no such subplans and/or modifications shall increase the share limitations contained in Section 3(a) hereof; and (v) take any action, before or after an Award is made, that the Administrator determines to be necessary or advisable to obtain approval or comply with any local governmental regulatory exemptions or approvals. Notwithstanding the foregoing, the Administrator may not take any actions hereunder, and no Awards shall be granted, that would violate the Exchange Act or any other applicable United States securities law, the Code, or any other applicable United States governing statute or law.

SECTION 3. STOCK ISSUABLE UNDER THE PLAN; MERGERS; SUBSTITUTION

(a) Stock Issuable. The maximum number of shares of Stock reserved and available for issuance under the Plan shall be 2,200,260 shares of Stock (the "Initial Limit"), subject to adjustment as provided in Section 3(c), plus on January 1, 2019 and each January 1 thereafter, the number of shares of Stock reserved and available for issuance under the Plan shall be cumulatively increased by 4% of the number of shares of Stock issued and outstanding on the immediately preceding December 31 (the "Annual Increase"). Subject to such overall limitation, the maximum aggregate number of shares of Stock that may be issued in the form of Incentive Stock Options shall not exceed the Initial Limit cumulatively increased on January 1, 2019 and on each January 1 thereafter by the lesser of the Annual Increase for such year or 1,359,815 shares of Stock, subject in all cases to adjustment as provided in Section 3(c). For purposes of this limitation, the shares of Stock underlying any Awards that are forfeited, canceled, held back upon exercise of an Option or settlement of an Award to cover the exercise price or tax withholding, reacquired by the Company prior to vesting, satisfied without the issuance of Stock or otherwise terminated (other than by exercise) under each of the Plan and the 2017 Plan shall be added back to the shares of Stock available for issuance under the Plan. In the event the Company repurchases shares of Stock on the open market, such shares shall not be added to the shares of Stock available for issuance under the Plan. Subject to such overall limitations, shares of Stock may be issued up to such maximum number pursuant to any type or types of Award. The shares available for issuance under the Plan may be authorized but unissued shares of Stock or shares of Stock reacquired by the Company.

(b) Maximum Awards to Non-Employee Directors. Notwithstanding anything to the contrary in this Plan, the value of all Awards awarded under this Plan and all other cash compensation paid by the Company to any Non-Employee Director in any calendar year shall not exceed $1,000,000. For the purpose of this limitation, the value of any Award shall be its grant date fair value, as determined in accordance with ASC 718 or successor provision but excluding the impact of estimated forfeitures related to service-based vesting provisions.

(c) Changes in Stock. Subject to Section 3(d) hereof, if, as a result of any reorganization, recapitalization, reclassification, stock dividend, stock split, reverse stock split or other similar change in the Company's capital stock, the outstanding shares of Stock are increased or decreased or are exchanged for a different number or kind of shares or other securities of the Company, or additional shares or new or different shares or other securities of the Company or other non-cash assets are distributed with respect to such shares of Stock or other securities, or, if, as a result of any merger or consolidation, sale of all or substantially all of the assets of the Company, the outstanding shares of Stock are converted into or exchanged for securities of the Company or any successor entity (or a parent or subsidiary thereof), the Administrator shall make an appropriate or proportionate adjustment in (i) the maximum number of shares reserved for issuance under the Plan, including the maximum number of shares that may be issued in the form of Incentive Stock Options, (ii) the number and kind of shares or other securities subject to any then outstanding Awards under the Plan, (iii) the repurchase price, if any, per share subject to each outstanding Restricted Stock Award, and (iv) the exercise price for each share subject to any then outstanding Stock Options and Stock Appreciation Rights under the Plan, without changing the aggregate exercise price (i.e., the exercise price multiplied by the number of Stock Options and Stock Appreciation Rights) as to which such Stock Options and Stock Appreciation Rights remain exercisable. The Administrator shall also make equitable or proportionate adjustments in the number of shares subject to outstanding Awards and the exercise price and the terms of outstanding Awards to take into consideration cash dividends paid other than in the ordinary course or any other extraordinary corporate event. The adjustment by the Administrator shall be final, binding and conclusive. No fractional shares of Stock shall be issued under the Plan resulting from any such adjustment, but the Administrator in its discretion may make a cash payment in lieu of fractional shares.

(d) Mergers and Other Transactions. In the case of and subject to the consummation of a Sale Event, the parties thereto may cause the assumption or continuation of Awards theretofore granted by the successor entity, or the substitution of such Awards with new Awards of the successor entity or parent thereof, with appropriate adjustment as to the number and kind of shares and, if appropriate, the per share exercise prices, as such parties shall agree. To the extent the parties to such Sale Event do not provide for the assumption, continuation or substitution of Awards, upon the effective time of the Sale Event, the Plan and all outstanding Awards granted hereunder shall terminate. In such case, except as may be otherwise provided in the relevant Award Certificate, all Options and Stock Appreciation Rights that are not exercisable immediately prior to the effective time of the Sale Event shall become fully exercisable as of the effective time of the Sale Event, all other Awards with time-based vesting, conditions or restrictions shall become fully vested and nonforfeitable as of the effective time of the Sale Event, and all Awards with conditions and restrictions relating to the attainment of performance goals may become vested and nonforfeitable in connection with a Sale Event in the Administrator's discretion or to the extent specified in the relevant Award Certificate. In the event of such termination, (i) the Company shall have the option (in its sole discretion) to make or provide for a payment, in cash or in kind, to the grantees holding Options and Stock Appreciation Rights, in exchange for the cancellation thereof, in an amount equal to the difference between (A) the Sale Price multiplied by the number of shares of Stock subject to outstanding Options and Stock Appreciation Rights (to the extent then exercisable at prices not in excess of the Sale Price) and (B) the aggregate exercise price of all such outstanding Options and Stock Appreciation Rights; or (ii) each grantee shall be permitted, within a specified period

of time prior to the consummation of the Sale Event as determined by the Administrator, to exercise all outstanding Options and Stock Appreciation Rights (to the extent then exercisable) held by such grantee. The Company shall also have the option (in its sole discretion) to make or provide for a payment, in cash or in kind, to the grantees holding other Awards in an amount equal to the Sale Price multiplied by the number of vested shares of Stock under such Awards.

SECTION 4. ELIGIBILITY

Grantees under the Plan will be such full or part-time officers and other employees, Non-Employee Directors and Consultants of the Company and its Subsidiaries as are selected from time to time by the Administrator in its sole discretion.

SECTION 5. STOCK OPTIONS

(a) Award of Stock Options. The Administrator may grant Stock Options under the Plan. Any Stock Option granted under the Plan shall be in such form as the Administrator may from time to time approve.

Stock Options granted under the Plan may be either Incentive Stock Options or Non-Qualified Stock Options. Incentive Stock Options may be granted only to employees of the Company or any Subsidiary that is a "subsidiary corporation" within the meaning of Section 424(f) of the Code. To the extent that any Option does not qualify as an Incentive Stock Option, it shall be deemed a Non-Qualified Stock Option.

Stock Options granted pursuant to this Section 5 shall be subject to the following terms and conditions and shall contain such additional terms and conditions, not inconsistent with the terms of the Plan, as the Administrator shall deem desirable. If the Administrator so determines, Stock Options may be granted in lieu of cash compensation at the optionee's election, subject to such terms and conditions as the Administrator may establish.

(b) Exercise Price. The exercise price per share for the Stock covered by a Stock Option granted pursuant to this Section 5 shall be determined by the Administrator at the time of grant but shall not be less than 100 percent of the Fair Market Value on the date of grant. In the case of an Incentive Stock Option that is granted to a Ten Percent Owner, the option price of such Incentive Stock Option shall be not less than 110 percent of the Fair Market Value on the grant date.

(c) Option Term. The term of each Stock Option shall be fixed by the Administrator, but no Stock Option shall be exercisable more than ten years after the date the Stock Option is granted. In the case of an Incentive Stock Option that is granted to a Ten Percent Owner, the term of such Stock Option shall be no more than five years from the date of grant.

(d) Exercisability; Rights of a Stockholder. Stock Options shall become exercisable at such time or times, whether or not in installments, as shall be determined by the Administrator at or after the grant date. The Administrator may at any time accelerate the exercisability of all or any portion of any Stock Option. An optionee shall have the rights of a stockholder only as to shares acquired upon the exercise of a Stock Option and not as to unexercised Stock Options.

(e) Method of Exercise. Stock Options may be exercised in whole or in part, by giving written or electronic notice of exercise to the Company, specifying the number of shares to be purchased. Payment of the purchase price may be made by one or more of the following methods except to the extent otherwise provided in the Option Award Certificate:

(i) In cash, by certified or bank check or other instrument acceptable to the Administrator;

(ii) Through the delivery (or attestation to the ownership following such procedures as the Company may prescribe) of shares of Stock that are not then subject to restrictions under any Company plan. Such surrendered shares shall be valued at Fair Market Value on the exercise date;

(iii) By the optionee delivering to the Company a properly executed exercise notice together with irrevocable instructions to a broker to promptly deliver to the Company cash or a check payable and acceptable to the Company for the purchase price; provided that in the event the optionee chooses to pay the purchase price as so provided, the optionee and the broker shall comply with such procedures and enter into such agreements of indemnity and other agreements as the Company shall prescribe as a condition of such payment procedure; or

(iv) With respect to Stock Options that are not Incentive Stock Options, by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Stock issuable upon exercise by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price.

Payment instruments will be received subject to collection. The transfer to the optionee on the records of the Company or of the transfer agent of the shares of Stock to be purchased pursuant to the exercise of a Stock Option will be contingent upon receipt from the optionee (or a purchaser acting in his stead in accordance with the provisions of the Stock Option) by the Company of the full purchase price for such shares and the fulfillment of any other requirements contained in the Option Award Certificate or applicable provisions of laws (including the satisfaction of any withholding taxes that the Company is obligated to withhold with respect to the optionee). In the event an optionee chooses to pay the purchase price by previously-owned shares of Stock through the attestation method, the number of shares of Stock transferred to the optionee upon the exercise of the Stock Option shall be net of the number of attested shares. In the event that the Company establishes, for itself or using the services of a third party, an automated system for the exercise of Stock Options, such as a system using an internet website or interactive voice response, then the paperless exercise of Stock Options may be permitted through the use of such an automated system.

(f) Annual Limit on Incentive Stock Options. To the extent required for "incentive stock option" treatment under Section 422 of the Code, the aggregate Fair Market Value (determined as of the time of grant) of the shares of Stock with respect to which Incentive Stock Options granted under this Plan and any other plan of the Company or its parent and subsidiary corporations become exercisable for the first time by an optionee during any calendar year shall not exceed $100,000. To the extent that any Stock Option exceeds this limit, it shall constitute a Non-Qualified Stock Option.

SECTION 6. STOCK APPRECIATION RIGHTS

(a) Award of Stock Appreciation Rights. The Administrator may grant Stock Appreciation Rights under the Plan. A Stock Appreciation Right is an Award entitling the recipient to receive shares of Stock having a value equal to the excess of the Fair Market Value of a share of Stock on the date of exercise over the exercise price of the Stock Appreciation Right multiplied by the number of shares of Stock with respect to which the Stock Appreciation Right shall have been exercised.

(b) Exercise Price of Stock Appreciation Rights. The exercise price of a Stock Appreciation Right shall not be less than 100 percent of the Fair Market Value of the Stock on the date of grant.

(c) Grant and Exercise of Stock Appreciation Rights. Stock Appreciation Rights may be granted by the Administrator independently of any Stock Option granted pursuant to Section 5 of the Plan.

(d) Terms and Conditions of Stock Appreciation Rights. Stock Appreciation Rights shall be subject to such terms and conditions as shall be determined on the date of grant by the Administrator. The term of a Stock Appreciation Right may not exceed ten years. The terms and conditions of each such Award shall be determined by the Administrator, and such terms and conditions may differ among individual Awards and grantees.

SECTION 7. RESTRICTED STOCK AWARDS

(a) Nature of Restricted Stock Awards. The Administrator may grant Restricted Stock Awards under the Plan. A Restricted Stock Award is any Award of Restricted Shares subject to such restrictions and conditions as the Administrator may determine at the time of grant. Conditions may be based on continuing employment (or other service relationship) and/or achievement of pre-established performance goals and objectives.

(b) Rights as a Stockholder. Upon the grant of the Restricted Stock Award and payment of any applicable purchase price, a grantee shall have the rights of a stockholder with respect to the voting of the Restricted Shares and receipt of dividends; provided that if the lapse of restrictions with respect to the Restricted Stock Award is tied to the attainment of performance goals, any dividends paid by the Company during the performance period shall accrue and shall not be paid to the grantee until and to the extent the performance goals are met with respect to the Restricted Stock Award. Unless the Administrator shall otherwise determine, (i) uncertificated Restricted Shares shall be accompanied by a notation on the records of the Company or the transfer agent to the effect that they are subject to forfeiture until such Restricted Shares are vested as provided in Section 7(d) below, and (ii) certificated Restricted Shares shall remain in the possession of the Company until such Restricted Shares are vested as provided in Section 7(d) below, and the grantee shall be required, as a condition of the grant, to deliver to the Company such instruments of transfer as the Administrator may prescribe.

(c) Restrictions. Restricted Shares may not be sold, assigned, transferred, pledged or otherwise encumbered or disposed of except as specifically provided herein or in the Restricted Stock Award Certificate. Except as may otherwise be provided by the Administrator either in

the Award Certificate or, subject to Section 18 below, in writing after the Award is issued, if a grantee's employment (or other service relationship) with the Company and its Subsidiaries terminates for any reason, any Restricted Shares that have not vested at the time of termination shall automatically and without any requirement of notice to such grantee from or other action by or on behalf of, the Company be deemed to have been reacquired by the Company at its original purchase price (if any) from such grantee or such grantee's legal representative simultaneously with such termination of employment (or other service relationship), and thereafter shall cease to represent any ownership of the Company by the grantee or rights of the grantee as a stockholder. Following such deemed reacquisition of Restricted Shares that are represented by physical certificates, a grantee shall surrender such certificates to the Company upon request without consideration.

(d) Vesting of Restricted Shares. The Administrator at the time of grant shall specify the date or dates and/or the attainment of pre-established performance goals, objectives and other conditions on which the non-transferability of the Restricted Shares and the Company's right of repurchase or forfeiture shall lapse. Subsequent to such date or dates and/or the attainment of such pre-established performance goals, objectives and other conditions, the shares on which all restrictions have lapsed shall no longer be Restricted Shares and shall be deemed "vested."

SECTION 8. RESTRICTED STOCK UNITS

(a) Nature of Restricted Stock Units. The Administrator may grant Restricted Stock Units under the Plan. A Restricted Stock Unit is an Award of stock units that may be settled in shares of Stock upon the satisfaction of such restrictions and conditions at the time of grant. Conditions may be based on continuing employment (or other service relationship) and/or achievement of pre-established performance goals and objectives. The terms and conditions of each such Award shall be determined by the Administrator, and such terms and conditions may differ among individual Awards and grantees. Except in the case of Restricted Stock Units with a deferred settlement date that complies with Section 409A, at the end of the vesting period, the Restricted Stock Units, to the extent vested, shall be settled in the form of shares of Stock. Restricted Stock Units with deferred settlement dates are subject to Section 409A and shall contain such additional terms and conditions as the Administrator shall determine in its sole discretion in order to comply with the requirements of Section 409A.

(b) Election to Receive Restricted Stock Units in Lieu of Compensation. The Administrator may, in its sole discretion, permit a grantee to elect to receive a portion of future cash compensation otherwise due to such grantee in the form of an award of Restricted Stock Units. Any such election shall be made in writing and shall be delivered to the Company no later than the date specified by the Administrator and in accordance with Section 409A and such other rules and procedures established by the Administrator. Any such future cash compensation that the grantee elects to defer shall be converted to a fixed number of Restricted Stock Units based on the Fair Market Value of Stock on the date the compensation would otherwise have been paid to the grantee if such payment had not been deferred as provided herein. The Administrator shall have the sole right to determine whether and under what circumstances to permit such elections and to impose such limitations and other terms and conditions thereon as the Administrator deems appropriate. Any Restricted Stock Units that are elected to be received in lieu of cash compensation shall be fully vested, unless otherwise provided in the Award Certificate.

(c) Rights as a Stockholder. A grantee shall have the rights as a stockholder only as to shares of Stock acquired by the grantee upon settlement of Restricted Stock Units; provided, however, that the grantee may be credited with Dividend Equivalent Rights with respect to the stock units underlying his Restricted Stock Units, subject to the provisions of Section 13 and such terms and conditions as the Administrator may determine.

(d) Termination. Except as may otherwise be provided by the Administrator either in the Award Certificate or, subject to Section 18 below, in writing after the Award is issued, a grantee's right in all Restricted Stock Units that have not vested shall automatically terminate upon the grantee's termination of employment (or cessation of service relationship) with the Company and its Subsidiaries for any reason.

SECTION 9. UNRESTRICTED STOCK AWARDS

Grant or Sale of Unrestricted Stock. The Administrator may grant (or sell at par value or such higher purchase price determined by the Administrator) an Unrestricted Stock Award under the Plan. An Unrestricted Stock Award is an Award pursuant to which the grantee may receive shares of Stock free of any restrictions under the Plan. Unrestricted Stock Awards may be granted in respect of past services or other valid consideration, or in lieu of cash compensation due to such grantee.

SECTION 10. CASH-BASED AWARDS

Grant of Cash-Based Awards. The Administrator may grant Cash-Based Awards under the Plan. A Cash-Based Award is an Award that entitles the grantee to a payment in cash upon the attainment of specified Performance Goals. The Administrator shall determine the maximum duration of the Cash-Based Award, the amount of cash to which the Cash-Based Award pertains, the conditions upon which the Cash-Based Award shall become vested or payable, and such other provisions as the Administrator shall determine. Each Cash-Based Award shall specify a cash-denominated payment amount, formula or payment ranges as determined by the Administrator. Payment, if any, with respect to a Cash-Based Award shall be made in accordance with the terms of the Award and may be made in cash.

SECTION 11. PERFORMANCE SHARE AWARDS

(a) Nature of Performance Share Awards. The Administrator may grant Performance Share Awards under the Plan. A Performance Share Award is an Award entitling the grantee to receive shares of Stock upon the attainment of Performance Goals. The Administrator shall determine whether and to whom Performance Share Awards shall be granted, the Performance Goals, the periods during which performance is to be measured, and such other limitations and conditions as the Administrator shall determine.

(b) Rights as a Stockholder. A grantee receiving a Performance Share Award shall have the rights of a stockholder only as to shares of Stock actually received by the grantee under the Plan and not with respect to shares subject to the Award but not actually received by the grantee. A grantee shall be entitled to receive shares of Stock under a Performance Share Award only upon satisfaction of all conditions specified in the Performance Share Award Certificate (or in a performance plan adopted by the Administrator).

(c) Termination. Except as may otherwise be provided by the Administrator either in the Award agreement or, subject to Section 18 below, in writing after the Award is issued, a grantee's rights in all Performance Share Awards shall automatically terminate upon the grantee's termination of employment (or cessation of service relationship) with the Company and its Subsidiaries for any reason.

SECTION 12. RESERVED

SECTION 13. DIVIDEND EQUIVALENT RIGHTS

(a) Dividend Equivalent Rights. The Administrator may grant Dividend Equivalent Rights under the Plan. A Dividend Equivalent Right is an Award entitling the grantee to receive credits based on cash dividends that would have been paid on the shares of Stock specified in the Dividend Equivalent Right (or other Award to which it relates) if such shares had been issued to the grantee. A Dividend Equivalent Right may be granted hereunder to any grantee as a component of an award of Restricted Stock Units or Performance Share Award or as a freestanding award. The terms and conditions of Dividend Equivalent Rights shall be specified in the Award Certificate. Dividend equivalents credited to the holder of a Dividend Equivalent Right may be paid currently or may be deemed to be reinvested in additional shares of Stock, which may thereafter accrue additional equivalents. Any such reinvestment shall be at Fair Market Value on the date of reinvestment or such other price as may then apply under a dividend reinvestment plan sponsored by the Company, if any. Dividend Equivalent Rights may be settled in cash or shares of Stock or a combination thereof, in a single installment or installments. A Dividend Equivalent Right granted as a component of an Award of Restricted Stock Units or Performance Share Award shall provide that such Dividend Equivalent Right shall be settled only upon settlement or payment of, or lapse of restrictions on, such other Award, and that such Dividend Equivalent Right shall expire or be forfeited or annulled under the same conditions as such other Award.

(b) Termination. Except as may otherwise be provided by the Administrator either in the Award Certificate or, subject to Section 18 below, in writing after the Award is issued, a grantee's rights in all Dividend Equivalent Rights shall automatically terminate upon the grantee's termination of employment (or cessation of service relationship) with the Company and its Subsidiaries for any reason.

SECTION 14. TRANSFERABILITY OF AWARDS

(a) Transferability. Except as provided in Section 14(b) below, during a grantee's lifetime, his or her Awards shall be exercisable only by the grantee, or by the grantee's legal representative or guardian in the event of the grantee's incapacity. No Awards shall be sold, assigned, transferred or otherwise encumbered or disposed of by a grantee other than by will or by the laws of descent and distribution or pursuant to a domestic relations order. No Awards shall be subject, in whole or in part, to attachment, execution, or levy of any kind, and any purported transfer in violation hereof shall be null and void.

(b) Administrator Action. Notwithstanding Section 14(a), the Administrator, in its discretion, may provide either in the Award Certificate regarding a given Award or by subsequent written approval that the grantee (who is an employee or director) may transfer his or her Non-Qualified Stock Options to his or her immediate family members, to trusts for the benefit of such family members, or to partnerships in which such family members are the only partners, provided that the transferee agrees in writing with the Company to be bound by all of the terms and conditions of this Plan and the applicable Award. In no event may an Award be transferred by a grantee for value.

(c) Family Member. For purposes of Section 14(b), "family member" shall mean a grantee's child, stepchild, grandchild, parent, stepparent, grandparent, spouse, former spouse, sibling, niece, nephew, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, including adoptive relationships, any person sharing the grantee's household (other than a tenant of the grantee), a trust in which these persons (or the grantee) have more than 50 percent of the beneficial interest, a foundation in which these persons (or the grantee) control the management of assets, and any other entity in which these persons (or the grantee) own more than 50 percent of the voting interests.

(d) Designation of Beneficiary. To the extent permitted by the Company, each grantee to whom an Award has been made under the Plan may designate a beneficiary or beneficiaries to exercise any Award or receive any payment under any Award payable on or after the grantee's death. Any such designation shall be on a form provided for that purpose by the Administrator and shall not be effective until received by the Administrator. If no beneficiary has been designated by a deceased grantee, or if the designated beneficiaries have predeceased the grantee, the beneficiary shall be the grantee's estate.

SECTION 15. TAX WITHHOLDING

(a) Payment by Grantee. Each grantee shall, no later than the date as of which the value of an Award or of any Stock or other amounts received thereunder first becomes includable in the gross income of the grantee for Federal income tax purposes, pay to the Company, or make arrangements satisfactory to the Administrator regarding payment of, any Federal, state, or local taxes of any kind required by law to be withheld by the Company with respect to such income. The Company and its Subsidiaries shall, to the extent permitted by law, have the right to deduct any such taxes from any payment of any kind otherwise due to the grantee. The Company's obligation to deliver evidence of book entry (or stock certificates) to any grantee is subject to and conditioned on tax withholding obligations being satisfied by the grantee.

(b) Payment in Stock. Subject to approval by the Administrator, a grantee may elect to have the Company's required tax withholding obligation satisfied, in whole or in part, by authorizing the Company to withhold from shares of Stock to be issued pursuant to any Award a number of shares with an aggregate Fair Market Value (as of the date the withholding is effected) that would satisfy the withholding amount due; provided, however, that the amount withheld does not exceed the maximum statutory tax rate or such lesser amount as is necessary to avoid adverse accounting treatment or as determined by the Administrator. The Administrator may also require Awards to be subject to mandatory share withholding up to the required withholding amount. For purposes of share withholding, the Fair Market Value of withheld shares shall be determined in the same manner as the value of Stock includible in income of the Participants.

SECTION 16. SECTION 409A AWARDS

To the extent that any Award is determined to constitute "nonqualified deferred compensation" within the meaning of Section 409A (a "409A Award"), the Award shall be subject to such additional rules and requirements as specified by the Administrator from time to time in order to comply with Section 409A. In this regard, if any amount under a 409A Award is payable upon a "separation from service" (within the meaning of Section 409A) to a grantee who is then considered a "specified employee" (within the meaning of Section 409A), then no such payment shall be made prior to the date that is the earlier of (i) six months and one day after the grantee's separation from service, or (ii) the grantee's death, but only to the extent such delay is necessary to prevent such payment from being subject to interest, penalties and/or additional tax imposed pursuant to Section 409A. Further, the settlement of any such Award may not be accelerated except to the extent permitted by Section 409A.

SECTION 17. TERMINATION OF EMPLOYMENT, TRANSFER, LEAVE OF ABSENCE, ETC.

(a) Termination of Employment. If the grantee's employer ceases to be a Subsidiary, the grantee shall be deemed to have terminated employment for purposes of the Plan.

(b) For purposes of the Plan, the following events shall not be deemed a termination of employment:

(i) a transfer to the employment of the Company from a Subsidiary or from the Company to a Subsidiary, or from one Subsidiary to another; or

(ii) an approved leave of absence for military service or sickness, or for any other purpose approved by the Company, if the employee's right to re-employment is guaranteed either by a statute or by contract or under the policy pursuant to which the leave of absence was granted or if the Administrator otherwise so provides in writing.

SECTION 18. AMENDMENTS AND TERMINATION

The Board may, at any time, amend or discontinue the Plan and the Administrator may, at any time, amend or cancel any outstanding Award for the purpose of satisfying changes in law or for any other lawful purpose, but no such action shall adversely affect rights under any outstanding Award without the holder's consent. Except as provided in Section 3(c) or 3(d), without prior stockholder approval, in no event may the Administrator exercise its discretion to reduce the exercise price of outstanding Stock Options or Stock Appreciation Rights or effect repricing through cancellation and re-grants or cancellation of Stock Options or Stock Appreciation Rights in exchange for cash or other Awards. To the extent required under the rules of any securities exchange or market system on which the Stock is listed, to the extent determined by the Administrator to be required by the Code to ensure that Incentive Stock Options granted under the Plan are qualified under Section 422 of the Code, Plan amendments shall be subject to approval by the Company stockholders entitled to vote at a meeting of stockholders. Nothing in this Section 18 shall limit the Administrator's authority to take any action permitted pursuant to Section 3(c) or 3(d).

SECTION 19. STATUS OF PLAN

With respect to the portion of any Award that has not been exercised and any payments in cash, Stock or other consideration not received by a grantee, a grantee shall have no rights greater than those of a general creditor of the Company unless the Administrator shall otherwise expressly determine in connection with any Award or Awards. In its sole discretion, the Administrator may authorize the creation of trusts or other arrangements to meet the Company's obligations to deliver Stock or make payments with respect to Awards hereunder, provided that the existence of such trusts or other arrangements is consistent with the foregoing sentence.

SECTION 20. GENERAL PROVISIONS

(a) No Distribution. The Administrator may require each person acquiring Stock pursuant to an Award to represent to and agree with the Company in writing that such person is acquiring the shares without a view to distribution thereof.

(b) Delivery of Stock Certificates. Stock certificates to grantees under this Plan shall be deemed delivered for all purposes when the Company or a stock transfer agent of the Company shall have mailed such certificates in the United States mail, addressed to the grantee, at the grantee's last known address on file with the Company. Uncertificated Stock shall be deemed delivered for all purposes when the Company or a Stock transfer agent of the Company shall have given to the grantee by electronic mail (with proof of receipt) or by United States mail, addressed to the grantee, at the grantee's last known address on file with the Company, notice of issuance and recorded the issuance in its records (which may include electronic "book entry" records). Notwithstanding anything herein to the contrary, the Company shall not be required to issue or deliver any certificates evidencing shares of Stock pursuant to the exercise of any Award, unless and until the Administrator has determined, with advice of counsel (to the extent the Administrator deems such advice necessary or advisable), that the issuance and delivery of such certificates is in compliance with all applicable laws, regulations of governmental authorities and, if applicable, the requirements of any exchange on which the shares of Stock are listed, quoted or traded. All Stock certificates delivered pursuant to the Plan shall be subject to any stop-transfer orders and other restrictions as the Administrator deems necessary or advisable to comply with federal, state or foreign jurisdiction, securities or other laws, rules and quotation system on which the Stock is listed, quoted or traded. The Administrator may place legends on any Stock certificate to reference restrictions applicable to the Stock. In addition to the terms and conditions provided herein, the Administrator may require that an individual make such reasonable covenants, agreements, and representations as the Administrator, in its discretion, deems necessary or advisable in order to comply with any such laws, regulations, or requirements. The Administrator shall have the right to require any individual to comply with any timing or other restrictions with respect to the settlement or exercise of any Award, including a window-period limitation, as may be imposed in the discretion of the Administrator.

(c) Stockholder Rights. Until Stock is deemed delivered in accordance with Section 20(b), no right to vote or receive dividends or any other rights of a stockholder will exist with respect to shares of Stock to be issued in connection with an Award, notwithstanding the exercise of a Stock Option or any other action by the grantee with respect to an Award.

(d) Other Compensation Arrangements; No Employment Rights. Nothing contained in this Plan shall prevent the Board from adopting other or additional compensation arrangements, including trusts, and such arrangements may be either generally applicable or applicable only in specific cases. The adoption of this Plan and the grant of Awards do not confer upon any employee any right to continued employment with the Company or any Subsidiary.

(e) Trading Policy Restrictions. Option exercises and other Awards under the Plan shall be subject to the Company's insider trading policies and procedures, as in effect from time to time.

(f) Clawback Policy. Awards under the Plan shall be subject to the Company's clawback policy, as in effect from time to time.

SECTION 21. EFFECTIVE DATE OF PLAN

This Plan shall become effective upon the date immediately preceding the date on which the Company's registration statement on Form S-1 becomes effective following stockholder approval of the Plan in accordance with applicable state law, the Company's bylaws and articles of incorporation, and applicable stock exchange rules. No grants of Stock Options and other Awards may be made hereunder after the tenth anniversary of the Effective Date and no grants of Incentive Stock Options may be made hereunder after the tenth anniversary of the date the Plan is approved by the Board.

SECTION 22. GOVERNING LAW

This Plan and all Awards and actions taken thereunder shall be governed by, and construed in accordance with, the laws of the State of Delaware, applied without regard to conflict of law principles.

DATE APPROVED BY BOARD OF DIRECTORS: December 21, 2017

DATE APPROVED BY STOCKHOLDERS: January 12, 2018

INCENTIVE STOCK OPTION AGREEMENT
UNDER THE RESTORBIO, INC.
2018 STOCK OPTION AND INCENTIVE PLAN

Name of Optionee: _____
No. of Option Shares: _____
Option Exercise Price per Share: $ _____
Grant Date: _____
Expiration Date: _____

Pursuant to the resTORbio, Inc. 2018 Stock Option and Incentive Plan as amended through the date hereof (the "Plan"), resTORbio, Inc. (the "Company") hereby grants to the Optionee named above an option (the "Stock Option") to purchase on or prior to the Expiration Date specified above all or part of the number of shares of Common Stock, par value $0.0001 per share (the "Stock"), of the Company specified above at the Option Exercise Price per Share specified above subject to the terms and conditions set forth herein and in the Plan.

1. Exercisability Schedule. No portion of this Stock Option may be exercised until such portion shall have become exercisable. Except as set forth below, and subject to the discretion of the Administrator (as defined in Section 2 of the Plan) to accelerate the exercisability schedule hereunder, this Stock Option shall be exercisable with respect to the following number of Option Shares on the dates indicated so long as the Optionee remains an employee of the Company or a Subsidiary on such dates:

Incremental Number of Option Shares Exercisable*	Exercisability Date
(%)	
(%)	
(%)	
(%)	
(%)	

* Max. of $100,000 per yr.

Once exercisable, this Stock Option shall continue to be exercisable at any time or times prior to the close of business on the Expiration Date, subject to the provisions hereof and of the Plan.

2. Manner of Exercise.

(a) The Optionee may exercise this Stock Option only in the following manner: from time to time on or prior to the Expiration Date of this Stock Option, the Optionee may give written notice to the Administrator of his or her election to purchase some or all of the Option Shares purchasable at the time of such notice. This notice shall specify the number of Option Shares to be purchased.

Payment of the purchase price for the Option Shares may be made by one or more of the following methods: (i) in cash, by certified or bank check or other instrument acceptable to the Administrator; (ii) through the delivery (or attestation to the ownership) of shares of Stock that have been purchased by the Optionee on the open market or that are beneficially owned by the Optionee and are not then subject to any restrictions under any Company plan and that otherwise satisfy any holding periods as may be required by the Administrator; or (iii) by the Optionee delivering to the Company a properly executed exercise notice together with irrevocable instructions to a broker to promptly deliver to the Company cash or a check payable and acceptable to the Company to pay the option purchase price, provided that in the event the Optionee chooses to pay the option purchase price as so provided, the Optionee and the broker shall comply with such procedures and enter into such agreements of indemnity and other agreements as the Administrator shall prescribe as a condition of such payment procedure; or (iv) a combination of (i), (ii) and (iii) above. Payment instruments will be received subject to collection.

The transfer to the Optionee on the records of the Company or of the transfer agent of the Option Shares will be contingent upon (i) the Company's receipt from the Optionee of the full purchase price for the Option Shares, as set forth above, (ii) the fulfillment of any other requirements contained herein or in the Plan or in any other agreement or provision of laws, and (iii) the receipt by the Company of any agreement, statement or other evidence that the Company may require to satisfy itself that the issuance of Stock to be purchased pursuant to the exercise of Stock Options under the Plan and any subsequent resale of the shares of Stock will be in compliance with applicable laws and regulations. In the event the Optionee chooses to pay the purchase price by previously-owned shares of Stock through the attestation method, the number of shares of Stock transferred to the Optionee upon the exercise of the Stock Option shall be net of the Shares attested to.

(b) The shares of Stock purchased upon exercise of this Stock Option shall be transferred to the Optionee on the records of the Company or of the transfer agent upon compliance to the satisfaction of the Administrator with all requirements under applicable laws or regulations in connection with such transfer and with the requirements hereof and of the Plan. The determination of the Administrator as to such compliance shall be final and binding on the Optionee. The Optionee shall not be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Stock subject to this Stock Option unless and until this Stock Option shall have been exercised pursuant to the terms hereof, the Company or the transfer agent shall have transferred the shares to the Optionee, and the Optionee's name shall have been entered as the stockholder of record on the books of the Company. Thereupon, the Optionee shall have full voting, dividend and other ownership rights with respect to such shares of Stock.

(c) The minimum number of shares with respect to which this Stock Option may be exercised at any one time shall be 100 shares, unless the number of shares with respect to which this Stock Option is being exercised is the total number of shares subject to exercise under this Stock Option at the time.

(d) Notwithstanding any other provision hereof or of the Plan, no portion of this Stock Option shall be exercisable after the Expiration Date hereof.

3. Termination of Employment. If the Optionee's employment by the Company or a Subsidiary (as defined in the Plan) is terminated, the period within which to exercise the Stock Option may be subject to earlier termination as set forth below.

(a) Termination Due to Death. If the Optionee's employment terminates by reason of the Optionee's death, any portion of this Stock Option outstanding on such date, to the extent exercisable on the date of death, may thereafter be exercised by the Optionee's legal representative or legatee for a period of 12 months from the date of death or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date of death shall terminate immediately and be of no further force or effect.

(b) Termination Due to Disability. If the Optionee's employment terminates by reason of the Optionee's disability (as determined by the Administrator), any portion of this Stock Option outstanding on such date, to the extent exercisable on the date of such termination of employment, may thereafter be exercised by the Optionee for a period of 12 months from the date of disability or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date of disability shall terminate immediately and be of no further force or effect.

(c) Termination for Cause. If the Optionee's employment terminates for Cause, any portion of this Stock Option outstanding on such date shall terminate immediately and be of no further force and effect. For purposes hereof, "Cause" shall mean, unless otherwise provided in an employment agreement between the Company and the Optionee, a determination by the Administrator that the Optionee shall be dismissed as a result of (i) any material breach by the Optionee of any agreement between the Optionee and the Company; (ii) the conviction of, indictment for or plea of nolo contendere by the Optionee to a felony or a crime involving moral turpitude; or (iii) any material misconduct or willful and deliberate non-performance (other than by reason of disability) by the Optionee of the Optionee's duties to the Company.

(d) Other Termination. If the Optionee's employment terminates for any reason other than the Optionee's death, the Optionee's disability, or Cause, and unless otherwise determined by the Administrator, any portion of this Stock Option outstanding on such date may be exercised, to the extent exercisable on the date of termination, for a period of three months from the date of termination or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date of termination shall terminate immediately and be of no further force or effect.

The Administrator's determination of the reason for termination of the Optionee's employment shall be conclusive and binding on the Optionee and his or her representatives or legatees.

4. Incorporation of Plan. Notwithstanding anything herein to the contrary, this Stock Option shall be subject to and governed by all the terms and conditions of the Plan, including the powers of the Administrator set forth in Section 2(b) of the Plan. Capitalized terms in this Agreement shall have the meaning specified in the Plan, unless a different meaning is specified herein.

5. Transferability. This Agreement is personal to the Optionee, is non-assignable and is not transferable in any manner, by operation of law or otherwise, other than by will or the laws of descent and distribution. This Stock Option is exercisable, during the Optionee's lifetime, only by the Optionee, and thereafter, only by the Optionee's legal representative or legatee.

6. Status of the Stock Option. This Stock Option is intended to qualify as an "incentive stock option" under Section 422 of the Internal Revenue Code of 1986, as amended (the "Code"), but the Company does not represent or warrant that this Stock Option qualifies as such. The Optionee should consult with his or her own tax advisors regarding the tax effects of this Stock Option and the requirements necessary to obtain favorable income tax treatment under Section 422 of the Code, including, but not limited to, holding period requirements. To the extent any portion of this Stock Option does not so qualify as an "incentive stock option," such portion shall be deemed to be a non-qualified stock option. If the Optionee intends to dispose or does dispose (whether by sale, gift, transfer or otherwise) of any Option Shares within the one-year period beginning on the date after the transfer of such shares to him or her, or within the two-year period beginning on the day after the grant of this Stock Option, he or she will so notify the Company within 30 days after such disposition.

7. Tax Withholding. The Optionee shall, not later than the date as of which the exercise of this Stock Option becomes a taxable event for Federal income tax purposes, pay to the Company or make arrangements satisfactory to the Administrator for payment of any Federal, state, and local taxes required by law to be withheld on account of such taxable event. The Company shall have the authority to cause the required tax withholding obligation to be satisfied, in whole or in part, by withholding from shares of Stock to be issued to the Optionee a number of shares of Stock with an aggregate Fair Market Value that would satisfy the withholding amount due; provided, however, that the amount withheld does not exceed the maximum statutory tax rate or such lesser amount as is necessary to avoid adverse accounting treatment or as determined by the Administrator.

8. No Obligation to Continue Employment. Neither the Company nor any Subsidiary is obligated by or as a result of the Plan or this Agreement to continue the Optionee in employment and neither the Plan nor this Agreement shall interfere in any way with the right of the Company or any Subsidiary to terminate the employment of the Optionee at any time.

9. Integration. This Agreement constitutes the entire agreement between the parties with respect to this Stock Option and supersedes all prior agreements and discussions between the parties concerning such subject matter.

10. Data Privacy Consent. In order to administer the Plan and this Agreement and to implement or structure future equity grants, the Company, its subsidiaries and affiliates and certain agents thereof (together, the "Relevant Companies") may process any and all personal or professional data, including but not limited to Social Security or other identification number, home address and telephone number, date of birth and other information that is necessary or desirable for the administration of the Plan and/or this Agreement (the "Relevant Information"). By entering into this Agreement, the Optionee (i) authorizes the Company to collect, process, register and transfer to the Relevant Companies all Relevant Information; (ii) waives any privacy rights the Optionee may have with respect to the Relevant Information; (iii) authorizes the Relevant Companies to store and transmit such information in electronic form; and (iv) authorizes the transfer of the Relevant Information to any jurisdiction in which the Relevant Companies consider appropriate. The Optionee shall have access to, and the right to change, the Relevant Information. Relevant Information will only be used in accordance with applicable law.

11. Notices. Notices hereunder shall be mailed or delivered to the Company at its principal place of business and shall be mailed or delivered to the Optionee at the address on file with the Company or, in either case, at such other address as one party may subsequently furnish to the other party in writing.

RESTORBIO, INC.

By: _____

Title:

The foregoing Agreement is hereby accepted and the terms and conditions thereof hereby agreed to by the undersigned. Electronic acceptance of this Agreement pursuant to the Company's instructions to the Optionee (including through an online acceptance process) is acceptable.

Dated: _____

_____

Optionee's Signature

Optionee's name and address:

_____

_____

_____

NON-QUALIFIED STOCK OPTION AGREEMENT
FOR NON-EMPLOYEE DIRECTORS
UNDER THE RESTORBIO, INC.
2018 STOCK OPTION AND INCENTIVE PLAN

Name of Optionee: _____
No. of Option Shares: _____
Option Exercise Price per Share: $ _____
Grant Date: _____
Expiration Date: _____

Pursuant to the resTORbio, Inc. 2018 Stock Option and Incentive Plan as amended through the date hereof (the "Plan"), resTORbio, Inc. (the "Company") hereby grants to the Optionee named above, who is a Director of the Company but is not an employee of the Company, an option (the "Stock Option") to purchase on or prior to the Expiration Date specified above all or part of the number of shares of Common Stock, par value $0.0001 per share (the "Stock"), of the Company specified above at the Option Exercise Price per Share specified above subject to the terms and conditions set forth herein and in the Plan. This Stock Option is not intended to be an "incentive stock option" under Section 422 of the Internal Revenue Code of 1986, as amended.

1. Exercisability Schedule. No portion of this Stock Option may be exercised until such portion shall have become exercisable. Except as set forth below, and subject to the discretion of the Administrator (as defined in Section 2 of the Plan) to accelerate the exercisability schedule hereunder, this Stock Option shall be exercisable with respect to the following number of Option Shares on the dates indicated so long as the Optionee remains in service as a member of the Board on such dates:

Incremental Number of Option Shares Exercisable		Exercisability Date
	(%)	
	(%)	
	(%)	
	(%)	
	(%)	

Once exercisable, this Stock Option shall continue to be exercisable at any time or times prior to the close of business on the Expiration Date, subject to the provisions hereof and of the Plan.

2. Manner of Exercise.

(a) The Optionee may exercise this Stock Option only in the following manner: from time to time on or prior to the Expiration Date of this Stock Option, the Optionee may give written notice to the Administrator of his or her election to purchase some or all of the Option Shares purchasable at the time of such notice. This notice shall specify the number of Option Shares to be purchased.

Payment of the purchase price for the Option Shares may be made by one or more of the following methods: (i) in cash, by certified or bank check or other instrument acceptable to the Administrator; (ii) through the delivery (or attestation to the ownership) of shares of Stock that have been purchased by the Optionee on the open market or that are beneficially owned by the Optionee and are not then subject to any restrictions under any Company plan and that otherwise satisfy any holding periods as may be required by the Administrator; (iii) by the Optionee delivering to the Company a properly executed exercise notice together with irrevocable instructions to a broker to promptly deliver to the Company cash or a check payable and acceptable to the Company to pay the option purchase price, provided that in the event the Optionee chooses to pay the option purchase price as so provided, the Optionee and the broker shall comply with such procedures and enter into such agreements of indemnity and other agreements as the Administrator shall prescribe as a condition of such payment procedure; (iv) by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Stock issuable upon exercise by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price; or (v) a combination of (i), (ii), (iii) and (iv) above. Payment instruments will be received subject to collection.

The transfer to the Optionee on the records of the Company or of the transfer agent of the Option Shares will be contingent upon (i) the Company's receipt from the Optionee of the full purchase price for the Option Shares, as set forth above, (ii) the fulfillment of any other requirements contained herein or in the Plan or in any other agreement or provision of laws, and (iii) the receipt by the Company of any agreement, statement or other evidence that the Company may require to satisfy itself that the issuance of Stock to be purchased pursuant to the exercise of Stock Options under the Plan and any subsequent resale of the shares of Stock will be in compliance with applicable laws and regulations. In the event the Optionee chooses to pay the purchase price by previously-owned shares of Stock through the attestation method, the number of shares of Stock transferred to the Optionee upon the exercise of the Stock Option shall be net of the Shares attested to.

(b) The shares of Stock purchased upon exercise of this Stock Option shall be transferred to the Optionee on the records of the Company or of the transfer agent upon compliance to the satisfaction of the Administrator with all requirements under applicable laws or regulations in connection with such transfer and with the requirements hereof and of the Plan. The determination of the Administrator as to such compliance shall be final and binding on the Optionee. The Optionee shall not be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Stock subject to this Stock Option unless and until this Stock Option shall have been exercised pursuant to the terms hereof, the Company or the transfer agent shall have transferred the shares to the Optionee, and the Optionee's name shall have been entered as the stockholder of record on the books of the Company. Thereupon, the Optionee shall have full voting, dividend and other ownership rights with respect to such shares of Stock.

(c) The minimum number of shares with respect to which this Stock Option may be exercised at any one time shall be 100 shares, unless the number of shares with respect to which this Stock Option is being exercised is the total number of shares subject to exercise under this Stock Option at the time.

(d) Notwithstanding any other provision hereof or of the Plan, no portion of this Stock Option shall be exercisable after the Expiration Date hereof.

3. Termination as Director. If the Optionee ceases to be a Director of the Company, the period within which to exercise the Stock Option may be subject to earlier termination as set forth below.

(a) Termination Due to Death. If the Optionee's service as a Director terminates by reason of the Optionee's death, any portion of this Stock Option outstanding on such date, to the extent exercisable on the date of death, may thereafter be exercised by the Optionee's legal representative or legatee for a period of 12 months from the date of death or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date of death shall terminate immediately and be of no further force or effect.

(b) Other Termination. If the Optionee ceases to be a Director for any reason other than the Optionee's death, any portion of this Stock Option outstanding on such date may be exercised, to the extent exercisable on the date the Optionee ceased to be a Director, for a period of six months from the date the Optionee ceased to be a Director or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date the Optionee ceases to be a Director shall terminate immediately and be of no further force or effect.

4. Incorporation of Plan. Notwithstanding anything herein to the contrary, this Stock Option shall be subject to and governed by all the terms and conditions of the Plan, including the powers of the Administrator set forth in Section 2(b) of the Plan. Capitalized terms in this Agreement shall have the meaning specified in the Plan, unless a different meaning is specified herein.

5. Transferability. This Agreement is personal to the Optionee, is non-assignable and is not transferable in any manner, by operation of law or otherwise, other than by will or the laws of descent and distribution. This Stock Option is exercisable, during the Optionee's lifetime, only by the Optionee, and thereafter, only by the Optionee's legal representative or legatee.

6. No Obligation to Continue as a Director. Neither the Plan nor this Stock Option confers upon the Optionee any rights with respect to continuance as a Director.

7. Integration. This Agreement constitutes the entire agreement between the parties with respect to this Stock Option and supersedes all prior agreements and discussions between the parties concerning such subject matter.

8. Data Privacy Consent. In order to administer the Plan and this Agreement and to implement or structure future equity grants, the Company, its subsidiaries and affiliates and certain agents thereof (together, the "Relevant Companies") may process any and all personal or professional data, including but not limited to Social Security or other identification number, home address and telephone number, date of birth and other information that is necessary or desirable for the administration of the Plan and/or this Agreement (the "Relevant Information"). By entering into this Agreement, the Optionee (i) authorizes the Company to collect, process, register and transfer to the Relevant Companies all Relevant Information; (ii) waives any privacy rights the Optionee may have with respect to the Relevant Information; (iii) authorizes the Relevant Companies to store and transmit such information in electronic form; and (iv) authorizes the transfer of the Relevant Information to any jurisdiction in which the Relevant Companies consider appropriate. The Optionee shall have access to, and the right to change, the Relevant Information. Relevant Information will only be used in accordance with applicable law.

9. Notices. Notices hereunder shall be mailed or delivered to the Company at its principal place of business and shall be mailed or delivered to the Optionee at the address on file with the Company or, in either case, at such other address as one party may subsequently furnish to the other party in writing.

RESTORBIO, INC.

By: _____

Title:

The foregoing Agreement is hereby accepted and the terms and conditions thereof hereby agreed to by the undersigned. Electronic acceptance of this Agreement pursuant to the Company's instructions to the Optionee (including through an online acceptance process) is acceptable.

Dated: _____

_____

Optionee's Signature

Optionee's name and address:

_____

_____

_____

NON-QUALIFIED STOCK OPTION AGREEMENT
FOR COMPANY EMPLOYEES
UNDER THE RESTORBIO, INC.
2018 STOCK OPTION AND INCENTIVE PLAN

Name of Optionee: _____
No. of Option Shares: _____
Option Exercise Price per Share: $ _____
Grant Date: _____
Expiration Date: _____

Pursuant to the resTORbio, Inc. 2018 Stock Option and Incentive Plan as amended through the date hereof (the "Plan"), resTORbio, Inc. (the "Company") hereby grants to the Optionee named above an option (the "Stock Option") to purchase on or prior to the Expiration Date specified above all or part of the number of shares of Common Stock, par value $0.0001 per share (the "Stock") of the Company specified above at the Option Exercise Price per Share specified above subject to the terms and conditions set forth herein and in the Plan. This Stock Option is not intended to be an "incentive stock option" under Section 422 of the Internal Revenue Code of 1986, as amended.

1. Exercisability Schedule. No portion of this Stock Option may be exercised until such portion shall have become exercisable. Except as set forth below, and subject to the discretion of the Administrator (as defined in Section 2 of the Plan) to accelerate the exercisability schedule hereunder, this Stock Option shall be exercisable with respect to the following number of Option Shares on the dates indicated so long as Optionee remains an employee of the Company or a Subsidiary on such dates:

Incremental Number of Option Shares Exercisable	Exercisability Date
(%)	
(%)	
(%)	
(%)	
(%)	

Once exercisable, this Stock Option shall continue to be exercisable at any time or times prior to the close of business on the Expiration Date, subject to the provisions hereof and of the Plan.

2. Manner of Exercise.

(a) The Optionee may exercise this Stock Option only in the following manner: from time to time on or prior to the Expiration Date of this Stock Option, the Optionee may give written notice to the Administrator of his or her election to purchase some or all of the Option Shares purchasable at the time of such notice. This notice shall specify the number of Option Shares to be purchased.

Payment of the purchase price for the Option Shares may be made by one or more of the following methods: (i) in cash, by certified or bank check or other instrument acceptable to the Administrator; (ii) through the delivery (or attestation to the ownership) of shares of Stock that have been purchased by the Optionee on the open market or that are beneficially owned by the Optionee and are not then subject to any restrictions under any Company plan and that otherwise satisfy any holding periods as may be required by the Administrator; (iii) by the Optionee delivering to the Company a properly executed exercise notice together with irrevocable instructions to a broker to promptly deliver to the Company cash or a check payable and acceptable to the Company to pay the option purchase price, provided that in the event the Optionee chooses to pay the option purchase price as so provided, the Optionee and the broker shall comply with such procedures and enter into such agreements of indemnity and other agreements as the Administrator shall prescribe as a condition of such payment procedure; (iv) by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Stock issuable upon exercise by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price; or (v) a combination of (i), (ii), (iii) and (iv) above. Payment instruments will be received subject to collection.

The transfer to the Optionee on the records of the Company or of the transfer agent of the Option Shares will be contingent upon (i) the Company's receipt from the Optionee of the full purchase price for the Option Shares, as set forth above, (ii) the fulfillment of any other requirements contained herein or in the Plan or in any other agreement or provision of laws, and (iii) the receipt by the Company of any agreement, statement or other evidence that the Company may require to satisfy itself that the issuance of Stock to be purchased pursuant to the exercise of Stock Options under the Plan and any subsequent resale of the shares of Stock will be in compliance with applicable laws and regulations. In the event the Optionee chooses to pay the purchase price by previously-owned shares of Stock through the attestation method, the number of shares of Stock transferred to the Optionee upon the exercise of the Stock Option shall be net of the Shares attested to.

(b) The shares of Stock purchased upon exercise of this Stock Option shall be transferred to the Optionee on the records of the Company or of the transfer agent upon compliance to the satisfaction of the Administrator with all requirements under applicable laws or regulations in connection with such transfer and with the requirements hereof and of the Plan. The determination of the Administrator as to such compliance shall be final and binding on the Optionee. The Optionee shall not be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Stock subject to this Stock Option unless and until this Stock Option shall have been exercised pursuant to the terms hereof, the Company or the transfer agent shall have transferred the shares to the Optionee, and the Optionee's name shall have been entered as the stockholder of record on the books of the Company. Thereupon, the Optionee shall have full voting, dividend and other ownership rights with respect to such shares of Stock.

(c) The minimum number of shares with respect to which this Stock Option may be exercised at any one time shall be 100 shares, unless the number of shares with respect to which this Stock Option is being exercised is the total number of shares subject to exercise under this Stock Option at the time.

(d) Notwithstanding any other provision hereof or of the Plan, no portion of this Stock Option shall be exercisable after the Expiration Date hereof.

3. Termination of Employment. If the Optionee's employment by the Company or a Subsidiary (as defined in the Plan) is terminated, the period within which to exercise the Stock Option may be subject to earlier termination as set forth below.

(a) Termination Due to Death. If the Optionee's employment terminates by reason of the Optionee's death, any portion of this Stock Option outstanding on such date, to the extent exercisable on the date of death, may thereafter be exercised by the Optionee's legal representative or legatee for a period of 12 months from the date of death or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date of death shall terminate immediately and be of no further force or effect.

(b) Termination Due to Disability. If the Optionee's employment terminates by reason of the Optionee's disability (as determined by the Administrator), any portion of this Stock Option outstanding on such date, to the extent exercisable on the date of such termination of employment, may thereafter be exercised by the Optionee for a period of 12 months from the date of disability or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date of disability shall terminate immediately and be of no further force or effect.

(c) Termination for Cause. If the Optionee's employment terminates for Cause, any portion of this Stock Option outstanding on such date shall terminate immediately and be of no further force and effect. For purposes hereof, "Cause" shall mean, unless otherwise provided in an employment agreement between the Company and the Optionee, a determination by the Administrator that the Optionee shall be dismissed as a result of (i) any material breach by the Optionee of any agreement between the Optionee and the Company; (ii) the conviction of, indictment for or plea of nolo contendere by the Optionee to a felony or a crime involving moral turpitude; or (iii) any material misconduct or willful and deliberate non-performance (other than by reason of disability) by the Optionee of the Optionee's duties to the Company.

(d) Other Termination. If the Optionee's employment terminates for any reason other than the Optionee's death, the Optionee's disability or Cause, and unless otherwise determined by the Administrator, any portion of this Stock Option outstanding on such date may be exercised, to the extent exercisable on the date of termination, for a period of three months from the date of termination or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date of termination shall terminate immediately and be of no further force or effect.

The Administrator's determination of the reason for termination of the Optionee's employment shall be conclusive and binding on the Optionee and his or her representatives or legatees.

4. Incorporation of Plan. Notwithstanding anything herein to the contrary, this Stock Option shall be subject to and governed by all the terms and conditions of the Plan, including the powers of the Administrator set forth in Section 2(b) of the Plan. Capitalized terms in this Agreement shall have the meaning specified in the Plan, unless a different meaning is specified herein.

5. Transferability. This Agreement is personal to the Optionee, is non-assignable and is not transferable in any manner, by operation of law or otherwise, other than by will or the laws of descent and distribution. This Stock Option is exercisable, during the Optionee's lifetime, only by the Optionee, and thereafter, only by the Optionee's legal representative or legatee.

6. Tax Withholding. The Optionee shall, not later than the date as of which the exercise of this Stock Option becomes a taxable event for Federal income tax purposes, pay to the Company or make arrangements satisfactory to the Administrator for payment of any Federal, state, and local taxes required by law to be withheld on account of such taxable event. The Company shall have the authority to cause the required tax withholding obligation to be satisfied, in whole or in part, by withholding from shares of Stock to be issued to the Optionee a number of shares of Stock with an aggregate Fair Market Value that would satisfy the withholding amount due; provided, however, that the amount withheld does not exceed the maximum statutory tax rate or such lesser amount as is necessary to avoid adverse accounting treatment or as determined by the Administrator.

7. No Obligation to Continue Employment. Neither the Company nor any Subsidiary is obligated by or as a result of the Plan or this Agreement to continue the Optionee in employment and neither the Plan nor this Agreement shall interfere in any way with the right of the Company or any Subsidiary to terminate the employment of the Optionee at any time.

8. Integration. This Agreement constitutes the entire agreement between the parties with respect to this Stock Option and supersedes all prior agreements and discussions between the parties concerning such subject matter.

9. Data Privacy Consent. In order to administer the Plan and this Agreement and to implement or structure future equity grants, the Company, its subsidiaries and affiliates and certain agents thereof (together, the "Relevant Companies") may process any and all personal or professional data, including but not limited to Social Security or other identification number, home address and telephone number, date of birth and other information that is necessary or desirable for the administration of the Plan and/or this Agreement (the "Relevant Information"). By entering into this Agreement, the Optionee (i) authorizes the Company to collect, process, register and transfer to the Relevant Companies all Relevant Information; (ii) waives any privacy rights the Optionee may have with respect to the Relevant Information; (iii) authorizes the Relevant Companies to store and transmit such information in electronic form; and (iv) authorizes the transfer of the Relevant Information to any jurisdiction in which the Relevant

Companies consider appropriate. The Optionee shall have access to, and the right to change, the Relevant Information. Relevant Information will only be used in accordance with applicable law.

10. Notices. Notices hereunder shall be mailed or delivered to the Company at its principal place of business and shall be mailed or delivered to the Optionee at the address on file with the Company or, in either case, at such other address as one party may subsequently furnish to the other party in writing.

RESTORBIO, INC.

By: _____

Title:

The foregoing Agreement is hereby accepted and the terms and conditions thereof hereby agreed to by the undersigned. Electronic acceptance of this Agreement pursuant to the Company's instructions to the Optionee (including through an online acceptance process) is acceptable.

Dated: _____

_____

Optionee's Signature

Optionee's name and address:

_____

_____

_____

NON-QUALIFIED STOCK OPTION AGREEMENT
FOR NON-EMPLOYEE CONSULTANTS
UNDER THE RESTORBIO, INC.
2018 STOCK OPTION AND INCENTIVE PLAN

Name of Optionee: _____
No. of Option Shares: _____
Option Exercise Price per Share: $ _____
Grant Date: _____
Expiration Date: _____

Pursuant to the resTORbio, Inc. 2018 Stock Option and Incentive Plan as amended through the date hereof (the "Plan"), resTORbio, Inc. (the "Company") hereby grants to the Optionee named above, who is a Consultant of the Company, an option (the "Stock Option") to purchase on or prior to the Expiration Date specified above all or part of the number of shares of Common Stock, par value $0.0001 per share (the "Stock"), of the Company specified above at the Option Exercise Price per Share specified above subject to the terms and conditions set forth herein and in the Plan. This Stock Option is not intended to be an "incentive stock option" under Section 422 of the Internal Revenue Code of 1986, as amended.

1. Exercisability Schedule. No portion of this Stock Option may be exercised until such portion shall have become exercisable. Except as set forth below, and subject to the discretion of the Administrator (as defined in Section 2 of the Plan) to accelerate the exercisability schedule hereunder, this Stock Option shall be exercisable with respect to the following number of Option Shares on the dates indicated so long as the Optionee remains in service to the Company or a Subsidiary as a Consultant on such dates:

Incremental Number of Option Shares Exercisable		Exercisability Date
(	%)	
(	%)	
(	%)	
(	%)	
(	%)	

Once exercisable, this Stock Option shall continue to be exercisable at any time or times prior to the close of business on the Expiration Date, subject to the provisions hereof and of the Plan.

2. Manner of Exercise.

(a) The Optionee may exercise this Stock Option only in the following manner: from time to time on or prior to the Expiration Date of this Stock Option, the Optionee may give written notice to the Administrator of his or her election to purchase some or all of the Option Shares purchasable at the time of such notice. This notice shall specify the number of Option Shares to be purchased.

Payment of the purchase price for the Option Shares may be made by one or more of the following methods: (i) in cash, by certified or bank check or other instrument acceptable to the Administrator; (ii) through the delivery (or attestation to the ownership) of shares of Stock that have been purchased by the Optionee on the open market or that are beneficially owned by the Optionee and are not then subject to any restrictions under any Company plan and that otherwise satisfy any holding periods as may be required by the Administrator; (iii) by the Optionee delivering to the Company a properly executed exercise notice together with irrevocable instructions to a broker to promptly deliver to the Company cash or a check payable and acceptable to the Company to pay the option purchase price, provided that in the event the Optionee chooses to pay the option purchase price as so provided, the Optionee and the broker shall comply with such procedures and enter into such agreements of indemnity and other agreements as the Administrator shall prescribe as a condition of such payment procedure; (iv) by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Stock issuable upon exercise by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price; or (v) a combination of (i), (ii), (iii) and (iv) above. Payment instruments will be received subject to collection.

The transfer to the Optionee on the records of the Company or of the transfer agent of the Option Shares will be contingent upon (i) the Company's receipt from the Optionee of the full purchase price for the Option Shares, as set forth above, (ii) the fulfillment of any other requirements contained herein or in the Plan or in any other agreement or provision of laws, and (iii) the receipt by the Company of any agreement, statement or other evidence that the Company may require to satisfy itself that the issuance of Stock to be purchased pursuant to the exercise of Stock Options under the Plan and any subsequent resale of the shares of Stock will be in compliance with applicable laws and regulations. In the event the Optionee chooses to pay the purchase price by previously-owned shares of Stock through the attestation method, the number of shares of Stock transferred to the Optionee upon the exercise of the Stock Option shall be net of the Shares attested to.

(b) The shares of Stock purchased upon exercise of this Stock Option shall be transferred to the Optionee on the records of the Company or of the transfer agent upon compliance to the satisfaction of the Administrator with all requirements under applicable laws or regulations in connection with such transfer and with the requirements hereof and of the Plan. The determination of the Administrator as to such compliance shall be final and binding on the Optionee. The Optionee shall not be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Stock subject to this Stock Option unless and until this Stock Option shall have been exercised pursuant to the terms hereof, the Company or the transfer agent shall have transferred the shares to the Optionee, and the Optionee's name shall have been entered as the stockholder of record on the books of the Company. Thereupon, the Optionee shall have full voting, dividend and other ownership rights with respect to such shares of Stock.

(c) The minimum number of shares with respect to which this Stock Option may be exercised at any one time shall be 100 shares, unless the number of shares with respect to which this Stock Option is being exercised is the total number of shares subject to exercise under this Stock Option at the time.

(d) Notwithstanding any other provision hereof or of the Plan, no portion of this Stock Option shall be exercisable after the Expiration Date hereof.

3. Termination as Consultant. If the Optionee ceases to be a Consultant to the Company or a Subsidiary for any reason, any portion of this Stock Option outstanding on such date may be exercised, to the extent exercisable on the date the Optionee ceased to provide services, for a period of three months from the date the Optionee ceased to provide services or until the Expiration Date, if earlier. Any portion of this Stock Option that is not exercisable on the date the Optionee ceases to be a Consultant to the Company or a Subsidiary shall terminate immediately and be of no further force or effect.

4. Incorporation of Plan. Notwithstanding anything herein to the contrary, this Stock Option shall be subject to and governed by all the terms and conditions of the Plan, including the powers of the Administrator set forth in Section 2(b) of the Plan. Capitalized terms in this Agreement shall have the meaning specified in the Plan, unless a different meaning is specified herein.

5. Transferability. This Agreement is personal to the Optionee, is non-assignable and is not transferable in any manner, by operation of law or otherwise, other than by will or the laws of descent and distribution. This Stock Option is exercisable, during the Optionee's lifetime, only by the Optionee, and thereafter, only by the Optionee's legal representative or legatee.

6. No Obligation to Continue as a Consultant or Service Provider. Neither the Plan nor this Stock Option confers upon the Optionee any rights with respect to continuance as a Consultant or other service provider to the Company or a Subsidiary.

7. Integration. This Agreement constitutes the entire agreement between the parties with respect to this Stock Option and supersedes all prior agreements and discussions between the parties concerning such subject matter.

8. Data Privacy Consent. In order to administer the Plan and this Agreement and to implement or structure future equity grants, the Company, its subsidiaries and affiliates and certain agents thereof (together, the "Relevant Companies") may process any and all personal or professional data, including but not limited to Social Security or other identification number, home address and telephone number, date of birth and other information that is necessary or desirable for the administration of the Plan and/or this Agreement (the "Relevant Information"). By entering into this Agreement, the Optionee (i) authorizes the Company to collect, process, register and transfer to the Relevant Companies all Relevant Information; (ii) waives any privacy rights the Optionee may have with respect to the Relevant Information; (iii) authorizes the

Relevant Companies to store and transmit such information in electronic form; and (iv) authorizes the transfer of the Relevant Information to any jurisdiction in which the Relevant Companies consider appropriate. The Optionee shall have access to, and the right to change, the Relevant Information. Relevant Information will only be used in accordance with applicable law.

9. Notices. Notices hereunder shall be mailed or delivered to the Company at its principal place of business and shall be mailed or delivered to the Optionee at the address on file with the Company or, in either case, at such other address as one party may subsequently furnish to the other party in writing.

RESTORBIO, INC.

By: _____

Title:

The foregoing Agreement is hereby accepted and the terms and conditions thereof hereby agreed to by the undersigned. Electronic acceptance of this Agreement pursuant to the Company's instructions to the Optionee (including through an online acceptance process) is acceptable.

Dated: _____

_____

Optionee's Signature

Optionee's name and address:

_____

_____

_____

RESTRICTED STOCK AWARD AGREEMENT
UNDER THE RESTORBIO, INC.
2018 STOCK OPTION AND INCENTIVE PLAN

Name of Grantee: _____

No. of Shares: _____

Grant Date: _____

Pursuant to the resTORbio, Inc. 2018 Stock Option and Incentive Plan as amended through the date hereof (the "Plan"), resTORbio, Inc. (the "Company") hereby grants a Restricted Stock Award (an "Award") to the Grantee named above. Upon acceptance of this Award, the Grantee shall receive the number of shares of Common Stock, par value $0.0001 per share (the "Stock") of the Company specified above, subject to the restrictions and conditions set forth herein and in the Plan. The Company acknowledges the receipt from the Grantee of consideration with respect to the par value of the Stock in the form of cash, past or future services rendered to the Company by the Grantee or such other form of consideration as is acceptable to the Administrator.

1. Award. The shares of Restricted Stock awarded hereunder shall be issued and held by the Company's transfer agent in book entry form, and the Grantee's name shall be entered as the stockholder of record on the books of the Company. Thereupon, the Grantee shall have all the rights of a stockholder with respect to such shares, including voting and dividend rights, subject, however, to the restrictions and conditions specified in Paragraph 2 below. The Grantee shall (i) sign and deliver to the Company a copy of this Award Agreement and (ii) deliver to the Company a stock power endorsed in blank.

2. Restrictions and Conditions.

(a) Any book entries for the shares of Restricted Stock granted herein shall bear an appropriate legend, as determined by the Administrator in its sole discretion, to the effect that such shares are subject to restrictions as set forth herein and in the Plan.

(b) Shares of Restricted Stock granted herein may not be sold, assigned, transferred, pledged or otherwise encumbered or disposed of by the Grantee prior to vesting.

(c) If the Grantee's employment with the Company and its Subsidiaries is voluntarily or involuntarily terminated for any reason (including death) prior to vesting of shares of Restricted Stock granted herein, all shares of Restricted Stock shall immediately and automatically be forfeited and returned to the Company.

3. Vesting of Restricted Stock. The restrictions and conditions in Paragraph 2 of this Agreement shall lapse on the Vesting Date or Dates specified in the following schedule so long as the Grantee remains an employee of the Company or a Subsidiary on such Dates. If a series of Vesting Dates is specified, then the restrictions and conditions in Paragraph 2 shall lapse only with respect to the number of shares of Restricted Stock specified as vested on such date.

Incremental Number of Shares Vested	Vesting Date
(%)	
(%)	
(%)	
(%)	
(%)	

Subsequent to such Vesting Date or Dates, the shares of Stock on which all restrictions and conditions have lapsed shall no longer be deemed Restricted Stock. The Administrator may at any time accelerate the vesting schedule specified in this Paragraph 3.

4. Dividends. Dividends on shares of Restricted Stock shall be paid currently to the Grantee.

5. Incorporation of Plan. Notwithstanding anything herein to the contrary, this Award shall be subject to and governed by all the terms and conditions of the Plan, including the powers of the Administrator set forth in Section 2(b) of the Plan. Capitalized terms in this Agreement shall have the meaning specified in the Plan, unless a different meaning is specified herein.

6. Transferability. This Agreement is personal to the Grantee, is non-assignable and is not transferable in any manner, by operation of law or otherwise, other than by will or the laws of descent and distribution.

7. Tax Withholding. The Grantee shall, not later than the date as of which the receipt of this Award becomes a taxable event for Federal income tax purposes, pay to the Company or make arrangements satisfactory to the Administrator for payment of any Federal, state, and local taxes required by law to be withheld on account of such taxable event. Except in the case where an election is made pursuant to Paragraph 8 below, the Company shall have the authority to cause the required tax withholding obligation to be satisfied, in whole or in part, by withholding from shares of Stock to be issued or released by the transfer agent a number of shares of Stock with an aggregate Fair Market Value that would satisfy the withholding amount due; provided, however, that the amount withheld does not exceed the maximum statutory tax rate or such lesser amount as is necessary to avoid adverse accounting treatment or as determined by the Administrator.

8. Election Under Section 83(b). The Grantee and the Company hereby agree that the Grantee may, within 30 days following the Grant Date of this Award, file with the Internal Revenue Service and the Company an election under Section 83(b) of the Internal Revenue Code. In the event the Grantee makes such an election, he or she agrees to provide a copy of the election to the Company. The Grantee acknowledges that he or she is responsible for obtaining the advice of his or her tax advisors with regard to the Section 83(b) election and that he or she is relying solely on such advisors and not on any statements or representations of the Company or any of its agents with regard to such election.

9. No Obligation to Continue Employment. Neither the Company nor any Subsidiary is obligated by or as a result of the Plan or this Agreement to continue the Grantee in employment and neither the Plan nor this Agreement shall interfere in any way with the right of the Company or any Subsidiary to terminate the employment of the Grantee at any time.

10. Integration. This Agreement constitutes the entire agreement between the parties with respect to this Award and supersedes all prior agreements and discussions between the parties concerning such subject matter.

11. Data Privacy Consent. In order to administer the Plan and this Agreement and to implement or structure future equity grants, the Company, its subsidiaries and affiliates and certain agents thereof (together, the "Relevant Companies") may process any and all personal or professional data, including but not limited to Social Security or other identification number, home address and telephone number, date of birth and other information that is necessary or desirable for the administration of the Plan and/or this Agreement (the "Relevant Information"). By entering into this Agreement, the Grantee (i) authorizes the Company to collect, process, register and transfer to the Relevant Companies all Relevant Information; (ii) waives any privacy rights the Grantee may have with respect to the Relevant Information; (iii) authorizes the Relevant Companies to store and transmit such information in electronic form; and (iv) authorizes the transfer of the Relevant Information to any jurisdiction in which the Relevant Companies consider appropriate. The Grantee shall have access to, and the right to change, the Relevant Information. Relevant Information will only be used in accordance with applicable law.

12. Notices. Notices hereunder shall be mailed or delivered to the Company at its principal place of business and shall be mailed or delivered to the Grantee at the address on file with the Company or, in either case, at such other address as one party may subsequently furnish to the other party in writing.

RESTORBIO, NC.

By: _____
Name:
Title:

The foregoing Agreement is hereby accepted and the terms and conditions thereof hereby agreed to by the undersigned. Electronic acceptance of this Agreement pursuant to the Company's instructions to the Grantee (including through an online acceptance process) is acceptable.

Dated: _____

_____
Grantee's Signature

Grantee's name and address:

_____

_____

_____

RESTRICTED STOCK UNIT AWARD AGREEMENT
FOR NON-EMPLOYEE DIRECTORS
UNDER THE RESTORBIO, INC.
2018 STOCK OPTION AND INCENTIVE PLAN

Name of Grantee: _____
No. of Restricted Stock Units: _____
Grant Date: _____

Pursuant to the resTORbio, Inc. 2018 Stock Option and Incentive Plan as amended through the date hereof (the "Plan"), resTORbio, Inc. (the "Company") hereby grants an award of the number of Restricted Stock Units listed above (an "Award") to the Grantee named above. Each Restricted Stock Unit shall relate to one share of Common Stock, par value $0.0001 per share (the "Stock") of the Company.

1. Restrictions on Transfer of Award. This Award may not be sold, transferred, pledged, assigned or otherwise encumbered or disposed of by the Grantee, and any shares of Stock issuable with respect to the Award may not be sold, transferred, pledged, assigned or otherwise encumbered or disposed of until (i) the Restricted Stock Units have vested as provided in Paragraph 2 of this Agreement and (ii) shares of Stock have been issued to the Grantee in accordance with the terms of the Plan and this Agreement.

2. Vesting of Restricted Stock Units. The restrictions and conditions of Paragraph 1 of this Agreement shall lapse on the Vesting Date or Dates specified in the following schedule so long as the Grantee remains in service as a member of the Board on such Dates. If a series of Vesting Dates is specified, then the restrictions and conditions in Paragraph 1 shall lapse only with respect to the number of Restricted Stock Units specified as vested on such date.

Incremental Number of Restricted Stock Units Vested	Vesting Date
(%)	
(%)	
(%)	
(%)	

The Administrator may at any time accelerate the vesting schedule specified in this Paragraph 2.

3. Termination of Service. If the Grantee's service with the Company and its Subsidiaries terminates for any reason (including death or disability) prior to the satisfaction of the vesting conditions set forth in Paragraph 2 above, any Restricted Stock Units that have not vested as of such date shall automatically and without notice terminate and be forfeited, and neither the Grantee nor any of his or her successors, heirs, assigns, or personal representatives will thereafter have any further rights or interests in such unvested Restricted Stock Units.

4. Issuance of Shares of Stock. As soon as practicable following each Vesting Date (but in no event later than two and one-half months after the end of the year in which the Vesting Date occurs), the Company shall issue to the Grantee the number of shares of Stock equal to the aggregate number of Restricted Stock Units that have vested pursuant to Paragraph 2 of this Agreement on such date and the Grantee shall thereafter have all the rights of a stockholder of the Company with respect to such shares.

5. Incorporation of Plan. Notwithstanding anything herein to the contrary, this Agreement shall be subject to and governed by all the terms and conditions of the Plan, including the powers of the Administrator set forth in Section 2(b) of the Plan. Capitalized terms in this Agreement shall have the meaning specified in the Plan, unless a different meaning is specified herein.

6. Section 409A of the Code. This Agreement shall be interpreted in such a manner that all provisions relating to the settlement of the Award are exempt from the requirements of Section 409A of the Code as "short-term deferrals" as described in Section 409A of the Code.

7. No Obligation to Continue as a Director. Neither the Plan nor this Award confers upon the Grantee any rights with respect to continuance as a Director.

8. Integration. This Agreement constitutes the entire agreement between the parties with respect to this Award and supersedes all prior agreements and discussions between the parties concerning such subject matter.

9. Data Privacy Consent. In order to administer the Plan and this Agreement and to implement or structure future equity grants, the Company, its subsidiaries and affiliates and certain agents thereof (together, the "Relevant Companies") may process any and all personal or professional data, including but not limited to Social Security or other identification number, home address and telephone number, date of birth and other information that is necessary or desirable for the administration of the Plan and/or this Agreement (the "Relevant Information"). By entering into this Agreement, the Grantee (i) authorizes the Company to collect, process, register and transfer to the Relevant Companies all Relevant Information; (ii) waives any privacy rights the Grantee may have with respect to the Relevant Information; (iii) authorizes the Relevant Companies to store and transmit such information in electronic form; and (iv) authorizes the transfer of the Relevant Information to any jurisdiction in which the Relevant Companies consider appropriate. The Grantee shall have access to, and the right to change, the Relevant Information. Relevant Information will only be used in accordance with applicable law.

10. Notices. Notices hereunder shall be mailed or delivered to the Company at its principal place of business and shall be mailed or delivered to the Grantee at the address on file with the Company or, in either case, at such other address as one party may subsequently furnish to the other party in writing.

RESTORBIO, INC.

By: _____
Name:
Title:

The foregoing Agreement is hereby accepted and the terms and conditions thereof hereby agreed to by the undersigned. Electronic acceptance of this Agreement pursuant to the Company's instructions to the Grantee (including through an online acceptance process) is acceptable.

Dated: _____

_____
Grantee's Signature

Grantee's name and address:

_____

_____

_____

RESTRICTED STOCK UNIT AWARD AGREEMENT
FOR COMPANY EMPLOYEES
UNDER THE RESTORBIO, INC.
2018 STOCK OPTION AND INCENTIVE PLAN

Name of Grantee: _____
No. of Restricted Stock Units: _____
Grant Date: _____

Pursuant to the resTORbio, Inc. 2018 Stock Option and Incentive Plan as amended through the date hereof (the "Plan"), resTORbio, Inc. (the "Company") hereby grants an award of the number of Restricted Stock Units listed above (an "Award") to the Grantee named above. Each Restricted Stock Unit shall relate to one share of Common Stock, par value $0.0001 per share (the "Stock") of the Company.

1. Restrictions on Transfer of Award. This Award may not be sold, transferred, pledged, assigned or otherwise encumbered or disposed of by the Grantee, and any shares of Stock issuable with respect to the Award may not be sold, transferred, pledged, assigned or otherwise encumbered or disposed of until (i) the Restricted Stock Units have vested as provided in Paragraph 2 of this Agreement and (ii) shares of Stock have been issued to the Grantee in accordance with the terms of the Plan and this Agreement.

2. Vesting of Restricted Stock Units. The restrictions and conditions of Paragraph 1 of this Agreement shall lapse on the Vesting Date or Dates specified in the following schedule so long as the Grantee remains an employee of the Company or a Subsidiary on such Dates. If a series of Vesting Dates is specified, then the restrictions and conditions in Paragraph 1 shall lapse only with respect to the number of Restricted Stock Units specified as vested on such date.

Incremental Number of Restricted Stock Units Vested	Vesting Date
(%)	
(%)	
(%)	
(%)	

The Administrator may at any time accelerate the vesting schedule specified in this Paragraph 2.

3. Termination of Employment. If the Grantee's employment with the Company and its Subsidiaries terminates for any reason (including death or disability) prior to the satisfaction of the vesting conditions set forth in Paragraph 2 above, any Restricted Stock Units that have not vested as of such date shall automatically and without notice terminate and be forfeited, and neither the Grantee nor any of his or her successors, heirs, assigns, or personal representatives will thereafter have any further rights or interests in such unvested Restricted Stock Units.

4. Issuance of Shares of Stock. As soon as practicable following each Vesting Date (but in no event later than two and one-half months after the end of the year in which the Vesting Date occurs), the Company shall issue to the Grantee the number of shares of Stock equal to the aggregate number of Restricted Stock Units that have vested pursuant to Paragraph 2 of this Agreement on such date and the Grantee shall thereafter have all the rights of a stockholder of the Company with respect to such shares.

5. Incorporation of Plan. Notwithstanding anything herein to the contrary, this Agreement shall be subject to and governed by all the terms and conditions of the Plan, including the powers of the Administrator set forth in Section 2(b) of the Plan. Capitalized terms in this Agreement shall have the meaning specified in the Plan, unless a different meaning is specified herein.

6. Tax Withholding. The Grantee shall, not later than the date as of which the receipt of this Award becomes a taxable event for Federal income tax purposes, pay to the Company or make arrangements satisfactory to the Administrator for payment of any Federal, state, and local taxes required by law to be withheld on account of such taxable event. The Company shall have the authority to cause the required tax withholding obligation to be satisfied, in whole or in part, by withholding from shares of Stock to be issued to the Grantee a number of shares of Stock with an aggregate Fair Market Value that would satisfy the withholding amount due; provided, however, that the amount withheld does not exceed the maximum statutory tax rate or such lesser amount as is necessary to avoid adverse accounting treatment or as determined by the Administrator.

7. Section 409A of the Code. This Agreement shall be interpreted in such a manner that all provisions relating to the settlement of the Award are exempt from the requirements of Section 409A of the Code as “short-term deferrals” as described in Section 409A of the Code.

8. No Obligation to Continue Employment. Neither the Company nor any Subsidiary is obligated by or as a result of the Plan or this Agreement to continue the Grantee in employment and neither the Plan nor this Agreement shall interfere in any way with the right of the Company or any Subsidiary to terminate the employment of the Grantee at any time.

9. Integration. This Agreement constitutes the entire agreement between the parties with respect to this Award and supersedes all prior agreements and discussions between the parties concerning such subject matter.

10. Data Privacy Consent. In order to administer the Plan and this Agreement and to implement or structure future equity grants, the Company, its subsidiaries and affiliates and certain agents thereof (together, the “Relevant Companies”) may process any and all personal or professional data, including but not limited to Social Security or other identification number, home address and telephone number, date of birth and other information that is necessary or desirable for the administration of the Plan and/or this Agreement (the “Relevant Information”). By entering into this Agreement, the Grantee (i) authorizes the Company to collect, process, register and transfer to the Relevant Companies all Relevant Information; (ii) waives any privacy

rights the Grantee may have with respect to the Relevant Information; (iii) authorizes the Relevant Companies to store and transmit such information in electronic form; and (iv) authorizes the transfer of the Relevant Information to any jurisdiction in which the Relevant Companies consider appropriate. The Grantee shall have access to, and the right to change, the Relevant Information. Relevant Information will only be used in accordance with applicable law.

11. Notices. Notices hereunder shall be mailed or delivered to the Company at its principal place of business and shall be mailed or delivered to the Grantee at the address on file with the Company or, in either case, at such other address as one party may subsequently furnish to the other party in writing.

RESTORBIO, INC.

By: _____
Name:
Title:

The foregoing Agreement is hereby accepted and the terms and conditions thereof hereby agreed to by the undersigned. Electronic acceptance of this Agreement pursuant to the Company's instructions to the Grantee (including through an online acceptance process) is acceptable.

Dated: _____

_____
Grantee's Signature

Grantee's name and address:

_____

_____

_____

RESTORBIO, INC.

FORM OF DIRECTOR INDEMNIFICATION AGREEMENT

This Indemnification Agreement ("Agreement") is made as of by and between resTORbio, Inc., a Delaware corporation (the "Company"), and [Director] ("Indemnitee").

RECITALS

WHEREAS, the Company desires to attract and retain the services of highly qualified individuals, such as Indemnitee, to serve the Company;

WHEREAS, in order to induce Indemnitee to provide or continue to provide services to the Company, the Company wishes to provide for the indemnification of, and advancement of expenses to, Indemnitee to the maximum extent permitted by law;

WHEREAS, the Third Amended and Restated Certificate of Incorporation (as amended and in effect from time to time, the "Charter") and the Amended and Restated Bylaws (as amended and in effect from time to time, the "Bylaws") of the Company require indemnification of the officers and directors of the Company, and Indemnitee may also be entitled to indemnification pursuant to the General Corporation Law of the State of Delaware (the "DGCL");

WHEREAS, the Charter, the Bylaws and the DGCL expressly provide that the indemnification provisions set forth therein are not exclusive, and thereby contemplate that contracts may be entered into between the Company and members of the board of directors, officers and other persons with respect to indemnification;

WHEREAS, the Board of Directors of the Company (the "Board") has determined that the increased difficulty in attracting and retaining highly qualified persons such as Indemnitee is detrimental to the best interests of the Company's stockholders;

WHEREAS, it is reasonable and prudent for the Company contractually to obligate itself to indemnify, and to advance expenses on behalf of, such persons to the fullest extent permitted by applicable law, regardless of any amendment or revocation of the Charter or the Bylaws, so that they will serve or continue to serve the Company free from undue concern that they will not be so indemnified;

WHEREAS, this Agreement is a supplement to and in furtherance of the indemnification provided in the Charter, the Bylaws and any resolutions adopted pursuant thereto, and shall not be deemed a substitute therefor, nor to diminish or abrogate any rights of Indemnitee thereunder; and

[WHEREAS, Indemnitee has certain rights to indemnification and/or insurance provided by [ ] ("[ ]") which Indemnitee and [ ] intend to be secondary to the primary obligation of the

Company to indemnify Indemnitee as provided in this Agreement, with the Company's acknowledgment and agreement to the foregoing being a material condition to Indemnitee's willingness to serve or continue to serve on the Board.]

NOW, THEREFORE, in consideration of the premises and the covenants contained herein, the Company and Indemnitee do hereby covenant and agree as follows:

Section 1. Services to the Company. Indemnitee agrees to continue to serve as a director of the Company. Indemnitee may at any time and for any reason resign from such position (subject to any other contractual obligation or any obligation imposed by law), in which event the Company shall have no obligation under this Agreement to continue Indemnitee in such position. This Agreement shall not be deemed an employment contract between the Company (or any of its subsidiaries or any Enterprise) and Indemnitee.

Section 2. Definitions.

As used in this Agreement:

(a) "Change in Control" shall mean (i) the sale of all or substantially all of the assets of the Company on a consolidated basis to an unrelated person or entity, (ii) a merger, reorganization or consolidation pursuant to which the holders of the Company's outstanding voting power and outstanding stock immediately prior to such transaction do not own a majority of the outstanding voting power and outstanding stock or other equity interests of the resulting or successor entity (or its ultimate parent, if applicable) immediately upon completion of such transaction, (iii) the sale of all of the Stock of the Company to an unrelated person, entity or group thereof acting in concert, or (iv) any other transaction in which the owners of the Company's outstanding voting power immediately prior to such transaction do not own at least a majority of the outstanding voting power of the Company or any successor entity immediately upon completion of the transaction other than as a result of the acquisition of securities directly from the Company.

(b) "Corporate Status" describes the status of a person as a current or former director of the Company or current or former director, manager, partner, officer, employee, agent or trustee of any other Enterprise which such person is or was serving at the request of the Company.

(c) "Enforcement Expenses" shall include all reasonable attorneys' fees, court costs, transcript costs, fees of experts, travel expenses, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees, and all other out-of-pocket disbursements or expenses of the types customarily incurred in connection with an action to enforce indemnification or advancement rights, or an appeal from such action. Expenses, however, shall not include fees, salaries, wages or benefits owed to Indemnitee.

(d) "Enterprise" shall mean any corporation (other than the Company), partnership, joint venture, trust, employee benefit plan, limited liability company, or other legal entity of which Indemnitee is or was serving at the request of the Company as a director, manager, partner, officer, employee, agent or trustee.

(e) "Expenses" shall include all reasonable attorneys' fees, court costs, transcript costs, fees of experts, travel expenses, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees, and all other out-of-pocket disbursements or expenses of the types customarily incurred in connection with prosecuting, defending, preparing to prosecute or defend, investigating, being or preparing to be a witness in, or otherwise participating in, a Proceeding or an appeal resulting from a Proceeding. Expenses, however, shall not include amounts paid in settlement by Indemnitee, the amount of judgments or fines against Indemnitee or fees, salaries, wages or benefits owed to Indemnitee.

(f) "Independent Counsel" means a law firm, or a partner (or, if applicable, member or shareholder) of such a law firm, that is experienced in matters of Delaware corporation law and neither presently is, nor in the past five (5) years has been, retained to represent: (i) the Company, any subsidiary of the Company, any Enterprise or Indemnitee in any matter material to any such party; or (ii) any other party to the Proceeding giving rise to a claim for indemnification hereunder. Notwithstanding the foregoing, the term "Independent Counsel" shall not include any person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing either the Company or Indemnitee in an action to determine Indemnitee's rights under this Agreement. The Company agrees to pay the reasonable fees and expenses of the Independent Counsel referred to above and to fully indemnify such counsel against any and all expenses, claims, liabilities and damages arising out of or relating to this Agreement or its engagement pursuant hereto.

(g) The term "Proceeding" shall include any threatened, pending or completed action, suit, arbitration, alternate dispute resolution mechanism, investigation, inquiry, administrative hearing or any other actual, threatened or completed proceeding, whether brought in the right of the Company or otherwise and whether of a civil, criminal, administrative, regulatory or investigative nature, and whether formal or informal, in which Indemnitee was, is or will be involved as a party or otherwise by reason of the fact that Indemnitee is or was a director of the Company or is or was serving at the request of the Company as a director, manager, partner, officer, employee, agent or trustee of any Enterprise or by reason of any action taken by Indemnitee or of any action taken on his or her part while acting as a director of the Company or while serving at the request of the Company as a director, manager, partner, officer, employee, agent or trustee of any Enterprise, in each case whether or not serving in such capacity at the time any liability or expense is incurred for which indemnification, reimbursement or advancement of expenses can be provided under this Agreement; provided, however, that the term "Proceeding" shall not include any action, suit or arbitration, or part thereof, initiated by Indemnitee to enforce Indemnitee's rights under this Agreement as provided for in Section 12(a) of this Agreement.

Section 3. Indemnity in Third-Party Proceedings. The Company shall indemnify Indemnitee to the extent set forth in this Section 3 if Indemnitee is, or is threatened to be made, a party to or a participant in any Proceeding, other than a Proceeding by or in the right of the Company to procure a judgment in its favor. Pursuant to this Section 3, Indemnitee shall be

indemnified against all Expenses, judgments, fines, penalties, excise taxes, and amounts paid in settlement actually and reasonably incurred by Indemnitee or on his or her behalf in connection with such Proceeding or any claim, issue or matter therein, if Indemnitee acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Company and, in the case of a criminal proceeding, had no reasonable cause to believe that his or her conduct was unlawful.

Section 4. Indemnity in Proceedings by or in the Right of the Company. The Company shall indemnify Indemnitee to the extent set forth in this Section 4 if Indemnitee is, or is threatened to be made, a party to or a participant in any Proceeding by or in the right of the Company to procure a judgment in its favor. Pursuant to this Section 4, Indemnitee shall be indemnified against all Expenses actually and reasonably incurred by Indemnitee or on his or her behalf in connection with such Proceeding or any claim, issue or matter therein, if Indemnitee acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Company. No indemnification for Expenses shall be made under this Section 4 in respect of any claim, issue or matter as to which Indemnitee shall have been finally adjudged by a court to be liable to the Company, unless and only to the extent that the Delaware Court of Chancery (the "Delaware Court") shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, Indemnitee is fairly and reasonably entitled to indemnification for such expenses as the Delaware Court shall deem proper.

Section 5. Indemnification for Expenses of a Party Who is Wholly or Partly Successful. Notwithstanding any other provisions of this Agreement and except as provided in Section 7, to the extent that Indemnitee is a party to or a participant in any Proceeding and is successful in such Proceeding or in defense of any claim, issue or matter therein, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by him or her in connection therewith. If Indemnitee is not wholly successful in such Proceeding but is successful as to one or more but less than all claims, issues or matters in such Proceeding, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by Indemnitee or on his or her behalf in connection with each successfully resolved claim, issue or matter. For purposes of this Section and without limitation, the termination of any claim, issue or matter in such a Proceeding by dismissal, with or without prejudice, shall be deemed to be a successful result as to such claim, issue or matter.

Section 6. Reimbursement for Expenses of a Witness or in Response to a Subpoena. Notwithstanding any other provision of this Agreement, to the extent that Indemnitee, by reason of his or her Corporate Status, (i) is a witness in any Proceeding to which Indemnitee is not a party and is not threatened to be made a party or (ii) receives a subpoena with respect to any Proceeding to which Indemnitee is not a party and is not threatened to be made a party, the Company shall reimburse Indemnitee for all Expenses actually and reasonably incurred by him or her or on his or her behalf in connection therewith.

Section 7. Exclusions. Notwithstanding any provision in this Agreement to the contrary, the Company shall not be obligated under this Agreement:

(a) to indemnify for amounts otherwise indemnifiable hereunder (or for which advancement is provided hereunder) if and to the extent that Indemnitee has otherwise actually received such amounts under any insurance policy, contract, agreement or otherwise; [provided that the foregoing shall not affect the rights of Indemnitee or the Secondary Indemnitors as set forth in Section 13(c)];

(b) to indemnify for an accounting of profits made from the purchase and sale (or sale and purchase) by Indemnitee of securities of the Company within the meaning of Section 16(b) of the Securities Exchange Act of 1934, as amended, or similar provisions of state statutory law or common law, or from the purchase or sale by Indemnitee of such securities in violation of Section 306 of the Sarbanes Oxley Act of 2002 ("SOX");

(c) to indemnify with respect to any Proceeding, or part thereof, brought by Indemnitee against the Company, any legal entity which it controls, any director or officer thereof or any third party, unless (i) the Board has consented to the initiation of such Proceeding or part thereof and (ii) the Company provides the indemnification, in its sole discretion, pursuant to the powers vested in the Company under applicable law; provided, however, that this Section 7(c) shall not apply to (A) counterclaims or affirmative defenses asserted by Indemnitee in an action brought against Indemnitee or (B) any action brought by Indemnitee for indemnification or advancement from the Company under this Agreement or under any directors' and officers' liability insurance policies maintained by the Company in the suit for which indemnification or advancement is being sought as described in Section 12; or

(d) to provide any indemnification or advancement of expenses that is prohibited by applicable law (as such law exists at the time payment would otherwise be required pursuant to this Agreement).

Section 8. Advancement of Expenses. Subject to Section 9(b), the Company shall advance, to the extent not prohibited by law, the Expenses incurred by Indemnitee in connection with any Proceeding, and such advancement shall be made as incurred, and such advancement shall be made within thirty (30) days after the receipt by the Company of a statement or statements requesting such advances (including any invoices received by Indemnitee, which such invoices may be redacted as necessary to avoid the waiver of any privilege accorded by applicable law) from time to time, whether prior to or after final disposition of any Proceeding. Advances shall be unsecured and interest free. Advances shall be made without regard to Indemnitee's (i) ability to repay the expenses, (ii) ultimate entitlement to indemnification under the other provisions of this Agreement, and (iii) entitlement to and availability of insurance coverage, including advancement, payment or reimbursement of defense costs, expenses of covered loss under the provisions of any applicable insurance policy (including , without limitation, whether such advancement, payment or reimbursement is withheld, conditioned or delayed by the insurer(s)). Indemnitee shall qualify for advances upon the execution and delivery to the Company of this Agreement which shall constitute an undertaking providing that Indemnitee undertakes to the fullest extent required by law to repay the advance if and to the extent that it is ultimately determined by a court of competent jurisdiction in a final judgment, not subject to appeal, that Indemnitee is not entitled to be indemnified by the Company. The right to advances under this paragraph shall in all events continue until final disposition of any Proceeding, including any appeal therein. Nothing in this Section 8 shall limit Indemnitee's right to advancement pursuant to Section 12(e) of this Agreement.

Section 9. Procedure for Notification and Defense of Claim.

(a) To obtain indemnification under this Agreement, Indemnitee shall submit to the Company a written request therefor specifying the basis for the claim, the amounts for which Indemnitee is seeking payment under this Agreement, and all documentation related thereto as reasonably requested by the Company.

(b) In the event that the Company shall be obligated hereunder to provide indemnification for or make any advancement of Expenses with respect to any Proceeding, the Company shall be entitled to assume the defense of such Proceeding, or any claim, issue or matter therein, with counsel approved by Indemnitee (which approval shall not be unreasonably withheld or delayed) upon the delivery to Indemnitee of written notice of the Company's election to do so. After delivery of such notice, approval of such counsel by Indemnitee and the retention of such counsel by the Company, the Company will not be liable to Indemnitee under this Agreement for any fees or expenses of separate counsel subsequently employed by or on behalf of Indemnitee with respect to the same Proceeding; provided that (i) Indemnitee shall have the right to employ separate counsel in any such Proceeding at Indemnitee's expense and (ii) if (A) the employment of separate counsel by Indemnitee has been previously authorized by the Company, (B) Indemnitee shall have reasonably concluded that there may be a conflict of interest between the Company and Indemnitee in the conduct of such defense, or (C) the Company shall not continue to retain such counsel to defend such Proceeding, then the fees and expenses actually and reasonably incurred by Indemnitee with respect to his or her separate counsel shall be Expenses hereunder.

(c) In the event that the Company does not assume the defense in a Proceeding pursuant to paragraph (b) above, then the Company will be entitled to participate in the Proceeding at its own expense.

(d) The Company shall not be liable to indemnify Indemnitee under this Agreement for any amounts paid in settlement of any Proceeding effected without its prior written consent (which consent shall not be unreasonably withheld or delayed). The Company shall not, without the prior written consent of Indemnitee (which consent shall not be unreasonably withheld or delayed), enter into any settlement which (i) includes an admission of fault of Indemnitee, any non-monetary remedy imposed on Indemnitee or any monetary damages for which Indemnitee is not wholly and actually indemnified hereunder or (ii) with respect to any Proceeding with respect to which Indemnitee may be or is made a party or may be otherwise entitled to seek indemnification hereunder, does not include the full release of Indemnitee from all liability in respect of such Proceeding.

Section 10. Procedure Upon Application for Indemnification.

(a) Upon written request by Indemnitee for indemnification pursuant to Section 9(a), a determination, if such determination is required by applicable law, with respect to Indemnitee's entitlement to indemnification hereunder shall be made in the specific case by one

of the following methods: (x) if a Change in Control shall have occurred, by Independent Counsel in a written opinion to the Board; or (y) if a Change in Control shall not have occurred: (i) by a majority vote of the disinterested directors, even though less than a quorum; (ii) by a committee of disinterested directors designated by a majority vote of the disinterested directors, even though less than a quorum; or (iii) if there are no disinterested directors or if the disinterested directors so direct, by Independent Counsel in a written opinion to the Board. For purposes hereof, disinterested directors are those members of the Board who are not parties to the action, suit or proceeding in respect of which indemnification is sought. In the case that such determination is made by Independent Counsel, a copy of Independent Counsel's written opinion shall be delivered to Indemnitee and, if it is so determined that Indemnitee is entitled to indemnification, payment to Indemnitee shall be made within thirty (30) days after such determination. Indemnitee shall cooperate with the Independent Counsel or the Company, as applicable, in making such determination with respect to Indemnitee's entitlement to indemnification, including providing to such counsel or the Company, upon reasonable advance request, any documentation or information which is not privileged or otherwise protected from disclosure and which is reasonably available to Indemnitee and reasonably necessary to such determination. Any out-of-pocket costs or expenses (including reasonable attorneys' fees and disbursements) actually and reasonably incurred by Indemnitee in so cooperating with the Independent Counsel or the Company shall be borne by the Company (irrespective of the determination as to Indemnitee's entitlement to indemnification) and the Company hereby indemnifies and agrees to hold Indemnitee harmless therefrom.

(b) If the determination of entitlement to indemnification is to be made by Independent Counsel pursuant to Section 10(a), the Independent Counsel shall be selected by the Board if a Change in Control shall not have occurred or, if a Change in Control shall have occurred, by Indemnitee. Indemnitee or the Company, as the case may be, may, within ten (10) days after written notice of such selection, deliver to the Company or Indemnitee, as the case may be, a written objection to such selection; provided, however, that such objection may be asserted only on the ground that the Independent Counsel so selected does not meet the requirements of "Independent Counsel" as defined in Section 2 of this Agreement, and the objection shall set forth with particularity the factual basis of such assertion. Absent a proper and timely objection, the person so selected shall act as Independent Counsel. If such written objection is so made and substantiated, the Independent Counsel so selected may not serve as Independent Counsel unless and until such objection is withdrawn or the Delaware Court has determined that such objection is without merit. If, within twenty (20) days after the later of (i) submission by Indemnitee of a written request for indemnification pursuant to Section 9(a), and (ii) the final disposition of the Proceeding, including any appeal therein, no Independent Counsel shall have been selected without objection, either Indemnitee or the Company may petition the Delaware Court for resolution of any objection which shall have been made by Indemnitee or the Company to the selection of Independent Counsel and/or for the appointment as Independent Counsel of a person selected by the court or by such other person as the court shall designate. The person with respect to whom all objections are so resolved or the person so appointed shall act as Independent Counsel under Section 10(a) hereof. Upon the due commencement of any judicial proceeding or arbitration pursuant to Section 12(a) of this Agreement, Independent Counsel shall be discharged and relieved of any further responsibility in such capacity (subject to the applicable standards of professional conduct then prevailing).

Section 11. Presumptions and Effect of Certain Proceedings.

(a) To the extent permitted by applicable law, in making a determination with respect to entitlement to indemnification hereunder, it shall be presumed that Indemnitee is entitled to indemnification under this Agreement if Indemnitee has submitted a request for indemnification in accordance with Section 9(a) of this Agreement, and the Company shall have the burden of proof to overcome that presumption in connection with the making of any determination contrary to that presumption. Neither (i) the failure of the Company or of Independent Counsel to have made a determination prior to the commencement of any action pursuant to this Agreement that indemnification is proper in the circumstances because Indemnitee has met the applicable standard of conduct, nor (ii) an actual determination by the Company or by Independent Counsel that Indemnitee has not met such applicable standard of conduct, shall be a defense to the action or create a presumption that Indemnitee has not met the applicable standard of conduct.

(b) The termination of any Proceeding or of any claim, issue or matter therein, by judgment, order, settlement or conviction, or upon a plea of guilty, nolo contendere or its equivalent, shall not (except as otherwise expressly provided in this Agreement) of itself adversely affect the right of Indemnitee to indemnification or create a presumption that Indemnitee did not act in good faith and in a manner which he or she reasonably believed to be in or not opposed to the best interests of the Company or, with respect to any criminal Proceeding, that Indemnitee had reasonable cause to believe that his or her conduct was unlawful.

(c) The knowledge and/or actions, or failure to act, of any director, manager, partner, officer, employee, agent or trustee of the Company, any subsidiary of the Company, or any Enterprise shall not be imputed to Indemnitee for purposes of determining the right to indemnification under this Agreement.

Section 12. Remedies of Indemnitee.

(a) Subject to Section 12(f), in the event that (i) a determination is made pursuant to Section 10 of this Agreement that Indemnitee is not entitled to indemnification under this Agreement, (ii) advancement of Expenses is not timely made pursuant to Section 8 of this Agreement, (iii) no determination of entitlement to indemnification shall have been made pursuant to Section 10(a) of this Agreement within sixty (60) days after receipt by the Company of the request for indemnification for which a determination is to be made other than by Independent Counsel, (iv) payment of indemnification or reimbursement of expenses is not made pursuant to Section 5 or 6 or the last sentence of Section 10(a) of this Agreement within thirty (30) days after receipt by the Company of a written request therefor (including any invoices received by Indemnitee, which such invoices may be redacted as necessary to avoid the waiver of any privilege accorded by applicable law) or (v) payment of indemnification pursuant to Section 3 or 4 of this Agreement is not made within thirty (30) days after a determination has been made that Indemnitee is entitled to indemnification, Indemnitee shall be entitled to an adjudication by the Delaware Court of his or her entitlement to such indemnification or advancement. Alternatively, Indemnitee, at his or her option, may seek an award in arbitration to be conducted by a single arbitrator pursuant to the Commercial Arbitration Rules of the

American Arbitration Association. Indemnitee shall commence such proceeding seeking an adjudication or an award in arbitration within 180 days following the date on which Indemnitee first has the right to commence such proceeding pursuant to this Section 12(a); provided, however, that the foregoing time limitation shall not apply in respect of a proceeding brought by Indemnitee to enforce his or her rights under Section 5 of this Agreement. The Company shall not oppose Indemnitee's right to seek any such adjudication or award in arbitration.

(b) In the event that a determination shall have been made pursuant to Section 10(a) of this Agreement that Indemnitee is not entitled to indemnification, any judicial proceeding or arbitration commenced pursuant to this Section 12 shall be conducted in all respects as a de novo trial, or arbitration, on the merits and Indemnitee shall not be prejudiced by reason of that adverse determination. In any judicial proceeding or arbitration commenced pursuant to this Section 12, the Company shall have the burden of proving Indemnitee is not entitled to indemnification or advancement, as the case may be.

(c) If a determination shall have been made pursuant to Section 10(a) of this Agreement that Indemnitee is entitled to indemnification, the Company shall be bound by such determination in any judicial proceeding or arbitration commenced pursuant to this Section 12, absent (i) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make Indemnitee's statement not materially misleading, in connection with the request for indemnification, or (ii) a prohibition of such indemnification under applicable law.

(d) The Company shall be precluded from asserting in any judicial proceeding or arbitration commenced pursuant to this Section 12 that the procedures and presumptions of this Agreement are not valid, binding and enforceable and shall stipulate in any such court or before any such arbitrator that the Company is bound by all the provisions of this Agreement.

(e) The Company shall indemnify Indemnitee to the fullest extent permitted by law against any and all Enforcement Expenses and, if requested by Indemnitee, shall (within thirty (30) days after receipt by the Company of a written request therefor) advance, to the extent not prohibited by law, such Enforcement Expenses to Indemnitee, which are incurred by Indemnitee in connection with any action brought by Indemnitee for indemnification or advancement from the Company under this Agreement or under any directors' and officers' liability insurance policies maintained by the Company in the suit for which indemnification or advancement is being sought. Such written request for advancement shall include invoices received by Indemnitee in connection with such Enforcement Expenses but, in the case of invoices in connection with legal services, any references to legal work performed or to expenditures made that would cause Indemnitee to waive any privilege accorded by applicable law need not be included with the invoice.

(f) Notwithstanding anything in this Agreement to the contrary, no determination as to entitlement to indemnification under this Agreement shall be required to be made prior to the final disposition of the Proceeding, including any appeal therein.

Section 13. Non-exclusivity; Survival of Rights; Insurance; Primacy of Indemnification; Subrogation.

(a) The rights of indemnification and to receive advancement as provided by this Agreement shall not be deemed exclusive of any other rights to which Indemnitee may at any time be entitled under applicable law, the Charter, the Bylaws, any agreement, a vote of stockholders or a resolution of directors, or otherwise. No amendment, alteration or repeal of this Agreement or of any provision hereof shall limit or restrict any right of Indemnitee under this Agreement in respect of any action taken or omitted by such Indemnitee in his or her Corporate Status prior to such amendment, alteration or repeal. To the extent that a change in Delaware law, whether by statute or judicial decision, permits greater indemnification or advancement than would be afforded currently under the Charter, Bylaws and this Agreement, it is the intent of the parties hereto that Indemnitee shall enjoy by this Agreement the greater benefits so afforded by such change. No right or remedy herein conferred is intended to be exclusive of any other right or remedy, and every other right and remedy shall be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other right or remedy.

(b) To the extent that the Company maintains an insurance policy or policies providing liability insurance for directors, managers, partners, officers, employees, agents or trustees of the Company or of any other Enterprise, Indemnitee shall be covered by such policy or policies in accordance with its or their terms to the maximum extent of the coverage available for any such director, manager, partner, officer, employee, agent or trustee under such policy or policies. If, at the time of the receipt of a notice of a claim pursuant to the terms hereof, the Company has director and officer liability insurance in effect, the Company shall give prompt notice of the commencement of such proceeding to the insurers in accordance with the procedures set forth in the respective policies. The Company shall thereafter take all necessary or desirable action to cause such insurers to pay, on behalf of Indemnitee, all amounts payable as a result of such proceeding in accordance with the terms of such policies.

(c) [The Company hereby acknowledges that Indemnitee has certain rights to indemnification, advancement of expenses and/or insurance provided by [ ] and certain of its affiliates (collectively, the "Secondary Indemnitors"). The Company hereby agrees (i) that it is the indemnitor of first resort (*i.e.*, its obligations to Indemnitee are primary and any obligation of the Secondary Indemnitors to advance expenses or to provide indemnification for the same expenses or liabilities incurred by Indemnitee are secondary), (ii) that it shall be required to advance the full amount of expenses incurred by Indemnitee and shall be liable for the full amount of all Expenses, judgments, penalties, fines and amounts paid in settlement to the extent legally permitted and as required by the terms of this Agreement and the Charter and/or Bylaws (or any other agreement between the Company and Indemnitee), without regard to any rights Indemnitee may have against the Secondary Indemnitors, and (iii) that it irrevocably waives, relinquishes and releases the Secondary Indemnitors from any and all claims against the Secondary Indemnitors for contribution, subrogation or any other recovery of any kind in respect thereof. The Company further agrees that no advancement or payment by the Secondary Indemnitors on behalf of Indemnitee with respect to any claim for which Indemnitee has sought indemnification from the Company shall affect the foregoing and the Secondary Indemnitors

shall have a right of contribution and/or be subrogated to the extent of such advancement or payment to all of the rights of recovery of Indemnitee against the Company. The Company and Indemnitee agree that the Secondary Indemnitors are express third party beneficiaries of the terms of this Section 13(c).]

(d) [Except as provided in paragraph (c) above,] in the event of any payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee [(other than against the Secondary Indemnitors)], who shall execute all papers required and take all action necessary to secure such rights, including execution of such documents as are necessary to enable the Company to bring suit to enforce such rights.

(e) [Except as provided in paragraph (c) above,] the Company's obligation to provide indemnification or advancement hereunder to Indemnitee who is or was serving at the request of the Company as a director, manager, partner, officer, employee, agent or trustee of any other Enterprise shall be reduced by any amount Indemnitee has actually received as indemnification or advancement from such other Enterprise.

Section 14. Duration of Agreement. This Agreement shall continue until and terminate upon the later of: (a) ten (10) years after the date that Indemnitee shall have ceased to serve as a director of the Company or (b) one (1) year after the final termination of any Proceeding, including any appeal, then pending in respect of which Indemnitee is granted rights of indemnification or advancement hereunder and of any proceeding commenced by Indemnitee pursuant to Section 12 of this Agreement relating thereto. This Agreement shall be binding upon the Company and its successors and assigns and shall inure to the benefit of Indemnitee and his or her heirs, executors and administrators. The Company shall require and cause any successor (whether direct or indirect by purchase, merger, consolidation or otherwise) to all, substantially all or a substantial part, of the business and/or assets of the Company, by written agreement in form and substance satisfactory to Indemnitee, expressly to assume and agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform if no such succession had taken place.

Section 15. Severability. If any provision or provisions of this Agreement shall be held to be invalid, illegal or unenforceable for any reason whatsoever: (a) the validity, legality and enforceability of the remaining provisions of this Agreement (including, without limitation, each portion of any section of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that is not itself invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby and shall remain enforceable to the fullest extent permitted by law; (b) such provision or provisions shall be deemed reformed to the extent necessary to conform to applicable law and to give the maximum effect to the intent of the parties hereto; and (c) to the fullest extent possible, the provisions of this Agreement (including, without limitation, each portion of any section of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that is not itself invalid, illegal or unenforceable) shall be construed so as to give effect to the intent manifested thereby.

Section 16. Enforcement.

(a) The Company expressly confirms and agrees that it has entered into this Agreement and assumed the obligations imposed on it hereby in order to induce Indemnitee to serve or continue to serve as a director of the Company, and the Company acknowledges that Indemnitee is relying upon this Agreement in serving as a director of the Company.

(b) This Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter hereof and supersedes all prior agreements and understandings, oral, written and implied, between the parties hereto with respect to the subject matter hereof; provided, however, that this Agreement is a supplement to and in furtherance of the Charter, the Bylaws and applicable law, and shall not be deemed a substitute therefor, nor to diminish or abrogate any rights of Indemnitee thereunder.

Section 17. Modification and Waiver. No supplement, modification or amendment, or waiver of any provision, of this Agreement shall be binding unless executed in writing by the parties thereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provisions of this Agreement nor shall any waiver constitute a continuing waiver. No supplement, modification or amendment of this Agreement or of any provision hereof shall limit or restrict any right of Indemnitee under this Agreement in respect of any action taken or omitted by such Indemnitee prior to such supplement, modification or amendment.

Section 18. Notice by Indemnitee. Indemnitee agrees promptly to notify the Company in writing upon being served with any summons, citation, subpoena, complaint, indictment, information or other document relating to any Proceeding or matter which may be subject to indemnification, reimbursement or advancement as provided hereunder. The failure of Indemnitee to so notify the Company shall not relieve the Company of any obligation which it may have to Indemnitee under this Agreement or otherwise.

Section 19. Notices. All notices, requests, demands and other communications under this Agreement shall be in writing and shall be deemed to have been duly given if (i) delivered by hand and receipted for by the party to whom said notice or other communication shall have been directed, (ii) mailed by certified or registered mail with postage prepaid, on the third business day after the date on which it is so mailed, (iii) mailed by reputable overnight courier and receipted for by the party to whom said notice or other communication shall have been directed or (iv) sent by facsimile transmission, with receipt of oral confirmation that such transmission has been received:

(a) If to Indemnitee, at such address as Indemnitee shall provide to the Company.

(b) If to the Company to:

resTORbio, Inc.
500 Boylston Street, Suite 1210
Boston, MA 02116
Attention: Chen Schor

or to any other address as may have been furnished to Indemnitee by the Company.

Section 20. Contribution. To the fullest extent permissible under applicable law, if the indemnification provided for in this Agreement is unavailable to Indemnitee for any reason whatsoever, the Company, in lieu of indemnifying Indemnitee, shall contribute to the amount incurred by Indemnitee, whether for judgments, fines, penalties, excise taxes, amounts paid or to be paid in settlement and/or for Expenses, in connection with any Proceeding in such proportion as is deemed fair and reasonable in light of all of the circumstances in order to reflect (i) the relative benefits received by the Company and Indemnitee in connection with the event(s) and/or transaction(s) giving rise to such Proceeding; and/or (ii) the relative fault of the Company (and its directors, officers, employees and agents) and Indemnitee in connection with such event(s) and/or transactions.

Section 21. Internal Revenue Code Section 409A. The Company intends for this Agreement to comply with the Indemnification exception under Section 1.409A-1(b)(10) of the regulations promulgated under the Internal Revenue Code of 1986, as amended (the "Code"), which provides that indemnification of, or the purchase of an insurance policy providing for payments of, all or part of the expenses incurred or damages paid or payable by Indemnitee with respect to a bona fide claim against Indemnitee or the Company do not provide for a deferral of compensation, subject to Section 409A of the Code, where such claim is based on actions or failures to act by Indemnitee in his or her capacity as a service provider of the Company. The parties intend that this Agreement be interpreted and construed with such intent.

Section 22. Applicable Law and Consent to Jurisdiction. This Agreement and the legal relations among the parties shall be governed by, and construed and enforced in accordance with, the laws of the State of Delaware, without regard to its conflict of laws rules. Except with respect to any arbitration commenced by Indemnitee pursuant to Section 12(a) of this Agreement, the Company and Indemnitee hereby irrevocably and unconditionally (i) agree that any action or proceeding arising out of or in connection with this Agreement shall be brought only in the Delaware Court, and not in any other state or federal court in the United States of America or any court in any other country, (ii) consent to submit to the exclusive jurisdiction of the Delaware Court for purposes of any action or proceeding arising out of or in connection with this Agreement, (iii) consent to service of process at the address set forth in Section 19 of this Agreement with the same legal force and validity as if served upon such party personally within the State of Delaware, (iv) waive any objection to the laying of venue of any such action or proceeding in the Delaware Court, and (v) waive, and agree not to plead or to make, any claim that any such action or proceeding brought in the Delaware Court has been brought in an improper or inconvenient forum.

Section 23. Headings. The headings of the paragraphs of this Agreement are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect the construction thereof.

Section 24. Identical Counterparts. This Agreement may be executed in one or more counterparts, each of which shall for all purposes be deemed to be an original but all of which together shall constitute one and the same Agreement. Only one such counterpart signed by the party against whom enforceability is sought needs to be produced to evidence the existence of this Agreement.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties have caused this Agreement to be signed as of the day and year first above written.

RESTORBIO, INC.

By: _____
Name:
Title:

_____
[Indemnitee]

Exhibit 10.4

RESTORBIO, INC.

FORM OF OFFICER INDEMNIFICATION AGREEMENT

This Indemnification Agreement ("Agreement") is made as of by and between resTORbio, Inc., a Delaware corporation (the "Company"), and ("Indemnitee").

RECITALS

WHEREAS, the Company desires to attract and retain the services of highly qualified individuals, such as Indemnitee, to serve the Company;

WHEREAS, in order to induce Indemnitee to provide or continue to provide services to the Company, the Company wishes to provide for the indemnification of, and advancement of expenses to, Indemnitee to the maximum extent permitted by law;

WHEREAS, the Third Amended and Restated Certificate of Incorporation (as amended and in effect from time to time, the "Charter") and the Amended and Restated Bylaws (as amended and in effect from time to time, the "Bylaws") of the Company require indemnification of the officers and directors of the Company, and Indemnitee may also be entitled to indemnification pursuant to the General Corporation Law of the State of Delaware (the "DGCL");

WHEREAS, the Charter, the Bylaws and the DGCL expressly provide that the indemnification provisions set forth therein are not exclusive, and thereby contemplate that contracts may be entered into between the Company and members of the board of directors, officers and other persons with respect to indemnification;

WHEREAS, the Board of Directors of the Company (the "Board") has determined that the increased difficulty in attracting and retaining highly qualified persons such as Indemnitee is detrimental to the best interests of the Company's stockholders;

WHEREAS, it is reasonable and prudent for the Company contractually to obligate itself to indemnify, and to advance expenses on behalf of, such persons to the fullest extent permitted by applicable law, regardless of any amendment or revocation of the Charter or the Bylaws, so that they will serve or continue to serve the Company free from undue concern that they will not be so indemnified; and

WHEREAS, this Agreement is a supplement to and in furtherance of the indemnification provided in the Charter, the Bylaws and any resolutions adopted pursuant thereto, and shall not be deemed a substitute therefor, nor to diminish or abrogate any rights of Indemnitee thereunder.

NOW, THEREFORE, in consideration of the premises and the covenants contained herein, the Company and Indemnitee do hereby covenant and agree as follows:

Section 1. Services to the Company. Indemnitee agrees to [continue to] serve as [a director and] an officer of the Company. Indemnitee may at any time and for any reason resign from [any] such position (subject to any other contractual obligation or any obligation imposed by law), in which event the Company shall have no obligation under this Agreement to continue Indemnitee in such position. This Agreement shall not be deemed an employment contract between the Company (or any of its subsidiaries or any Enterprise) and Indemnitee.

Section 2. Definitions.

As used in this Agreement:

(a) "Change in Control" shall mean (i) the sale of all or substantially all of the assets of the Company on a consolidated basis to an unrelated person or entity, (ii) a merger, reorganization or consolidation pursuant to which the holders of the Company's outstanding voting power and outstanding stock immediately prior to such transaction do not own a majority of the outstanding voting power and outstanding stock or other equity interests of the resulting or successor entity (or its ultimate parent, if applicable) immediately upon completion of such transaction, (iii) the sale of all of the Stock of the Company to an unrelated person, entity or group thereof acting in concert, or (iv) any other transaction in which the owners of the Company's outstanding voting power immediately prior to such transaction do not own at least a majority of the outstanding voting power of the Company or any successor entity immediately upon completion of the transaction other than as a result of the acquisition of securities directly from the Company.

(b) "Corporate Status" describes the status of a person as a current or former [director or] officer of the Company or current or former director, manager, partner, officer, employee, agent or trustee of any other Enterprise which such person is or was serving at the request of the Company.

(c) "Enforcement Expenses" shall include all reasonable attorneys' fees, court costs, transcript costs, fees of experts, travel expenses, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees, and all other out-of-pocket disbursements or expenses of the types customarily incurred in connection with an action to enforce indemnification or advancement rights, or an appeal from such action. Expenses, however, shall not include fees, salaries, wages or benefits owed to Indemnitee.

(d) "Enterprise" shall mean any corporation (other than the Company), partnership, joint venture, trust, employee benefit plan, limited liability company, or other legal entity of which Indemnitee is or was serving at the request of the Company as a director, manager, partner, officer, employee, agent or trustee.

(e) "Expenses" shall include all reasonable attorneys' fees, court costs, transcript costs, fees of experts, travel expenses, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees, and all other out-of-pocket disbursements or expenses of the types customarily incurred in connection with prosecuting, defending, preparing to prosecute or defend, investigating, being or preparing to be a witness in, or otherwise

participating in, a Proceeding or an appeal resulting from a Proceeding. Expenses, however, shall not include amounts paid in settlement by Indemnitee, the amount of judgments or fines against Indemnitee or fees, salaries, wages or benefits owed to Indemnitee.

(f) "Independent Counsel" means a law firm, or a partner (or, if applicable, member or shareholder) of such a law firm, that is experienced in matters of Delaware corporation law and neither presently is, nor in the past five (5) years has been, retained to represent: (i) the Company, any subsidiary of the Company, any Enterprise or Indemnitee in any matter material to any such party; or (ii) any other party to the Proceeding giving rise to a claim for indemnification hereunder. Notwithstanding the foregoing, the term "Independent Counsel" shall not include any person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing either the Company or Indemnitee in an action to determine Indemnitee's rights under this Agreement. The Company agrees to pay the reasonable fees and expenses of the Independent Counsel referred to above and to fully indemnify such counsel against any and all expenses, claims, liabilities and damages arising out of or relating to this Agreement or its engagement pursuant hereto.

(g) The term "Proceeding" shall include any threatened, pending or completed action, suit, arbitration, alternate dispute resolution mechanism, investigation, inquiry, administrative hearing or any other actual, threatened or completed proceeding, whether brought in the right of the Company or otherwise and whether of a civil, criminal, administrative, regulatory or investigative nature, and whether formal or informal, in which Indemnitee was, is or will be involved as a party or otherwise by reason of the fact that Indemnitee is or was [a director or] an officer of the Company or is or was serving at the request of the Company as a director, manager, partner, officer, employee, agent or trustee of any Enterprise or by reason of any action taken by Indemnitee or of any action taken on his or her part while acting as [a director or] an officer of the Company or while serving at the request of the Company as a director, manager, partner, officer, employee, agent or trustee of any Enterprise, in each case whether or not serving in such capacity at the time any liability or expense is incurred for which indemnification, reimbursement or advancement of expenses can be provided under this Agreement; provided, however, that the term "Proceeding" shall not include any action, suit or arbitration, or part thereof, initiated by Indemnitee to enforce Indemnitee's rights under this Agreement as provided for in Section 12(a) of this Agreement.

Section 3. Indemnity in Third-Party Proceedings. The Company shall indemnify Indemnitee to the extent set forth in this Section 3 if Indemnitee is, or is threatened to be made, a party to or a participant in any Proceeding, other than a Proceeding by or in the right of the Company to procure a judgment in its favor. Pursuant to this Section 3, Indemnitee shall be indemnified against all Expenses, judgments, fines, penalties, excise taxes, and amounts paid in settlement actually and reasonably incurred by Indemnitee or on his or her behalf in connection with such Proceeding or any claim, issue or matter therein, if Indemnitee acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Company and, in the case of a criminal proceeding, had no reasonable cause to believe that his or her conduct was unlawful.

Section 4. Indemnity in Proceedings by or in the Right of the Company. The Company shall indemnify Indemnitee to the extent set forth in this Section 4 if Indemnitee is, or is threatened to be made, a party to or a participant in any Proceeding by or in the right of the Company to procure a judgment in its favor. Pursuant to this Section 4, Indemnitee shall be indemnified against all Expenses actually and reasonably incurred by Indemnitee or on his or her behalf in connection with such Proceeding or any claim, issue or matter therein, if Indemnitee acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Company. No indemnification for Expenses shall be made under this Section 4 in respect of any claim, issue or matter as to which Indemnitee shall have been finally adjudged by a court to be liable to the Company, unless and only to the extent that the Delaware Court of Chancery (the "Delaware Court") shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, Indemnitee is fairly and reasonably entitled to indemnification for such expenses as the Delaware Court shall deem proper.

Section 5. Indemnification for Expenses of a Party Who is Wholly or Partly Successful. Notwithstanding any other provisions of this Agreement and except as provided in Section 7, to the extent that Indemnitee is a party to or a participant in any Proceeding and is successful in such Proceeding or in defense of any claim, issue or matter therein, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by him or her in connection therewith. If Indemnitee is not wholly successful in such Proceeding but is successful as to one or more but less than all claims, issues or matters in such Proceeding, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by Indemnitee or on his or her behalf in connection with each successfully resolved claim, issue or matter. For purposes of this Section and without limitation, the termination of any claim, issue or matter in such a Proceeding by dismissal, with or without prejudice, shall be deemed to be a successful result as to such claim, issue or matter.

Section 6. Reimbursement for Expenses of a Witness or in Response to a Subpoena. Notwithstanding any other provision of this Agreement, to the extent that Indemnitee, by reason of his or her Corporate Status, (i) is a witness in any Proceeding to which Indemnitee is not a party and is not threatened to be made a party or (ii) receives a subpoena with respect to any Proceeding to which Indemnitee is not a party and is not threatened to be made a party, the Company shall reimburse Indemnitee for all Expenses actually and reasonably incurred by him or her or on his or her behalf in connection therewith.

Section 7. Exclusions. Notwithstanding any provision in this Agreement to the contrary, the Company shall not be obligated under this Agreement:

(a) to indemnify for amounts otherwise indemnifiable hereunder (or for which advancement is provided hereunder) if and to the extent that Indemnitee has otherwise actually received such amounts under any insurance policy, contract, agreement or otherwise;

(b) to indemnify for an accounting of profits made from the purchase and sale (or sale and purchase) by Indemnitee of securities of the Company within the meaning of Section 16(b) of the Securities Exchange Act of 1934, as amended, or similar provisions of state statutory law or common law, or from the purchase or sale by Indemnitee of such securities in violation of Section 306 of the Sarbanes-Oxley Act of 2022 ("SOX");

(c) to indemnify for any reimbursement of, or payment to, the Company by Indemnitee of any bonus or other incentive-based or equity-based compensation or of any profits realized by Indemnitee from the sale of securities of the Company pursuant to Section 304 of SOX or any formal policy of the Company adopted by the Board (or a committee thereof), or any other remuneration paid to Indemnitee if it shall be determined by a final judgment or other final adjudication that such remuneration was in violation of law;

(d) to indemnify with respect to any Proceeding, or part thereof, brought by Indemnitee against the Company, any legal entity which it controls, any director or officer thereof or any third party, unless (i) the Board has consented to the initiation of such Proceeding or part thereof and (ii) the Company provides the indemnification, in its sole discretion, pursuant to the powers vested in the Company under applicable law; provided, however, that this Section 7(d) shall not apply to (A) counterclaims or affirmative defenses asserted by Indemnitee in an action brought against Indemnitee or (B) any action brought by Indemnitee for indemnification or advancement from the Company under this Agreement or under any directors' and officers' liability insurance policies maintained by the Company in the suit for which indemnification or advancement is being sought as described in Section 12; or

(e) to provide any indemnification or advancement of expenses that is prohibited by applicable law (as such law exists at the time payment would otherwise be required pursuant to this Agreement).

Section 8. Advancement of Expenses. Subject to Section 9(b), the Company shall advance, to the extent not prohibited by law, the Expenses incurred by Indemnitee in connection with any Proceeding, and such advancement shall be made as incurred, and such advancement shall be made within thirty (30) days after the receipt by the Company of a statement or statements requesting such advances (including any invoices received by Indemnitee, which such invoices may be redacted as necessary to avoid the waiver of any privilege accorded by applicable law) from time to time, whether prior to or after final disposition of any Proceeding. Advances shall be unsecured and interest free. Advances shall be made without regard to Indemnitee's (i) ability to repay the expenses, (ii) ultimate entitlement to indemnification under the other provisions of this Agreement, and (iii) entitlement to and availability of insurance coverage, including advancement, payment or reimbursement of defense costs, expenses of covered loss under the provisions of any applicable insurance policy (including , without limitation, whether such advancement, payment or reimbursement is withheld, conditioned or delayed by the insurer(s)). Indemnitee shall qualify for advances upon the execution and delivery to the Company of this Agreement which shall constitute an undertaking providing that Indemnitee undertakes to the fullest extent required by law to repay the advance if and to the extent that it is ultimately determined by a court of competent jurisdiction in a final judgment, not subject to appeal, that Indemnitee is not entitled to be indemnified by the Company. The right to advances under this paragraph shall in all events continue until final disposition of any Proceeding, including any appeal therein. Nothing in this Section 8 shall limit Indemnitee's right to advancement pursuant to Section 12(e) of this Agreement.

Section 9. Procedure for Notification and Defense of Claim.

(a) To obtain indemnification under this Agreement, Indemnitee shall submit to the Company a written request therefor specifying the basis for the claim, the amounts for which Indemnitee is seeking payment under this Agreement, and all documentation related thereto as reasonably requested by the Company.

(b) In the event that the Company shall be obligated hereunder to provide indemnification for or make any advancement of Expenses with respect to any Proceeding, the Company shall be entitled to assume the defense of such Proceeding, or any claim, issue or matter therein, with counsel approved by Indemnitee (which approval shall not be unreasonably withheld or delayed) upon the delivery to Indemnitee of written notice of the Company's election to do so. After delivery of such notice, approval of such counsel by Indemnitee and the retention of such counsel by the Company, the Company will not be liable to Indemnitee under this Agreement for any fees or expenses of separate counsel subsequently employed by or on behalf of Indemnitee with respect to the same Proceeding; provided that (i) Indemnitee shall have the right to employ separate counsel in any such Proceeding at Indemnitee's expense and (ii) if (A) the employment of separate counsel by Indemnitee has been previously authorized by the Company, (B) Indemnitee shall have reasonably concluded that there may be a conflict of interest between the Company and Indemnitee in the conduct of such defense, or (C) the Company shall not continue to retain such counsel to defend such Proceeding, then the fees and expenses actually and reasonably incurred by Indemnitee with respect to his or her separate counsel shall be Expenses hereunder.

(c) In the event that the Company does not assume the defense in a Proceeding pursuant to paragraph (b) above, then the Company will be entitled to participate in the Proceeding at its own expense.

(d) The Company shall not be liable to indemnify Indemnitee under this Agreement for any amounts paid in settlement of any Proceeding effected without its prior written consent (which consent shall not be unreasonably withheld or delayed). The Company shall not, without the prior written consent of Indemnitee (which consent shall not be unreasonably withheld or delayed), enter into any settlement which (i) includes an admission of fault of Indemnitee, any non-monetary remedy imposed on Indemnitee or any monetary damages for which Indemnitee is not wholly and actually indemnified hereunder or (ii) with respect to any Proceeding with respect to which Indemnitee may be or is made a party or may be otherwise entitled to seek indemnification hereunder, does not include the full release of Indemnitee from all liability in respect of such Proceeding.

Section 10. Procedure Upon Application for Indemnification.

(a) Upon written request by Indemnitee for indemnification pursuant to Section 9(a), a determination, if such determination is required by applicable law, with respect to Indemnitee's entitlement to indemnification hereunder shall be made in the specific case by one of the following methods: [(x) if a Change in Control shall have occurred and indemnification is being requested by Indemnitee hereunder in his or her capacity as a director of the Company, by Independent Counsel in a written opinion to the Board; or (y) in any other case,] (i) by a majority

vote of the disinterested directors, even though less than a quorum; (ii) by a committee of disinterested directors designated by a majority vote of the disinterested directors, even though less than a quorum; or (iii) if there are no disinterested directors or if the disinterested directors so direct, by Independent Counsel in a written opinion to the Board. For purposes hereof, disinterested directors are those members of the Board who are not parties to the action, suit or proceeding in respect of which indemnification is sought. In the case that such determination is made by Independent Counsel, a copy of Independent Counsel's written opinion shall be delivered to Indemnitee and, if it is so determined that Indemnitee is entitled to indemnification, payment to Indemnitee shall be made within thirty (30) days after such determination. Indemnitee shall cooperate with the Independent Counsel or the Company, as applicable, in making such determination with respect to Indemnitee's entitlement to indemnification, including providing to such counsel or the Company, upon reasonable advance request, any documentation or information which is not privileged or otherwise protected from disclosure and which is reasonably available to Indemnitee and reasonably necessary to such determination. Any out-of-pocket costs or expenses (including reasonable attorneys' fees and disbursements) actually and reasonably incurred by Indemnitee in so cooperating with the Independent Counsel or the Company shall be borne by the Company (irrespective of the determination as to Indemnitee's entitlement to indemnification) and the Company hereby indemnifies and agrees to hold Indemnitee harmless therefrom.

(b) If the determination of entitlement to indemnification is to be made by Independent Counsel pursuant to Section 10(a), the Independent Counsel shall be selected by the Board[; provided that, if a Change in Control shall have occurred and indemnification is being requested by Indemnitee hereunder in his or her capacity as a director of the Company, the Independent Counsel shall be selected by Indemnitee]. Indemnitee [or the Company, as the case may be,] may, within ten (10) days after written notice of such selection, deliver to the Company [or Indemnitee, as the case may be,] a written objection to such selection; provided, however, that such objection may be asserted only on the ground that the Independent Counsel so selected does not meet the requirements of "Independent Counsel" as defined in Section 2 of this Agreement, and the objection shall set forth with particularity the factual basis of such assertion. Absent a proper and timely objection, the person so selected shall act as Independent Counsel. If such written objection is so made and substantiated, the Independent Counsel so selected may not serve as Independent Counsel unless and until such objection is withdrawn or the Delaware Court has determined that such objection is without merit. If, within twenty (20) days after the later of (i) submission by Indemnitee of a written request for indemnification pursuant to Section 9(a), and (ii) the final disposition of the Proceeding, including any appeal therein, no Independent Counsel shall have been selected without objection, either Indemnitee or the Company may petition the Delaware Court for resolution of any objection which shall have been made by Indemnitee or the Company to the selection of Independent Counsel and/or for the appointment as Independent Counsel of a person selected by the court or by such other person as the court shall designate. The person with respect to whom all objections are so resolved or the person so appointed shall act as Independent Counsel under Section 10(a) hereof. Upon the due commencement of any judicial proceeding or arbitration pursuant to Section 12(a) of this Agreement, Independent Counsel shall be discharged and relieved of any further responsibility in such capacity (subject to the applicable standards of professional conduct then prevailing).

Section 11. Presumptions and Effect of Certain Proceedings.

(a) To the extent permitted by applicable law, in making a determination with respect to entitlement to indemnification hereunder, it shall be presumed that Indemnitee is entitled to indemnification under this Agreement if Indemnitee has submitted a request for indemnification in accordance with Section 9(a) of this Agreement, and the Company shall have the burden of proof to overcome that presumption in connection with the making of any determination contrary to that presumption. Neither (i) the failure of the Company or of Independent Counsel to have made a determination prior to the commencement of any action pursuant to this Agreement that indemnification is proper in the circumstances because Indemnitee has met the applicable standard of conduct, nor (ii) an actual determination by the Company or by Independent Counsel that Indemnitee has not met such applicable standard of conduct, shall be a defense to the action or create a presumption that Indemnitee has not met the applicable standard of conduct.

(b) The termination of any Proceeding or of any claim, issue or matter therein, by judgment, order, settlement or conviction, or upon a plea of guilty, nolo contendere or its equivalent, shall not (except as otherwise expressly provided in this Agreement) of itself adversely affect the right of Indemnitee to indemnification or create a presumption that Indemnitee did not act in good faith and in a manner which he or she reasonably believed to be in or not opposed to the best interests of the Company or, with respect to any criminal Proceeding, that Indemnitee had reasonable cause to believe that his or her conduct was unlawful.

(c) The knowledge and/or actions, or failure to act, of any director, manager, partner, officer, employee, agent or trustee of the Company, any subsidiary of the Company, or any Enterprise shall not be imputed to Indemnitee for purposes of determining the right to indemnification under this Agreement.

Section 12. Remedies of Indemnitee.

(a) Subject to Section 12(f), in the event that (i) a determination is made pursuant to Section 10 of this Agreement that Indemnitee is not entitled to indemnification under this Agreement, (ii) advancement of Expenses is not timely made pursuant to Section 8 of this Agreement, (iii) no determination of entitlement to indemnification shall have been made pursuant to Section 10(a) of this Agreement within sixty (60) days after receipt by the Company of the request for indemnification for which a determination is to be made other than by Independent Counsel, (iv) payment of indemnification or reimbursement of expenses is not made pursuant to Section 5 or 6 or the last sentence of Section 10(a) of this Agreement within thirty (30) days after receipt by the Company of a written request therefor (including any invoices received by Indemnitee, which such invoices may be redacted as necessary to avoid the waiver of any privilege accorded by applicable law) or (v) payment of indemnification pursuant to Section 3 or 4 of this Agreement is not made within thirty (30) days after a determination has been made that Indemnitee is entitled to indemnification, Indemnitee shall be entitled to an adjudication by the Delaware Court of his or her entitlement to such indemnification or advancement. Alternatively, Indemnitee, at his or her option, may seek an award in arbitration to be conducted by a single arbitrator pursuant to the Commercial Arbitration Rules of the

American Arbitration Association. Indemnitee shall commence such proceeding seeking an adjudication or an award in arbitration within 180 days following the date on which Indemnitee first has the right to commence such proceeding pursuant to this Section 12(a); provided, however, that the foregoing time limitation shall not apply in respect of a proceeding brought by Indemnitee to enforce his or her rights under Section 5 of this Agreement. The Company shall not oppose Indemnitee's right to seek any such adjudication or award in arbitration.

(b) In the event that a determination shall have been made pursuant to Section 10(a) of this Agreement that Indemnitee is not entitled to indemnification, any judicial proceeding or arbitration commenced pursuant to this Section 12 shall be conducted in all respects as a de novo trial, or arbitration, on the merits and Indemnitee shall not be prejudiced by reason of that adverse determination. In any judicial proceeding or arbitration commenced pursuant to this Section 12, the Company shall have the burden of proving Indemnitee is not entitled to indemnification or advancement, as the case may be.

(c) If a determination shall have been made pursuant to Section 10(a) of this Agreement that Indemnitee is entitled to indemnification, the Company shall be bound by such determination in any judicial proceeding or arbitration commenced pursuant to this Section 12, absent (i) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make Indemnitee's statement not materially misleading, in connection with the request for indemnification, or (ii) a prohibition of such indemnification under applicable law.

(d) The Company shall be precluded from asserting in any judicial proceeding or arbitration commenced pursuant to this Section 12 that the procedures and presumptions of this Agreement are not valid, binding and enforceable and shall stipulate in any such court or before any such arbitrator that the Company is bound by all the provisions of this Agreement.

(e) The Company shall indemnify Indemnitee to the fullest extent permitted by law against any and all Enforcement Expenses and, if requested by Indemnitee, shall (within thirty (30) days after receipt by the Company of a written request therefor) advance, to the extent not prohibited by law, such Enforcement Expenses to Indemnitee, which are incurred by Indemnitee in connection with any action brought by Indemnitee for indemnification or advancement from the Company under this Agreement or under any directors' and officers' liability insurance policies maintained by the Company in the suit for which indemnification or advancement is being sought. Such written request for advancement shall include invoices received by Indemnitee in connection with such Enforcement Expenses but, in the case of invoices in connection with legal services, any references to legal work performed or to expenditures made that would cause Indemnitee to waive any privilege accorded by applicable law need not be included with the invoice.

(f) Notwithstanding anything in this Agreement to the contrary, no determination as to entitlement to indemnification under this Agreement shall be required to be made prior to the final disposition of the Proceeding, including any appeal therein.

Section 13. Non-exclusivity; Survival of Rights; Insurance; Subrogation.

(a) The rights of indemnification and to receive advancement as provided by this Agreement shall not be deemed exclusive of any other rights to which Indemnitee may at any time be entitled under applicable law, the Charter, the Bylaws, any agreement, a vote of stockholders or a resolution of directors, or otherwise. No amendment, alteration or repeal of this Agreement or of any provision hereof shall limit or restrict any right of Indemnitee under this Agreement in respect of any action taken or omitted by such Indemnitee in his or her Corporate Status prior to such amendment, alteration or repeal. To the extent that a change in Delaware law, whether by statute or judicial decision, permits greater indemnification or advancement than would be afforded currently under the Charter, Bylaws and this Agreement, it is the intent of the parties hereto that Indemnitee shall enjoy by this Agreement the greater benefits so afforded by such change. No right or remedy herein conferred is intended to be exclusive of any other right or remedy, and every other right and remedy shall be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other right or remedy.

(b) To the extent that the Company maintains an insurance policy or policies providing liability insurance for directors, managers, partners, officers, employees, agents or trustees of the Company or of any other Enterprise, Indemnitee shall be covered by such policy or policies in accordance with its or their terms to the maximum extent of the coverage available for any such director, manager, partner, officer, employee, agent or trustee under such policy or policies. If, at the time of the receipt of a notice of a claim pursuant to the terms hereof, the Company has director and officer liability insurance in effect, the Company shall give prompt notice of the commencement of such proceeding to the insurers in accordance with the procedures set forth in the respective policies. The Company shall thereafter take all necessary or desirable action to cause such insurers to pay, on behalf of Indemnitee, all amounts payable as a result of such proceeding in accordance with the terms of such policies.

(c) In the event of any payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee, who shall execute all papers required and take all action necessary to secure such rights, including execution of such documents as are necessary to enable the Company to bring suit to enforce such rights.

(d) The Company's obligation to provide indemnification or advancement hereunder to Indemnitee who is or was serving at the request of the Company as a director, manager, partner, officer, employee, agent or trustee of any other Enterprise shall be reduced by any amount Indemnitee has actually received as indemnification or advancement from such other Enterprise.

Section 14. Duration of Agreement. This Agreement shall continue until and terminate upon the later of: (a) ten (10) years after the date that Indemnitee shall have ceased to serve as [both a director and] an officer of the Company or (b) one (1) year after the final termination of any Proceeding, including any appeal, then pending in respect of which Indemnitee is granted rights of indemnification or advancement hereunder and of any proceeding

commenced by Indemnitee pursuant to Section 12 of this Agreement relating thereto. This Agreement shall be binding upon the Company and its successors and assigns and shall inure to the benefit of Indemnitee and his or her heirs, executors and administrators. The Company shall require and cause any successor (whether direct or indirect by purchase, merger, consolidation or otherwise) to all, substantially all or a substantial part, of the business and/or assets of the Company, by written agreement in form and substance satisfactory to Indemnitee, expressly to assume and agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform if no such succession had taken place.

Section 15. Severability. If any provision or provisions of this Agreement shall be held to be invalid, illegal or unenforceable for any reason whatsoever: (a) the validity, legality and enforceability of the remaining provisions of this Agreement (including, without limitation, each portion of any section of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that is not itself invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby and shall remain enforceable to the fullest extent permitted by law; (b) such provision or provisions shall be deemed reformed to the extent necessary to conform to applicable law and to give the maximum effect to the intent of the parties hereto; and (c) to the fullest extent possible, the provisions of this Agreement (including, without limitation, each portion of any section of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that is not itself invalid, illegal or unenforceable) shall be construed so as to give effect to the intent manifested thereby.

Section 16. Enforcement.

(a) The Company expressly confirms and agrees that it has entered into this Agreement and assumed the obligations imposed on it hereby in order to induce Indemnitee to serve or continue to serve as [a director and] an officer of the Company, and the Company acknowledges that Indemnitee is relying upon this Agreement in serving as [a director and] an officer of the Company.

(b) This Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter hereof and supersedes all prior agreements and understandings, oral, written and implied, between the parties hereto with respect to the subject matter hereof; provided, however, that this Agreement is a supplement to and in furtherance of the Charter, the Bylaws and applicable law, and shall not be deemed a substitute therefor, nor to diminish or abrogate any rights of Indemnitee thereunder.

Section 17. Modification and Waiver. No supplement, modification or amendment, or waiver of any provision, of this Agreement shall be binding unless executed in writing by the parties thereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provisions of this Agreement nor shall any waiver constitute a continuing waiver. No supplement, modification or amendment of this Agreement or of any provision hereof shall limit or restrict any right of Indemnitee under this Agreement in respect of any action taken or omitted by such Indemnitee prior to such supplement, modification or amendment.

Section 18. Notice by Indemnitee. Indemnitee agrees promptly to notify the Company in writing upon being served with any summons, citation, subpoena, complaint, indictment, information or other document relating to any Proceeding or matter which may be subject to indemnification, reimbursement or advancement as provided hereunder. The failure of Indemnitee to so notify the Company shall not relieve the Company of any obligation which it may have to Indemnitee under this Agreement or otherwise.

Section 19. Notices. All notices, requests, demands and other communications under this Agreement shall be in writing and shall be deemed to have been duly given if (i) delivered by hand and receipted for by the party to whom said notice or other communication shall have been directed, (ii) mailed by certified or registered mail with postage prepaid, on the third business day after the date on which it is so mailed, (iii) mailed by reputable overnight courier and receipted for by the party to whom said notice or other communication shall have been directed or (iv) sent by facsimile transmission, with receipt of oral confirmation that such transmission has been received:

(a) If to Indemnitee, at such address as Indemnitee shall provide to the Company.

(b) If to the Company to:

resTORbio, Inc.
500 Boylston Street, Suite 1210
Boston, MA 02116
Attention: Chen Schor

or to any other address as may have been furnished to Indemnitee by the Company.

Section 20. Contribution. To the fullest extent permissible under applicable law, if the indemnification provided for in this Agreement is unavailable to Indemnitee for any reason whatsoever, the Company, in lieu of indemnifying Indemnitee, shall contribute to the amount incurred by Indemnitee, whether for judgments, fines, penalties, excise taxes, amounts paid or to be paid in settlement and/or for Expenses, in connection with any Proceeding in such proportion as is deemed fair and reasonable in light of all of the circumstances in order to reflect (i) the relative benefits received by the Company and Indemnitee in connection with the event(s) and/or transaction(s) giving rise to such Proceeding; and/or (ii) the relative fault of the Company (and its directors, officers, employees and agents) and Indemnitee in connection with such event(s) and/or transactions.

Section 21. Internal Revenue Code Section 409A. The Company intends for this Agreement to comply with the Indemnification exception under Section 1.409A-1(b)(10) of the regulations promulgated under the Internal Revenue Code of 1986, as amended (the "Code"), which provides that indemnification of, or the purchase of an insurance policy providing for payments of, all or part of the expenses incurred or damages paid or payable by Indemnitee with respect to a bona fide claim against Indemnitee or the Company do not provide for a deferral of compensation, subject to Section 409A of the Code, where such claim is based on actions or failures to act by Indemnitee in his or her capacity as a service provider of the Company. The parties intend that this Agreement be interpreted and construed with such intent.

Section 22. Applicable Law and Consent to Jurisdiction. This Agreement and the legal relations among the parties shall be governed by, and construed and enforced in accordance with, the laws of the State of Delaware, without regard to its conflict of laws rules. Except with respect to any arbitration commenced by Indemnitee pursuant to Section 12(a) of this Agreement, the Company and Indemnitee hereby irrevocably and unconditionally (i) agree that any action or proceeding arising out of or in connection with this Agreement shall be brought only in the Delaware Court, and not in any other state or federal court in the United States of America or any court in any other country, (ii) consent to submit to the exclusive jurisdiction of the Delaware Court for purposes of any action or proceeding arising out of or in connection with this Agreement, (iii) consent to service of process at the address set forth in Section 19 of this Agreement with the same legal force and validity as if served upon such party personally within the State of Delaware, (iv) waive any objection to the laying of venue of any such action or proceeding in the Delaware Court, and (v) waive, and agree not to plead or to make, any claim that any such action or proceeding brought in the Delaware Court has been brought in an improper or inconvenient forum.

Section 23. Headings. The headings of the paragraphs of this Agreement are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect the construction thereof.

Section 24. Identical Counterparts. This Agreement may be executed in one or more counterparts, each of which shall for all purposes be deemed to be an original but all of which together shall constitute one and the same Agreement. Only one such counterpart signed by the party against whom enforceability is sought needs to be produced to evidence the existence of this Agreement.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties have caused this Agreement to be signed as of the day and year first above written.

RESTORBIO, INC.

By: _____
Name:
Title:

_____
[Name of Indemnitee]

Exhibit 10.5

RESTORBIO, INC.

2018 EMPLOYEE STOCK PURCHASE PLAN

The purpose of the resTORbio, Inc. 2018 Employee Stock Purchase Plan ("the Plan") is to provide eligible employees of resTORbio, Inc. (the "Company") and each Designated Subsidiary (as defined in Section 11) with opportunities to purchase shares of the Company's common stock, par value $0.0001 per share (the "Common Stock"). 275,030 shares of Common Stock have been approved and reserved for this purpose, plus on January 1, 2019, and each January 1 thereafter through January 1, 2028, the number of shares of Common Stock reserved and available for issuance under the Plan shall be cumulatively increased by the least of (i) 543,926 shares of Common Stock, (ii) one percent (1%) of the number of shares of Common Stock issued and outstanding on the immediately preceding December 31st, or (iii) such lesser number of shares of Common Stock as determined by the Administrator. The Plan is intended to constitute an "employee stock purchase plan" within the meaning of Section 423(b) of the Internal Revenue Code of 1986, as amended (the "Code"), and shall be interpreted in accordance with that intent.

1. Administration. The Plan will be administered by the person or persons (the "Administrator") appointed by the Company's Board of Directors (the "Board") for such purpose. The Administrator has authority at any time to: (i) adopt, alter and repeal such rules, guidelines and practices for the administration of the Plan and for its own acts and proceedings as it shall deem advisable; (ii) interpret the terms and provisions of the Plan; (iii) make all determinations it deems advisable for the administration of the Plan; (iv) decide all disputes arising in connection with the Plan; and (v) otherwise supervise the administration of the Plan. All interpretations and decisions of the Administrator shall be binding on all persons, including

the Company and the Participants. No member of the Board or individual exercising administrative authority with respect to the Plan shall be liable for any action or determination made in good faith with respect to the Plan or any option granted hereunder.

2. Offerings. The Company will make one or more offerings to eligible employees to purchase Common Stock under the Plan ("Offerings"). Unless otherwise determined by the Administrator, an Offering will begin on the first business day occurring on or after each January 1 and July 1 and will end on the last business day occurring on or before the following June 30 and December 31, respectively. The Administrator may, in its discretion, designate a different period for any Offering, provided that no Offering shall exceed one year in duration or overlap any other Offering.

3. Eligibility. All individuals classified as employees on the payroll records of the Company and each Designated Subsidiary are eligible to participate in any one or more of the Offerings under the Plan, provided that as of the first day of the applicable Offering (the "Offering Date") they are customarily employed by the Company or a Designated Subsidiary for more than 20 hours a week and have completed at least three months of employment. Notwithstanding any other provision herein, individuals who are not contemporaneously classified as employees of the Company or a Designated Subsidiary for purposes of the Company's or applicable Designated Subsidiary's payroll system are not considered to be eligible employees of the Company or any Designated Subsidiary and shall not be eligible to participate in the Plan. In the event any such individuals are reclassified as employees of the Company or a Designated Subsidiary for any purpose, including, without limitation, common law or statutory employees, by any action of any third party, including, without limitation, any government agency, or as a result of any private lawsuit, action or administrative proceeding,

such individuals shall, notwithstanding such reclassification, remain ineligible for participation. Notwithstanding the foregoing, the exclusive means for individuals who are not contemporaneously classified as employees of the Company or a Designated Subsidiary on the Company's or Designated Subsidiary's payroll system to become eligible to participate in this Plan is through an amendment to this Plan, duly executed by the Company, which specifically renders such individuals eligible to participate herein.

4. Participation.

(a) Participants. An eligible employee who is not a Participant in any prior Offering may participate in a subsequent Offering by submitting an enrollment form to his or her appropriate payroll location at least 15 business days before the Offering Date (or by such other deadline as shall be established by the Administrator for the Offering).

(b) Enrollment. The enrollment form will (a) state a whole percentage to be deducted from an eligible employee's Compensation (as defined in Section 11) per pay period, (b) authorize the purchase of Common Stock in each Offering in accordance with the terms of the Plan and (c) specify the exact name or names in which shares of Common Stock purchased for such individual are to be issued pursuant to Section 10. An employee who does not enroll in accordance with these procedures will be deemed to have waived the right to participate. Unless a Participant files a new enrollment form or withdraws from the Plan, such Participant's deductions and purchases will continue at the same percentage of Compensation for future Offerings, provided he or she remains eligible.

(c) Notwithstanding the foregoing, participation in the Plan will neither be permitted nor be denied contrary to the requirements of the Code.

5. Employee Contributions. Each eligible employee may authorize payroll deductions up to a maximum of fifteen percent of such employee's Compensation for each pay period. The Company will maintain book accounts showing the amount of payroll deductions made by each Participant for each Offering. No interest will accrue or be paid on payroll deductions.

6. Deduction Changes. Except as may be determined by the Administrator in advance of an Offering, a Participant may not increase or decrease his or her payroll deduction during any Offering, but may increase or decrease his or her payroll deduction with respect to the next Offering (subject to the limitations of Section 5) by filing a new enrollment form at least 15 business days before the next Offering Date (or by such other deadline as shall be established by the Administrator for the Offering). The Administrator may, in advance of any Offering, establish rules permitting a Participant to increase, decrease or terminate his or her payroll deduction during an Offering.

7. Withdrawal. A Participant may withdraw from participation in the Plan by delivering a written notice of withdrawal to his or her appropriate payroll location. The Participant's withdrawal will be effective as of the next business day. Following a Participant's withdrawal, the Company will promptly refund such individual's entire account balance under the Plan to him or her (after payment for any Common Stock purchased before the effective date of withdrawal). Partial withdrawals are not permitted. Such an employee may not begin participation again during the remainder of the Offering, but may enroll in a subsequent Offering in accordance with Section 4.

8. Grant of Options. On each Offering Date, the Company will grant to each eligible employee who is then a Participant in the Plan an option ("Option") to purchase on the last day of such Offering (the "Exercise Date"), at the Option Price hereinafter provided for, the lowest of (a) a number of shares of Common Stock determined by dividing such Participant's accumulated payroll deductions on such Exercise Date by the lower of (i) 85 percent of the Fair Market Value of the Common Stock on the Offering Date, or (ii) 85 percent of the Fair Market Value of the Common Stock on the Exercise Date, (b) a number of shares determined by dividing $25,000 by the Fair Market of the Common Stock on the Offering Date of such Offering ; or (c) such other lesser maximum number of shares as shall have been established by the Administrator in advance of the Offering; provided, however, that such Option shall be subject to the limitations set forth below. Each Participant's Option shall be exercisable only to the extent of such Participant's accumulated payroll deductions on the Exercise Date. The purchase price for each share purchased under each Option (the "Option Price") will be 85 percent of the Fair Market Value of the Common Stock on the Offering Date or the Exercise Date, whichever is less.

Notwithstanding the foregoing, no Participant may be granted an option hereunder if such Participant, immediately after the option was granted, would be treated as owning stock possessing 5 percent or more of the total combined voting power or value of all classes of stock of the Company or any Parent or Subsidiary (as defined in Section 11). For purposes of the preceding sentence, the attribution rules of Section 424(d) of the Code shall apply in determining the stock ownership of a Participant, and all stock which the Participant has a contractual right to purchase shall be treated as stock owned by the Participant. In addition, no Participant may be granted an Option which permits his or her rights to purchase stock under the Plan, and any other employee stock purchase plan of the Company and its Parents and Subsidiaries, to accrue at a rate which exceeds $25,000 of the fair market value of such stock (determined on the option grant date or dates) for each calendar year in which the Option is outstanding at any time. The
purpose of the limitation in the preceding sentence is to comply with Section 423(b)(8) of the Code and shall be applied taking Options into account in the order in which they were granted.

9. Exercise of Option and Purchase of Shares. Each employee who continues to be a Participant in the Plan on the Exercise Date shall be deemed to have exercised his or her Option on such date and shall acquire from the Company such number of whole shares of Common Stock reserved for the purpose of the Plan as his or her accumulated payroll deductions on such date will purchase at the Option Price, subject to any other limitations contained in the Plan. Any amount remaining in a Participant's account at the end of an Offering solely by reason of the inability to purchase a fractional share will be carried forward to the next Offering; any other balance remaining in a Participant's account at the end of an Offering will be refunded to the Participant promptly.

10. Issuance of Certificates. Certificates representing shares of Common Stock purchased under the Plan may be issued only in the name of the employee, in the name of the employee and another person of legal age as joint tenants with rights of survivorship, or in the name of a broker authorized by the employee to be his, her or their, nominee for such purpose.

11. Definitions.

The term "Compensation" means the amount of base pay, prior to salary reduction pursuant to Sections 125, 132(f) or 401(k) of the Code, but excluding overtime, commissions, incentive or bonus awards, allowances and reimbursements for expenses such as relocation allowances or travel expenses, income or gains on the exercise of Company stock options, and similar items.

The term "Designated Subsidiary" means any present or future Subsidiary (as defined below) that has been designated by the Board to participate in the Plan. The Board may so designate any Subsidiary, or revoke any such designation, at any time and from time to time, either before or after the Plan is approved by the stockholders.

The term “Fair Market Value of the Common Stock” on any given date means the fair market value of the Common Stock determined in good faith by the Administrator; provided, however, that if the Common Stock is admitted to quotation on the National Association of Securities Dealers Automated Quotation System (“Nasdaq”), Nasdaq Global Market or another national securities exchange, the determination shall be made by reference to the closing price on such date. If there is no closing price for such date, the determination shall be made by reference to the last date preceding such date for which there is a closing price.

The term “Initial Public Offering” means the first underwritten, firm commitment public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, covering the offer and sale by the Company of its Common Stock.

The term “Parent” means a “parent corporation” with respect to the Company, as defined in Section 424(e) of the Code.

The term “Participant” means an individual who is eligible as determined in Section 3 and who has complied with the provisions of Section 4.

The term “Subsidiary” means a “subsidiary corporation” with respect to the Company, as defined in Section 424(f) of the Code.

12. Rights on Termination of Employment. If a Participant’s employment terminates for any reason before the Exercise Date for any Offering, no payroll deduction will be taken from any pay due and owing to the Participant and the balance in the Participant’s account will be paid to such Participant or, in the case of such Participant’s death, to his or her designated beneficiary as if such Participant had withdrawn from the Plan under Section 7. An employee

will be deemed to have terminated employment, for this purpose, if the corporation that employs him or her, having been a Designated Subsidiary, ceases to be a Subsidiary, or if the employee is transferred to any corporation other than the Company or a Designated Subsidiary. An employee will not be deemed to have terminated employment for this purpose, if the employee is on an approved leave of absence for military service or sickness or for any other purpose approved by the Company, if the employee's right to reemployment is guaranteed either by a statute or by contract or under the policy pursuant to which the leave of absence was granted or if the Administrator otherwise provides in writing.

13. Special Rules. Notwithstanding anything herein to the contrary, the Administrator may adopt special rules applicable to the employees of a particular Designated Subsidiary, whenever the Administrator determines that such rules are necessary or appropriate for the implementation of the Plan in a jurisdiction where such Designated Subsidiary has employees; provided that such rules are consistent with the requirements of Section 423(b) of the Code. Any special rules established pursuant to this Section 13 shall, to the extent possible, result in the employees subject to such rules having substantially the same rights as other Participants in the Plan.

14. Optionees Not Stockholders. Neither the granting of an Option to a Participant nor the deductions from his or her pay shall constitute such Participant a holder of the shares of Common Stock covered by an Option under the Plan until such shares have been purchased by and issued to him or her.

15. Rights Not Transferable. Rights under the Plan are not transferable by a Participant other than by will or the laws of descent and distribution, and are exercisable during the Participant's lifetime only by the Participant.

16. Application of Funds. All funds received or held by the Company under the Plan may be combined with other corporate funds and may be used for any corporate purpose.

17. Adjustment in Case of Changes Affecting Common Stock. In the event of a subdivision of outstanding shares of Common Stock, the payment of a dividend in Common Stock or any other change affecting the Common Stock, the number of shares approved for the Plan and the share limitation set forth in Section 8 shall be equitably or proportionately adjusted to give proper effect to such event.

18. Amendment of the Plan. The Board may at any time and from time to time amend the Plan in any respect, except that without the approval within 12 months of such Board action by the stockholders, no amendment shall be made increasing the number of shares approved for the Plan or making any other change that would require stockholder approval in order for the Plan, as amended, to qualify as an "employee stock purchase plan" under Section 423(b) of the Code.

19. Insufficient Shares. If the total number of shares of Common Stock that would otherwise be purchased on any Exercise Date plus the number of shares purchased under previous Offerings under the Plan exceeds the maximum number of shares issuable under the Plan, the shares then available shall be apportioned among Participants in proportion to the amount of payroll deductions accumulated on behalf of each Participant that would otherwise be used to purchase Common Stock on such Exercise Date.

20. Termination of the Plan. The Plan may be terminated at any time by the Board. Upon termination of the Plan, all amounts in the accounts of Participants shall be promptly refunded.

21. Governmental Regulations. The Company's obligation to sell and deliver Common Stock under the Plan is subject to obtaining all governmental approvals required in connection with the authorization, issuance, or sale of such stock.

22. Governing Law. This Plan and all Options and actions taken thereunder shall be governed by, and construed in accordance with, the laws of the State of Delaware, applied without regard to conflict of law principles.

23. Issuance of Shares. Shares may be issued upon exercise of an Option from authorized but unissued Common Stock, from shares held in the treasury of the Company, or from any other proper source.

24. Tax Withholding. Participation in the Plan is subject to any minimum required tax withholding on income of the Participant in connection with the Plan. Each Participant agrees, by entering the Plan, that the Company and its Subsidiaries shall have the right to deduct any such taxes from any payment of any kind otherwise due to the Participant, including shares issuable under the Plan.

25. Notification Upon Sale of Shares. Each Participant agrees, by entering the Plan, to give the Company prompt notice of any disposition of shares purchased under the Plan where such disposition occurs within two years after the date of grant of the Option pursuant to which such shares were purchased or within one year after the date such shares were purchased.

26. Effective Date and Approval of Shareholders. The Plan shall take effect on the date immediately preceding the date on which the Company's registration statement on Form S-1 becomes effective following approval by the holders of a majority of the votes cast at a meeting of stockholders at which a quorum is present or by written consent of the stockholders.

RESTORBIO, INC.

NON-EMPLOYEE DIRECTOR COMPENSATION POLICY

The purpose of this Non-Employee Director Compensation Policy of resTORbio, Inc. (the "Company"), is to provide a total compensation package that enables the Company to attract and retain, on a long- term basis, high-caliber directors who are not employees or officers of the Company or its subsidiaries. In furtherance of the purpose stated above, all non-employee directors shall be paid compensation for services provided to the Company as set forth below:

Cash Retainers

Annual Retainer for Board Membership: $35,000 for general availability and participation in meetings and conference calls of our Board of Directors. No additional compensation for attending individual Board of Directors meetings.

Additional Annual Retainer for Non-Executive Chair of the Board: $30,000

Additional Retainers for Committee Membership:

Audit Committee Chair:	$7,500
Audit Committee member:	$7,500
Compensation Committee Chair:	$5,000
Compensation Committee member:	$5,000
Nominating and Corporate Governance Committee Chair:	$4,000
Nominating and Corporate Governance Committee member:	$4,000

No additional compensation for attending individual committee meetings. All cash retainers will be paid quarterly, in arrears, or upon the earlier resignation or removal of the non-employee directors, pro-rated based on the number of actual days served by the director during such calendar quarter. Chair and committee member retainers are in addition to retainers for members of the Board of Directors.

Equity Retainers

Initial Award: An initial, one-time equity award (the "Initial Award") of 28,828 options to each new non-employee director upon his or her election to the Board of Directors, which shall vest 33% on first anniversary of grant, then the remainder shall vest ratably monthly, provided, however, that all vesting shall cease if the director resigns from the Board of Directors or otherwise ceases to serve as a director of the Company. This Initial Award applies only to non-employee directors who are first elected to the Board of Directors subsequent to the

Company's initial public offering. If the Initial Award is in the form of a stock option, such stock option shall have a per share exercise price equal to the Fair Market Value (as defined in the Company's 2018 Stock Option and Incentive Plan) of the Company's common stock on the date of grant.

Annual Award: On each date of the Company's Annual Meeting of Stockholders following the completion of the Company's initial public offering (the "Annual Meeting"), each continuing non-employee member of the Board of Directors, other than a director receiving an Initial Award, will receive an annual equity award (the "Annual Award") of 14,414 options, which shall vest in full upon the earlier to occur of the first anniversary of the date of grant or the date of the next Annual Meeting; provided, however, that all vesting shall cease if the director resigns from the Board of Directors or otherwise ceases to serve as a director, unless the Board of Directors determines that the circumstances warrant continuation of vesting. If the Annual Award is in the form of a stock option, such stock option shall have a per share exercise price equal to the Fair Market Value (as defined in the Company's 2018 Stock Option and Incentive Plan) of the Company's common stock on the date of grant.

Expenses

The Company will reimburse all reasonable out-of-pocket expenses incurred by non-employee directors in attending meetings of the Board or any Committee.

Adopted December 21, 2017, subject to effectiveness of the Company's Registration Statement on Form S-1.

[***] INDICATES MATERIAL THAT HAS BEEN OMITTED AND FOR WHICH CONFIDENTIAL TREATMENT HAS BEEN REQUESTED. ALL SUCH OMITTED MATERIAL HAS BEEN FILED WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 406 PROMULGATED UNDER THE SECURITIES ACT OF 1933, AS AMENDED

EXECUTION COPY

LICENSE AGREEMENT

This License Agreement ("Agreement"), made as of March 23, 2017 ("Effective Date"), is by and between Novartis International Pharmaceutical Ltd., a for-profit corporation with its principal place of business at Lichtstrasse 35, CH-4056 Basel, Switzerland ("Novartis") and resTORbio, Inc., a Delaware corporation located at 501 Boylston Street, Suite 6102, Boston, Massachusetts 02116 ("resTORbio"). Novartis and resTORbio are each referred to individually as a "Party" and together as the "Parties."

Background

Novartis Controls (as defined below) the Novartis Patents and Know-How (each as defined below) relating to the Compounds (as defined below). resTORbio wishes to obtain, and Novartis wishes to grant, rights under the Novartis Technology (as defined below) to develop, make, use and sell products incorporating BEZ235 or BEZ235 together with RAD001 in the Field (as defined below), as set forth herein.

For good and valuable consideration, the Parties agree as follows:

1. DEFINITIONS AND INTERPRETATION

1.1 **Definitions**. Unless the context otherwise requires, the terms in this Agreement with initial letters capitalized, will have the meanings set forth below, or the meaning as designated in the indicated places throughout this Agreement.

"Accounting Standards" means, with respect to resTORbio, US GAAP (United States Generally Accepted Accounting Principles) and means, with respect to Novartis, IFRS (International Financial Reporting Standards), in each case as generally and consistently applied throughout the Party's organization. Each Party will promptly notify the other Party in the event that it changes the Accounting Standards pursuant to which its records relating to this Agreement are maintained; *provided, however*, that each Party may only use internationally recognized accounting principles (*e.g.*, IFRS, US GAAP, *etc.*).

"Affiliate" means, with respect to a Party, any Person that controls, is controlled by, or is under common control with that Party. For the purpose of this definition, "control" will mean, direct or indirect, ownership of 50% or more of the shares of stock entitled to vote for the election of directors, in the case of a corporation, or 50% or more of the equity interest in the case of any other type of legal entity, status as a general partner in any partnership, or any other arrangement whereby the entity or Person controls or has the right to control the board of directors or equivalent governing body of a corporation or other entity, or the ability to cause the direction of the management or policies of a corporation or other entity, or otherwise has "control" over the relevant entity as set forth in applicable Accounting Standards, as amended from time to time. In the case of entities organized under the laws of certain countries, the maximum percentage ownership permitted by law for a foreign investor may be less than 50%, and in such case such lower percentage will be substituted in the preceding sentence, *provided* that such foreign investor has the power to direct the management and policies of such entity.

"Alliance Manager" will have the meaning set forth in Section 3.1.

"BEZ235" means the compound described as BEZ235 in *Exhibit A* to this Agreement, including all pharmaceutically acceptable salts and metabolites thereof, whether produced by chemical synthesis or otherwise, which is owned or Controlled by Novartis or its Affiliates.

"BEZ235 Patents" means the Patent Rights listed in *Exhibit B-2*.

"BEZ235/RAD001 Combination Patents" means the Patent Rights listed in *Exhibit B-3*.

"Calendar Quarter" means the respective periods of three consecutive calendar months ending on March 31, June 30, September 30 and December 31.

"Calendar Year" means a period of twelve consecutive calendar months ending on December 31.

"Claims" means all Third Party demands, claims, actions, proceedings and liability (whether criminal or civil, in contract, tort or otherwise) for losses, damages, reasonable legal costs and other reasonable expenses of any nature whatsoever.

"Code" means Title 11 of the U.S. Code.

"Combination Therapy" means any product (in any composition or formulation) containing one or more active biologic or pharmaceutical ingredients in addition to Compounds, or any Combination Therapy approved by a Regulatory Authority in any country where one or more active biologic or pharmaceutical ingredients in addition to Compounds is administered separately from Compounds. For the avoidance of doubt, the combination of BEZ235 and RAD001 alone (*i.e.*, without an additional active ingredient) does not constitute a Combination Therapy.

"Commercialize" means to market, promote, distribute, import, export, offer to sell and/or sell Product, and "Commercialization" means commercialization activities relating to Product, including activities relating to marketing, promoting, distributing, importing, exporting, offering for sale and/or selling Product.

"Commercially Reasonable Efforts" means, with respect to a Party, the efforts and resources typically used by reasonable biotechnology or pharmaceutical companies to perform the obligation at issue, which efforts will not be less than those efforts made by such Party with respect to other products at a similar stage of development or in a similar stage of product life, with similar developmental risk profiles, of similar market and commercial potential, taking into account the proprietary position of the products relative to the products of Third Parties, the regulatory structure involved, Regulatory Authority approved labeling, product profile, the profitability of the applicable products, issues of safety and efficacy, the likely timing of the product's entry into the market, the likelihood of receiving Regulatory Approval, and other relevant scientific, technical and commercial factors, including potential competitive products.

"Compounds" means, without distinction, either or both of BEZ235 and RAD001.

"Control" or "Controlled" means, with respect to any Know-How, Patent Rights, other intellectual property rights, or any proprietary or trade secret information, the legal authority or right (whether by ownership, license or otherwise, other than by a license granted under this Agreement) of a Party or its Affiliates, to grant a license or a sublicense of or under such Know-How, Patent Rights, or intellectual property rights to another Person, or to otherwise disclose such proprietary or trade secret information to another Person, without breaching the terms of any agreement with a Third Party or misappropriating the proprietary or trade secret information of a Third Party.

"Develop" or "Development" means drug development activities, including, without limitation, test method development and stability testing, assay development and audit development, toxicology, formulation, quality assurance/quality control development, statistical analysis, clinical studies, packaging development, regulatory affairs, and the preparation, filing and prosecution of INDs, NDAs and MAAs.

"Effective Date" has the meaning in the preamble (*i.e.*, in the first paragraph of this Agreement).

"EMA" means the European Medicines Agency or any successor entity thereto.

"Encumbrance" means any claim, charge, equitable interest, hypothecation, lien, mortgage, pledge, option, license, assignment, power of sale, retention of title, right of pre-emption, right of first refusal or security interest of any kind.

"European Regulatory Approval" means, with respect to a Product, **(a)** MAA approval from the EMA and pricing and reimbursement approval in three of the Major European Countries, or **(b)** marketing, pricing, and reimbursement approvals in three of the Major European Countries.

"FDA" means the United States Food and Drug Administration or any successor entity thereto.

"Field" means **(a)** with respect to BEZ235, the treatment, prevention and diagnosis of diseases and other conditions in all Indications in humans and animals; and **(b)** with respect to RAD001, limited to uses together with BEZ235 as part of a Fixed Dose Combination that includes at least 0.1mg of BEZ235 per dose, for any Indication in humans related to **(i)** the improvement in immune function or immunosenescence in the elderly; **(ii)** the reduction of infection frequency, severity, duration, health care resource utilization, hospitalization, morbidity or mortality, or the treatment of infections; **(iii)** the reduction of pulmonary disease exacerbation frequency, severity, or related hospitalization; **(iv)** the enhancement of therapeutic or prophylactic benefits of vaccines; or **(v)** any aging-related disease or condition; *provided*, *however*, that notwithstanding the foregoing, the Field does not include application or use of RAD001 in connection with organ transplantation, oncology, immuno- oncology or in the Cardiac Stent Field. For this purpose, the term "Cardiac Stent Field" means the prevention and/or treatment of coronary and peripheral vascular diseases with stents, stent delivery systems or other site-specific local, vascular delivery systems, but does not extend to any systemic application. It is understood and agreed that the Field also does not include any rights for resTORbio to develop, make, use and sell RAD001 **(A)** in any combination other than a Fixed Dose Combination; **(B)** by itself (except in connection with the Development of a Fixed Dose Combination as set forth in Section 5.1 of this Agreement); or **(C)** in any use outside of the Indications described in clauses (i) through (v) of the preceding sentence.

"First Commercial Sale" means, with respect to a Product in a particular country, the first arm's length sale to a Third Party for value for use or consumption of any such Product following receipt of Regulatory Approval of such Product in such country.

"Fixed Dose Combination" means, with respect to BEZ235 and RAD001, the combination of BEZ API and RAD API in a single dosage form which is manufactured and distributed in such single dosage form.

"Generic Equivalent" means, with respect to a particular Product in a country, any product that **(a)** has Regulatory Approval for use in such country pursuant to a regulatory process governing approval of generic, interchangeable, or biosimilar pharmaceutical or biological product based on the then-current standards for regulatory approval in such country, where such regulatory approval relied on or incorporated clinical data generated by either Party to this Agreement or their Affiliates or licensees, or was obtained using an abbreviated, expedited, or other similar process; **(b)** during the Royalty Term, is not owned or licensed by resTORbio under this Agreement; and **(c)** is sold in the same country as the relevant Product by a Third Party that is not a sublicensee or Affiliate of resTORbio, and that did not purchase such product in a chain of distribution that included resTORbio, or its Affiliates or its or their sublicensees.

"IND" means an Investigational New Drug application in the US filed with the FDA or the corresponding application for the investigation of Products in any other country or group of countries, as defined in the applicable laws and regulations and filed with the Regulatory Authority of a given country or group of countries.

"Indication" means a specific disease, impairment, medical condition, or symptom thereof that is the intended subject of a Product. For the purposes of the Milestones set forth in Section 8.3, a "Second Indication" shall mean an intended subject of a Product that is a different disease, impairment, medical condition, or symptom thereof than the subject of the first Indication for a Product.

"Information" means all Know-How and other proprietary information and data of a financial, commercial or technical nature which the disclosing Party, its Affiliates, or its or their licensors has supplied or otherwise made available to the other Party or its Affiliates, whether made available orally, in writing or in electronic form, including information comprising or relating to concepts, discoveries, inventions, data, designs or formulae in relation to this Agreement.

"Initiation" means, with respect to a Product and a clinical trial, the first dosing in such clinical trial of the first human with the relevant Product.

"Insolvency Event" means **(a)** resTORbio ceases to function as a going concern by suspending or discontinuing its business; **(b)** resTORbio becomes insolvent (*i.e.*, is unable to pay its debts as they become due); **(c)** resTORbio is the subject of voluntary or involuntary bankruptcy proceedings instituted on behalf of or against resTORbio (except for involuntary bankruptcy proceedings that are dismissed within 90 days); **(d)** an administrative receiver, receiver and manager, interim receiver, custodian, sequestrator, or similar officer is appointed for resTORbio; **(e)** a resolution to wind up resTORbio is passed at a meeting of the directors or shareholders of resTORbio; or **(f)** a resolution shall have been passed by resTORbio or resTORbio's directors to make an application for an administration order or to appoint an administrator for all of resTORbio's assets; or **(g)** resTORbio makes any general assignment for the benefit of all of its creditors.

"Invoice" means an invoice in a form reasonably acceptable to resTORbio and to Novartis.

"Know-How" means all technical information, know-how and data, including inventions (whether patentable or not), discoveries, trade secrets, specifications, instructions, processes, formulae, materials, expertise and other technology applicable to Compounds, formulations, compositions, Products or to their manufacture, development, registration, use or commercialization or methods of assaying or testing them or processes for their manufacture, formulations containing them, compositions incorporating or comprising them and including all biological, chemical, pharmacological, biochemical, toxicological, pharmaceutical, physical and analytical, safety, quality control, manufacturing, preclinical and clinical data, instructions, processes, formulae, expertise and information, regulatory filings and copies thereof, relevant to the development, manufacture, use or commercialization of and/or which may be useful in studying, testing, development, production or formulation of Products, or intermediates for the synthesis thereof.

"MAA" means an application for the authorization to market the Product in any country or group of countries outside the United States, as defined in the applicable laws and regulations and filed with the Regulatory Authority of a given country or group of countries.

"Major European Countries" means France, Germany, Italy, Spain and the United Kingdom.

"Major Market" means any of the United States, Japan, and each of the Major European Countries.

"Milestones" means the milestones relating to the Product as set forth in Sections 8.3 and 8.4.

"Milestone Payments" means the payments to be made by resTORbio to Novartis upon the achievement of the corresponding Milestones as set forth in Sections 8.3 and 8.4.

"NDA" shall mean a New Drug Application, as described in the FDA regulations, 21 CFR Section 314.50, including all amendments and supplements to the application.

"Net Sales" means the net sales recorded by resTORbio or any of its Affiliates or sublicensees for any Product sold to Third Parties other than sublicensees, as determined by computing the gross sales of such Product and deducting the following amounts, in all cases to the extent permitted by the resTORbio Accounting Standards, as consistently applied:

(i) normal trade and cash discounts;

(ii) amounts repaid or credited by reasons of defects, rejections, recalls or returns;

(iii) rebates and chargebacks to customers and third parties (including, without limitation, Medicare, Medicaid, Managed Healthcare and similar types of rebates);

(iv) amounts provided or credited to customers through coupons and other discount programs;

(v) delayed ship order credits, discounts or payments related to the impact of price increases between purchase and shipping dates or retroactive price reductions; and

(vi) fee for service payments to customers for any non-separable services (including compensation for maintaining agreed inventory levels and providing information).

With respect to the calculation of Net Sales:

(i) Net Sales only include the value charged or invoiced on the first arm's length sale to a Third Party, and sales between or among resTORbio and its Affiliates and sublicensees will be disregarded for purposes of calculating Net Sales;

(ii) If a Product is delivered to the Third Party before being invoiced (or is not invoiced), Net Sales will be calculated at the time all the revenue recognition criteria under Accounting Standards are met;

(iii) In the event that the Product is sold as a part of a Combination Therapy, the Net Sales will be calculated by multiplying the Net Sales of the Combination Therapy by the fraction, $A/(A+B)$ where A is the weighted (by sales volume) average sale price in the relevant country of the Product containing the Compounds as the sole active ingredient in finished form, and B is the weighted average sale price (by sales volume) in that country of the product(s) containing the other component(s) as the sole active ingredient(s) in finished form in an Indication similar to the intended use of the Product. Regarding prices comprised in the weighted average price when sold separately referred to above, if these are available for different dosages from the dosages of Compounds and other active ingredient components that are included in the Combination Therapy, then resTORbio will be entitled to make a proportional adjustment to such prices in calculating the royalty-bearing Net Sales of the Combination Therapy. If the weighted average sale price cannot be determined for the Product or other product(s) containing the Compounds or component(s), the calculation of Net Sales for any such Combination Therapy will be agreed by the Parties based on the relative value contributed by each component (each Party's agreement not to be unreasonably withheld or delayed).

"Novartis Know-How" means any Know-How Controlled by Novartis or any of its Affiliates as of the Effective Date that is material for the research, Development, manufacture, preparation, use of the Compounds or the Commercialization of the Compounds and Products, in each case in the Field. Notwithstanding the foregoing, Novartis Know-How will not include information relating to **(a)** Novartis' proprietary products containing RAD001; **(b)** matters outside the Field; and **(c)** the manufacturing of RAD001, particularly related to the active pharmaceutical ingredient and/or any formulation technologies.

"Novartis Patents" means any Patent Rights Controlled by Novartis or any of its Affiliates as of the Effective Date that are set forth on *Exhibit B*. For convenience, the Novartis Patents are divided into three categories: **(a)** RAD001 Patents (listed in *Exhibit B-1*); **(b)** BEZ235 Patents (listed in *Exhibit B-2*); and **(c)** BEZ235/RAD001 Combination Patents (listed in *Exhibit B-3*).

"Novartis Technology" means the Novartis Know-How and Novartis Patents.

"Patent Rights" means all patents and patent applications, in any country, including all divisionals, continuations, substitutions, continuations-in-part, re-examinations, reissues, additions, renewals, extensions, registrations, supplemental protection certificates, utility models, design patents and the like of any of the foregoing.

"Person" means any individual, partnership, limited liability company, firm, corporation, association, trust, unincorporated organization or other entity.

"Phase I Clinical Trial" means a clinical study of a Product in human subjects designed to obtain data on the safety and tolerability of such Product, including pharmacological or pharmacokinetic information, as more fully defined in 21 C.F.R. §312.21(a) (or the non- United States equivalent thereof).

"Phase II Clinical Trial" means a clinical study of a Product in patients designed to establish the dosing range for such Product and the safety and efficacy of such Product, as further defined in 21 C.F.R. §312.21(b) (or the non-United States equivalent thereof).

"Phase III Clinical Trial" means a controlled clinical study of a Product in patients designed to establish efficacy and safety of such Product for the purpose of preparing and submitting a filing for BLA approval in the US, or European Regulatory Approval, as further defined in 21 C.F.R. §312.21(c) (or the non-United States equivalent thereof).

"Prior Confidentiality Agreement" means the Confidentiality Agreement between the Parties dated August 9, 2016.

"Product" means a therapeutic product incorporating or comprising either **(a)** BEZ235; or

(b) BEZ235 and RAD001 together in a Fixed Dose Combination, in both cases in finished dosage form, **(i)** the Development, manufacture, preparation, use or Commercialization of which would, but for the license granted hereunder, infringe a Valid Claim of the Novartis Patents; and/or **(ii)** that is Developed using, incorporates, or embodies Novartis Know-How.

"RAD001" means the compound described as RAD001 in *Exhibit A* to this Agreement and pharmaceutically acceptable salts, whether produced by chemical synthesis or otherwise, which is owned or Controlled by Novartis or its Affiliates.

"RAD001 Patents" means the Patent Rights listed in *Exhibit B-1*.

"Regulatory Approval" means, with respect to a product in any country or jurisdiction, any approval, registration, license or authorization from a Regulatory Authority in a country or other jurisdiction that is reasonably necessary to market and sell a Product in such country or jurisdiction (including, *e.g.*, any applicable pricing and reimbursement approvals).

"Regulatory Authority" means any governmental authority or agency responsible for authorizing or approving the marketing and/or sale of products in a jurisdiction (*e.g.*, the FDA, EMA, the Japanese Ministry of Health, Labour and Welfare, and corresponding national or regional regulatory agencies or organizations).

"Regulatory Exclusivity" means with respect to a Product in a country, the period of time during which **(a)** a Party or its Affiliate or sublicensee has been granted the exclusive legal right by a Regulatory Authority (or is otherwise entitled to the exclusive legal right by operation of applicable law) in such country to market and sell the Product; or **(b)** the data and information submitted by a Party or its Affiliate or sublicensee to the relevant Regulatory Authority in such country for purposes of obtaining Regulatory Approval may not be disclosed, referenced or relied upon in any way by a Third Party or such Regulatory Authority (including by relying upon the Regulatory Authority's previous findings regarding the safety or effectiveness of the Product) to support the Regulatory Approval or marketing of any product by a Third Party in such country.

"Regulatory Filings" means, with respect to the Compounds or a Product, any submission to a Regulatory Authority of any appropriate regulatory application, and will include, without limitation, any submission to a regulatory advisory board, marketing authorization application, and any supplement or amendment thereto. For the avoidance of doubt, Regulatory Filings will include any IND, NDA, MAA or the corresponding application in any other country or group of countries.

"Royalty Term" means the period commencing on the First Commercial Sale of a Product in a specified country until the latest of **(a)** the expiration of the last to expire Valid Claim of the Novartis Patents that, but for the licenses granted in this Agreement, would be infringed by the Development, manufacture, use, importation or other Commercialization of such Product in such country; **(b)** the expiration of any Regulatory Exclusivity for such Product in such country; or **(c)** the ten year anniversary of the First Commercial Sale of the Product in the relevant country.

"Sales & Royalty Report" means a written report or reports showing each of: **(a)** the gross and Net Sales of each Product, on a country-by-country basis, during the reporting period by resTORbio and its Affiliates and sublicensees (in all cases itemizing the various deductions taken from gross to compute Net Sales as set forth in the definition of Net Sales, above); **(b)** the royalties payable, in USD, which will have accrued hereunder with respect to such Net Sales; and **(c)** if sales include any Combination Therapy, the methodology and data used to determine Net Sales as set forth in the Net Sales definition.

"Senior Officers" means, for Novartis, the Chief Executive Officer of the Novartis Institutes for BioMedical Research, or his/her designee, and for resTORbio, its Chief Executive Officer or his designee.

"Serious Adverse Event" means any untoward medical occurrence in a human clinical trial subject or in a patient who is administered a Product, whether or not having a causal relationship with such Product, that **(a)** results in death or poses a threat to life; **(b)** requires or prolongs hospitalization; **(c)** results in persistent or significant disability or incapacity; **(d)** is medically significant; or **(e)** results in a congenital abnormality or birth defect. In the case of other significant events, medical and scientific judgment should be exercised in deciding whether expedited reporting is appropriate. Such events may be important medical events that may not be immediately life-threatening or result in death or hospitalization but which may jeopardize the patient or may require intervention to prevent one of the other outcomes described above in this definition. Such events should usually be considered Serious Adverse Events.

"Term" with reference to this Agreement shall mean the period of time beginning on the Effective Date and ending upon the expiration of the Royalty Term for the last Product with a Royalty Term.

"Territory" means worldwide.

"Third Party" means any Person other than a Party or an Affiliate of a Party.

"United States" or "US" means the United States of America, its territories and possessions. "USD" or "US$" means the lawful currency of the United States.

"Valid Claim" means **(a)** claim of an issued and unexpired patent included within the Novartis Patents that **(i)** covers the practice of the relevant Compound or Product in the relevant jurisdiction; **(ii)** has not been irrevocably or unappealably disclaimed or abandoned, or been held unenforceable, unpatentable or invalid by a decision of a court or other governmental agency of competent jurisdiction; and **(iii)** has not been admitted to be invalid or unenforceable through reissue, disclaimer, or otherwise; or **(b)** a claim included in a patent application included within the Novartis Patents that **(i)** would cover the practices of the relevant Product in the relevant jurisdiction if such claim was to issue; and **(ii)** has not been cancelled, withdrawn or abandoned, nor been pending for more than five (5) years from the earliest filing date to which such patent application or claim is entitled.

1.2 **Interpretation**. In this agreement unless otherwise specified:

(a) "includes" and "including" will mean respectively includes and including without limitation;

(b) a Party includes its permitted assignees and/or the respective successors in title to substantially the whole of its undertaking;

(c) a statute or statutory instrument or any of their provisions is to be construed as a reference to that statute or statutory instrument or such provision as the same may have been or may from time to time hereafter be amended or re-enacted;

(d) words denoting the singular will include the plural and vice versa and words denoting any gender will include all genders;

(e) the Exhibits and other attachments form part of the operative provision of this Agreement and references to this Agreement shall, unless the context otherwise requires, include references to the Exhibits and attachments;

(f) the headings in this Agreement are for information only and will not be considered in the interpretation of this Agreement;

(g) general words will not be given a restrictive interpretation by reason of their being preceded or followed by words indicating a particular class of acts, matters or things; and

(h) the terms and conditions of this Agreement are the result of negotiations between the Parties and that this Agreement will not be construed in favor of or against any Party by reason of the extent to which any Party participated in the preparation of this Agreement.

2. LICENSE; SUBLICENSES; GRANT BACKS.

2.1 **License Grant**. Subject to the terms and conditions of this Agreement, Novartis hereby grants to resTORbio **(a)** an exclusive (even as to Novartis and its Affiliates), sub-licensable (pursuant to Section 2.2) license or sublicense, as applicable, under Novartis' interest in the Novartis Technology to research, Develop, make, have made, use, import, offer for sale, sell, have sold and otherwise Commercialize BEZ235 and BEZ235-containing Products; and **(b)** an exclusive (even as to Novartis and its Affiliates), sub-licensable (pursuant to Section 2.2) license or sublicense, as applicable, under Novartis' interest in the Novartis Technology to research, Develop, make, have made, use, import, offer for sale, sell, have sold and otherwise Commercialize a Fixed Dose Combination Product containing both

RAD001 and BEZ235, in both cases (*i.e.*, clauses (a) and (b)) limited to the Field in the Territory; *provided, however*, that this license will not include any right of access to Novartis Know How related to RAD001 other than as provided in Section 4. The foregoing license is exclusive to resTORbio in the Field; *provided, however*, that Novartis and its Affiliates will retain the right to conduct research (but not Development or Commercialization activities) using the Novartis Technology in the Field (including both with respect to BEZ235 individually and BEZ235 and RAD001 in combination); and *provided* [***]. For the avoidance of doubt, resTORbio acknowledges that Novartis retains full rights with respect to RAD001 to research, Develop, make, have made, use, import, offer for sale, sell, have sold and otherwise Commercialize RAD001 as a monotherapy (for all uses, applications, and indications) or in any combination other than with BEZ235.

2.2 **Sublicense Rights**. resTORbio may sublicense (through multiple tiers) the rights granted to it by Novartis under this Agreement at any time at its sole discretion, but subject to the applicable terms of this Agreement. Prior to the 40 Patient Trial Date with Fixed Dose Combination, resTORbio must obtain Novartis' written consent prior to sublicensing its rights under this Agreement, to the extent that such rights include rights to research, Develop, or Commercialize a Fixed Dose Combination. resTORbio may exercise its rights and perform its rights and obligations under this Agreement itself or through any of its Affiliates. In addition, resTORbio may subcontract to Third Parties the performance of tasks and obligations with respect to the Development and Commercialization of the Products as resTORbio deems appropriate, subject to the applicable terms and conditions of this Agreement. resTORbio shall provide Novartis with a copy of any sublicense agreement it enters with respect to the Novartis Technology within ten (10) days after the execution thereof, *provided* that such copy may be subject to redaction as resTORbio reasonably believes appropriate to protect confidential business information, including financial provisions and other sensitive information as applicable, but resTORbio shall not redact provisions that are useful to Novartis to confirm payments by resTORbio to Novartis under Section 8.2. Each such sublicense agreement shall be considered confidential Information of resTORbio and subject to Article 10 of this Agreement. Each sublicense of the Novartis Technology shall be consistent with the terms and conditions of this Agreement. Upon the termination of this Agreement by Novartis pursuant to Section 11.2 or Section 11.3 or by resTORbio pursuant to Section 11.2(a) or 11.4, any sublicense granted by resTORbio under the Novartis Technology will terminate upon the effective date of termination of this Agreement. resTORbio will remain labile for the acts and omissions of its sublicensees and Affiliates as if such sublicensees and Affiliates were resTORbio hereunder.

2.3 **Grant Back of RAD001 Improvements Outside the Field**. To the extent resTORbio creates, conceives of, or reduces to practice any improvements to RAD001 Novartis Know How outside the Field (including but not limited to dosing, formulation, and combinations of RAD001 other than with BEZ235) during the Term ("RAD001 Improvements"), then resTORbio hereby grants to Novartis and its Affiliates a non-exclusive, fully-paid, perpetual (*i.e.*, for the life of the relevant Patent Rights and Know How, subject to reversion as set forth in Section 12.2), sub-licensable license in the Territory to resTORbio's interest in such RAD001 Improvements; *provided*, *however*, that for the avoidance of doubt, such license is limited to practice outside of the Field. Novartis may sublicense (through multiple tiers) the rights granted to it by resTORbio under this Agreement at any time at its sole discretion, but subject to the applicable terms of this Agreement. Each sublicense of the RAD001 Improvements shall be consistent with the terms and conditions of this Agreement. Upon the termination of this Agreement by resTORbio pursuant to Section 11.2, any license granted to Novartis to the RAD001 Improvements will terminate upon the effective date of termination of this Agreement. Novartis will remain labile for the acts and omissions of its sublicensees as if such sublicensees were Novartis hereunder

2.4 **Covenant Not to Enforce**. To the extent Novartis creates, conceives of or reduces to practice during the Term any improvements to the Novartis Technology relating to BEZ235 or its use ("BEZ235 Technology Improvements"), Novartis agrees that it will not take action against resTORbio to enforce its intellectual property rights in BEZ235 Technology Improvements in connection with resTORbio Development and Commercialization of Products and Compounds in the Field.

3. GOVERNANCE

3.1 **Alliance Managers**. Within 30 days after the Effective Date, each Party will appoint (and notify the other Party of the identity of) a senior representative having a general understanding of pharmaceutical development and commercialization issues to act as its alliance manager under this Agreement ("Alliance Manager"). The Alliance Managers will **(a)** serve as the contact point between the Parties for the purpose of providing Novartis with information on the progress of resTORbio's Development and Commercialization of the Products; **(b)** be primarily responsible for facilitating the flow of information and otherwise promoting communication, coordination and collaboration between the Parties, including in particular the transfer of information and Know-How from Novartis to resTORbio; **(c)** provide a single point of communication for seeking consensus both internally within the respective Party's organization and facilitating review of external corporate communications; and **(d)** raise cross-Party and/or cross-functional disputes in a timely manner. Each Party may replace its Alliance Manager on written notice to the other Party.

3.2 **Development Information**. Within ninety (90) days after the Effective Date, resTORbio will provide Novartis with a high level summary development plan setting forth the anticipated Development activities to be conducted by resTORbio and its Affiliates and sublicensees related to the Compounds and Products during the following 18 month period (the "Development Plan"). No later than ninety (90) days after each anniversary of the Effective Date, until the approval of the first NDA or MAA for a Product, resTORbio will provide Novartis an updated Development Plan providing, in reasonable detail, the

Development activities conducted by resTORbio and its Affiliates and sublicensees related to Compounds and Products during the immediately preceding year and its anticipated plans for Development of the Compounds and Products for next 18 month period. In addition to this annual report, resTORbio will provide to Novartis a high level summary of all Development activities that resTORbio, its agents, or their sublicensees have conducted in the prior six month period until the approval of the first NDA or MAA for a Product. resTORbio may revise the Development Plan or any update thereto in its sole discretion, subject to satisfaction of its obligations under Section 5.2.

3.3 **Meetings**. During the period from the Effective Date until the first NDA or MAA filing for a Product, the Alliance Managers will meet (either in person or by teleconference) at least twice per year, to review and discuss progress made under, and any changes to, the Development, Plan, including the Development work performed, clinical trials, Milestones, any key issues and the overall status of Development.

3.4 **Reports**. The Information provided by resTORbio to Novartis under Sections 3.2 and 3.3 will be provided for the purpose of demonstrating the Commercially Reasonable Efforts of resTORbio in connection with the Development and Commercialization of Compounds and Products.

4. DISCLOSURE OF LICENSOR KNOW-HOW & COOPERATION

4.1 **Technology Transfer**. Within 45 days after the Effective Date, Novartis will transfer BEZ235-related Know How (limited to BEZ235 API and BEZ235 Drug Product) to resTORbio that is available to Novartis and that would reasonably consist of Novartis Know How set forth in *Exhibit C* (the "Technology Transfer Activities") at no additional cost; *provided*, *however*, that Novartis shall not be required to provide more than [***] man hours of service in connection with the Technology Transfer Activities. For clarity, with respect to the BEZ Placebo (as defined in Section 6.1), Novartis will only provide certificates of analysis and will not conduct a further technology transfer.

Except as provided below, to the extent that additional services are reasonably requested by resTORbio in writing (*i.e.*, in excess of the [***] hours are needed to complete the Technology Transfer Activities), and such additional services are approved by Novartis (not to be unreasonably withheld) in writing, such activities will **(a)** be charged at the rate of $[***] per man-hour (plus any applicable expenses); and **(b)** shall not exceed a term longer than six months after the Effective Date.

4.2 ***Clinical and Pre-clinical Documents*.** The Parties acknowledge that as of the Effective Date, *Exhibit C* includes only CMC-related Technology Transfer Activities. Following the Effective Date, the Parties will negotiate in good faith to agree upon a revised *Exhibit C*, which will add a list of pre-clinical and clinical documents in Novartis' possession that are material to the BEZ-335 Know How and reasonably necessary for the Development of BEZ235.

4.3. **Analytical Methods.** During a term not to exceed twelve months after the Effective Date, to the extent that resTORbio requests in writing that Novartis transfer RAD001 analytical methods for drug substance release and RAD001 analysis/stability to resTORbio or its designee, such activities will be provided at no additional cost to resTORbio and for no more than a total of [***] hours of work, and will be delivered approximately three months following such request, and are subject to the execution by

resTORbio of a separate, commercially standard confidentiality agreement to be provided by Novartis. Any additional work related to the transfer of analytical methods upon resTORbio's reasonable request will be charged by Novartis to resTORbio at the rate of $[***] per man hour (plus any applicable expenses).

4.4 For clarity, notwithstanding anything in this Agreement to the contrary, **(i)** Know How relating to RAD001 that is subject to transfer will be limited to specific analytical methods for drug substance release and analysis/stability, and **(ii)** Novartis Know-How required for the manufacturing of RAD001 placebo, RAD001 active pharmaceutical ingredient, and/or any RAD001 formulation Know-How will not be included in the Technology Transfer Activities or otherwise transferred to resTORbio.

4.5 For further clarity, the [***] hour time periods described in Section 4.1, Section 4.3, and Section 5.3(e) are independent of one another, but may not be exchanged (*i.e.*, they total [***] hours, but unused time under one Section may not be applied to another Section), and each of these time periods will only be triggered upon resTORbio's written request.

5. DEVELOPMENT AND REGULATORY

5.1 **Development**. Subject to Section 5.2, resTORbio will have sole control over all Development activities and full decision-making authority with respect to the Development of the Products and will be responsible for conducting, at its sole expense, such research and preclinical, clinical and other Development of Compounds and/or Products as it determines appropriate in its sole discretion; *provided*, *however*, **(a)** that resTORbio shall have the right to use RAD001 by itself to the extent required for Development (but not Commercialization) of Products, with the objective of obtaining Regulatory Approval for a Fixed Dose Combination, so long as **(i)** the relevant Regulatory Authority requires such activity; **(ii)** resTORbio provides advance notice to Novartis on the proposed clinical trial plans for use of RAD001 as monotherapy; and **(iii)** resTORbio considers in good faith comments made by Novartis on such planned activities so long as such comments are provided within 30 days of resTORbio providing such clinical trial plans to the Novartis Alliance Manager; and **(b)** the use in a Fixed Dose Combination resulting in daily dose of RAD001 in excess of [***]mg must be subject to the prior written approval of Novartis.

5.2 **Development Diligence**. resTORbio will itself, or through its Affiliates or sublicensees, use Commercially Reasonable Efforts to Develop at least one Product in the Field. Subject to compliance with the provisions of Section 5.1, the Development of the Product will be in resTORbio's sole discretion.

5.3 **Regulatory**.

(a) Novartis will promptly assign to resTORbio the following Regulatory Filings: IND76209, IND115666, and BEZ235Y2201, and thereafter resTORbio shall be responsible for all future correspondence relating to these INDs and any and all subsequent Regulatory Filings relating to BEZ235, it being understood that any such activities will be conducted in accordance with Applicable Law. Within 90 days after the Effective Date, to the extent permitted by applicable law, Novartis will assign to resTORbio or provide a copy of any Regulatory Filings solely related to BEZ235.

(b) Novartis hereby grants to resTORbio, together with resTORbio's Affiliates and sublicensees, a right of reference to the Novartis-sponsored [***] to permit resTORbio to Develop or obtain Regulatory Approval of the BEZ235/RAD001 Fixed Dose Combination Product in the Field in the Territory, and Novartis agrees to submit such documentation within 21 days after the Effective Date as may be reasonably required to cause such right of reference to become effective; *provided, however* that no data contained in the RAD001 dossier will be shared with or provided to resTORbio, and the investigator brochure for RAD001 that resTORbio intends to use for Development of Compounds and Products will be independently developed by resTORbio, although it may rely on information from the Novartis investigator brochure to the extent required by applicable law. resTORbio may also cross- reference to [***](RAD001) in regards to Module 3 (quality), Non- clinical info (Module 4) and corresponding summaries in Module 2. For CTAs in Europe, resTORbio will provide information on RAD001 as a publicly available simplified investigational medical product (sIMPD), which is a Summary of Product Characteristics (SmPC) of RAD001 medicinal product authorized in corresponding European Member State. Novartis shall be free to withdraw any and all Regulatory Filings for BEZ235 (and combinations with BEZ235) or RAD001 unless resTORbio agrees to compensate Novartis for all costs (including internal costs) relating to the maintenance of the respective Regulatory Filings. For clarity, in case a Regulatory Authority requires or actively withdraws a Regulatory Filing Novartis will inform resTORbio hereof without undue delay but shall not be forced to appeal such decision. Novartis agrees to provide reasonable collaborative assistance to resTORbio, at the rates set forth in Article 4, in connection with the regulatory process involving the Fixed Dose Combination as may be required to address aspects of referenced materials to which resTORbio will not have access.

(c) resTORbio will **(i)** determine the regulatory plans and strategies for the Compounds and/or Products, **(ii)** (either itself or through its Affiliates or sublicensees) make all Regulatory Filings with respect to the Products, and **(iii)** be responsible for obtaining and maintaining Regulatory Approvals throughout the world in the name of resTORbio or its Affiliates or sublicensees; *provided, however*, that any activity involving the use of a Fixed Dose Combination product resulting in daily dose of RAD001 in excess of [***]mg will be subject to the prior written approval of Novartis.

(d) resTORbio will have the right to disclose the existence of, and the results from, any clinical trials conducted under this Agreement in accordance with its standard policies.

(e) Novartis will provide up to [***] man hours, over a period of [***] months commencing on the Effective Date, with respect to all regulatory matters.

5.4 **Adverse Event Reporting and Safety Data Exchange**. The Parties shall cooperate with regard to the reporting and handling of safety information involving or relating to RAD001 to the extent required by applicable laws. Following the Effective Date, and in time to ensure that all regulatory requirements are met, and to the extent required by applicable law or any Regulatory Authority, the Parties shall enter into one or more Safety Data Exchange Agreements, which will define the pharmacovigilance responsibilities of the Parties and safety data exchange procedures to enable each Party to comply with all of its legal and regulatory obligations related to BEZ235 and RAD001.

5.5 **Product Recalls**. If any Regulatory Authority issues or requests a recall or takes similar action with respect to a Product, or in the event either Party reasonably believes that an event, incident or circumstance has occurred that may result in the need for such a recall, such Party shall promptly notify the other Party thereof by telephone, facsimile or email. Following such notification, resTORbio shall decide and have control of whether to conduct a recall or market withdrawal (except if a recall or market withdrawal is mandated by a Regulatory Authority, in which case it shall be required) or take such other corrective action in any country and the manner in which any such recall, market withdrawal or corrective action shall be conducted, *provided* that resTORbio shall keep Novartis regularly informed regarding any such recall, market withdrawal or corrective action.

5.6 **Compliance**. resTORbio will, and will cause its Affiliates and sublicensees to, **(a)** comply with all applicable current international regulatory standards, including cGMP, cGLP, cGCP and other rules, regulations and requirements, and **(b)** not employ or use any person that has been debarred under Section 306(a) or 306(b) of the U.S. Federal Food, Drug and Cosmetic Act.

6. MANUFACTURING AND SUPPLY.

6.1 **Inventory of BEZ235 and Placebos.** Within 30 days after the written request of resTORbio, Novartis will make available for pick up by resTORbio and/or resTORbio's designee or identified carrier companies and Third Party contract manufacturing organizations ("CMO" or "CMOs"), from Novartis' facilities where the materials are currently stored, Novartis' inventory of BEZ235 active pharmaceutical ingredient ("BEZ API") and [***] mg capsules of BEZ235 drug product ("BEZ Drug Product") in its current form ("as is"), and as well as approximately [***] capsules of [***] mg BEZ235 placebo for BEZ Drug Product ("BEZ Placebo") (of which approximately [***] capsules will be provided in matching placebo bottles), as is and without warranty as to their usefulness (see *Exhibit D*). Within 90 days after the Effective Date, the Parties will execute a commercially reasonable quality agreement, an initial draft of which will be provided by resTORbio, relating to the supply of BEZ API, BEZ Drug Product, and BEZ Placebo. The BEZ API, BEZ Drug Product, and BEZ Placebo will be picked up in not more than one or two installments. resTORbio and Novartis will cooperate to permit resTORbio to provide necessary information as may be required to pick-up, in a timely manner, the BEZ API, BEZ Drug Product, and BEZ Placebo. In connection with the transfer of this material, Novartis will share will resTORbio any information that is readily available to Novartis (and not otherwise available to resTORbio), in particular Compound-specific information, as is necessary to permit resTORbio to pick up the material as described in this Section 6.1. If resTORbio does not provide such information within 20 days after resTORbio's written request or does not pick up the materials in 30 days after resTORbio's written request it will forfeit its right to pick up these materials, but such forfeit will not occur if Novartis does not provide necessary documentation and information required for resTORbio or its designee to pick up the BEZ API, BEZ Drug Product, and BEZ Placebo for shipment. resTORbio will be responsible for all documentation, licenses, customs clearance, costs, *etc.* that are needed for and related to the pick up, transport, and subsequent delivery of the materials to the first destination as defined by resTORbio. The BEZ API, BEZ Drug Product, and BEZ Placebo shall be provided Ex Works (Novartis' facility) (Incoterms 2010) [***]. All BEZ API and BEZ Drug Product supplied by Novartis will only be used according to its specifications, especially release specifications and applicable laws, and will not be used for Commercial purposes.

6.2 **[Reserved]**.

6.3 **RAD001 Dispersible Batch**. At resTORbio's request and written purchase order to be placed before April 10, 2017, Novartis will make a once-off supply of commercially packaged RAD001 dispersible tablets (the "RAD001 Dispersible Once-Off Supply"), with such supply consisting of approximately [***] tablets ([***] mg) and [***] tablets ([***] mg). The RAD001 Dispersible Once-Off Supply shall be manufactured by Novartis in accordance with cGMP. The Parties agree that all other warranties are excluded including any implied warranties as to merchantability or fitness for purpose. The RAD001 Dispersible Once-Off Supply will be delivered FCA or EXW at Novartis' option, from a Novartis facility which address shall be notified by Novartis to resTORbio in writing (Incoterms 2010). Delivery of the RAD001 Dispersible Once-Off Supply is anticipated to occur five months after receipt of the purchase order from resTORbio. The RAD001 Dispersible Once-Off Supply may be made by Novartis, an Affiliate or third party at Novartis' discretion. resTORbio will use the RAD001 Dispersible Once-Off Supply for Development purposes only and shall not ship or use it, even partially outside of the United States. resTORbio will be responsible for all documentation and licenses required for resTORbio to accept delivery of the RAD001 Dispersible Once-Off Supply. resTORbio will

pay USD$[***] for these materials within 60 days after receipt of an invoice for the same, which will be issued by Novartis on or after the Effective Date. The RAD001 Dispersible Once-Off Supply shall consist of the following SKUs:

Material No.	Product description	Tablets per blister	Blister cards per finished pack	Tablets per finished pack	Tablets required by resTORbio	Price per pack
[***]	[***] [***] [***] [***]	[***]	[***]	[***]	[***]	USD $[***]
[***]	[***] [***] [***] [***]	[***]	[***]	[***]	[***]	USD $[***]

7. COMMERCIALIZATION

7.1 **Commercialization**. resTORbio will be solely responsible for all aspects of Commercialization of the Products, including planning and implementation, distribution, booking of sales, pricing, and reimbursement. resTORbio will itself, or through its Affiliates or sublicensees, use Commercially Reasonable Efforts to Commercialize at least one Product in at least one Major Market. Notwithstanding the foregoing, resTORbio's application of Commercially Reasonable Efforts will not require resTORbio to Commercialize a Product in any particular country or territory other than a Major Market if resTORbio reasonably determines that it is not commercially reasonable to do so for such Product. Subject to compliance with the foregoing, the Commercialization of the Product will be in resTORbio's sole discretion.

8. FINANCIAL PROVISIONS

8.1 **Upfront Equity in resTORbio.** In consideration of the licenses and rights granted to resTORbio hereunder, on the Effective Date and at the same time as the closing of a $15 million investment in Series A preferred shares of resTORbio by other investors, resTORbio will issue to Novartis Series A Preferred Shares, representing USD $5 million worth of Series A Preferred Shares of resTORbio on the terms and conditions set forth in the various agreements and instruments set forth in *Exhibit E*.

8.2 **Sublicense Revenue.** To the extent that resTORbio receives consideration from a sublicensee for the granting of a sublicense of the licenses and rights granted to resTORbio by Novartis in this Agreement, and such consideration is not for the purpose of funding the reasonable costs directly related to research and development by resTORbio of the Compounds (such an agreement is referred to as a "Sublicense Agreement"), then resTORbio shall pay to Novartis **(x)** forty percent (40%) of the value of the consideration received by resTORbio pursuant to any Sublicense Agreement executed prior to the date that resTORbio or its sublicensee has completed the last visit in of the 40th subject of any Clinical Trial (the "40 Patient Trial Date"), and **(y)** twenty percent (20%) of the value of such consideration received by resTORbio or its sublicensee pursuant to any Sublicense Agreement executed after the 40 Patient Trial Date but executed prior to the date that resTORbio or its sublicensee has completed (last patient visit) a clinical trial or clinical trials of a Product, which studies include in the aggregate at least 400 patients (the "400 Patient Trial Date"). resTORbio shall not be required to share with Novartis any additional sublicensing consideration pursuant to this Section 8.2 received pursuant to Agreements executed after the 400 Patient Trial Date. resTORbio shall give Novartis notice of the execution of such Sublicense Agreement within 15 days after its execution and such payment shall be made within 30 days after receipt of such consideration by resTORbio. For the avoidance of doubt, in each case, Milestone Payments under Section 8.3, Sales Milestones under Section 8.4, and Royalties under Section 8.5 will continue to be due with respect to any such sublicense; *provided, however*, that resTORbio shall be entitled to offset the amount of any Milestone Payments against corresponding Milestone Payments payable to Novartis under Section 8.3(a) of this Agreement (but not Sales Milestones under Section 8.4 or Royalties under Section 8.5) pursuant to Sublicense Agreements executed prior to the 400 Patient Trial Date against amounts payable to Novartis by resTORbio under this Section 8.2 (but in no event will such set off result in a refund).

8.3 **Milestone Payments**.

(a) In further consideration of the licenses and rights granted to resTORbio hereunder, upon achievement of each of the following Milestones set forth below for a Product by resTORbio, its Affiliates, or its sublicensees (as applicable), the corresponding Milestone Payments will be payable to Novartis:

Milestone	Milestone Payment (USD)
Clinical Milestones	
[***]	$[***]
[***]	$[***]
[***]	$[***]
[***]	$[***]
Regulatory Milestones	
[***]	$[***]
[***]	$[***]
[***]	$[***]
[***]	$[***]
[***]	$[***]
[***]	$[***]

(b) Each Milestone Payment will be deemed earned as of the first achievement of the corresponding Milestone, and will be paid within 30 days after the relevant Milestone is achieved. resTORbio will provide Novartis with written notice of the achievement of each Milestone within fifteen (15) days after such Milestone is determined to have been achieved.

(c) Each Milestone in the table above will be paid only once. The total potential Milestone Payments that may be paid under this Section 8.3 is $46,100,000. For the avoidance of doubt, no additional Milestone Payments will be due for Milestones completed for the Development and Commercialization of Products that were previously achieved by a different Product for the same Indication, or for any Product intended to treat any additional Indications (by the same Product) (after the first two).

(d) In the event that a clinical Milestone is skipped for any reason and a subsequent milestone is achieved with respect to any Product (*e.g.*, if a Phase II Clinical Trial was not required for a Product and a Phase III Clinical Trial was initiated), then resTORbio shall pay the amount of the skipped clinical Milestone upon achievement of the subsequent Milestone.

8.4 Sales Milestones.

(a) resTORbio will make each of the following one time payments when worldwide Annual Net Sales of all Products in a given Calendar Year by it, its Affiliates, or their sublicenees first meet the corresponding thresholds:

Aggregate Net Sales of Products in any Calendar Year during the Royalty Term	Sales Milestone Payment (USD)
[***]	$ [***]
[***]	$ [***]
[***]	$ [***]
[***]	$ [***]
[***]	$ [***]

(b) For example, if Annual Net Sales of Products in the first Calendar Year of Net Sales equals $600 million, then both the first and second Sales Milestone Payments will be made in that year.

(c) Each Milestone Payment in the table above will be paid only once. The total potential Milestone Payments that may be paid under this Section 8.4 is $125,000,000.

(d) Each Milestone Payment will be deemed earned as of the first achievement of the corresponding sales milestone, and will be paid within 30 days after the relevant sales milestone is achieved. resTORbio will provide Novartis with written notice of the achievement of each Milestone within fifteen (15) days after such sales milestone is determined to have been achieved.

8.5 **Royalty Payments**.

(a) In consideration of the licenses and rights granted to resTORbio hereunder, during the Royalty Term, resTORbio will make royalty payments to Novartis on Net Sales of Products by resTORbio, its Affiliates and sublicensees, at the rates set forth below:

Aggregate Net Sales of Product in any Calendar Year during the Royalty Term	Royalty Rate
[***]	[***]%
[***]	[***]%
[***]	[***]%
[***]	[***]%
[***]	[***]%
[***]	[***]%

(b) For example, if Net Sales in a Calendar Year are $[***], the royalty on such Net Sales will be equal to [***]% of USD $[***], [***]% of USD $[***], [***]% of USD $[***], [***]% of USD $[***], and [***]% of USD $[***], or USD $[***].

(c) Royalties will be payable on a Product-by-Product and country-by-country basis during the Royalty Term for such Product in such country. Following the expiration of the applicable Royalty Term for a Product in a country, resTORbio licenses under this Agreement with respect to such Product in such country will continue in effect, but will become fully paid-up, royalty-free, transferable, perpetual and irrevocable. For the avoidance of doubt, royalties will be payable only once with respect to the same unit of Product.

(d) Within thirty (30) days after each Calendar Quarter during the term of this Agreement following the First Commercial Sale of a Product, resTORbio will provide to Novartis a Sales & Royalty Report. Novartis will submit an Invoice to resTORbio with respect to the royalty amount shown therein. resTORbio will pay such royalty amount within thirty (30) days after receipt of the Invoice.

(e) Notwithstanding anything to the contrary herein, in the event that, with respect to a Product in a specified country, if **(i)** the Royalty Term for such Product in such country continues solely due to clause (b) or clause (c) of the definition of Royalty Term (*i.e.*, there is no Valid Claim of a Patent Right included in the Novartis Technology Covering the Product), or **(ii)** a Generic Equivalent exists with respect to such Product in the Field in such country in a Calendar Year, [***].

8.6 **Third Party Obligations; Set Off**.

(a) *[Reserved]*.

(b) If resTORbio reasonably determines that, in order to avoid infringement of any Patent Right not licensed hereunder that covers the composition of matter or method of use of a Compound, it is required to obtain a license under such Patent Right from a Third Party in order to Commercialize a Product in the Field in a country and is required under a license agreement entered into after the Effective Date to pay a licensing fee and/or royalty to such Third Party under such license (including in connection with the settlement of a patent infringement claim), [***].

(b) [***]. Any amount that resTORbio is entitled to deduct that is reduced by this limitation will be carried forward and resTORbio may deduct such amount from royalty payments due to Novartis until the full amount that resTORbio was entitled to deduct is deducted.

8.7 Payments.

(a) All payments from resTORbio to Novartis will be made by wire transfer in US Dollars to the credit of such bank account as may be designated by Novartis in this Agreement or in writing to resTORbio. Any payment which falls due on a date which is not a business day in the location from which the payment will be made may be made on the next succeeding business day in such location.

(b) All payments under this Agreement will be payable in USD. When conversion of payments from any foreign currency is required to be undertaken by resTORbio, the USD equivalent will be calculated using resTORbio's then- current standard exchange rate methodology as applied in its external reporting. If there is no standard exchange rate methodology applied by resTORbio in its external reporting in accordance with Accounting Standards, then any amount in a currency other than USD shall be converted to USD using the exchange rate most recently quoted in the *Wall Street Journal* in New York as of the last business day of the applicable Calendar Quarter.

(c) Novartis will pay any and all taxes levied on account of any payments made to it under this Agreement. If any taxes are required to be withheld by resTORbio, resTORbio will: **(i)** deduct such taxes from the payment made to Novartis; **(ii)** timely pay the taxes to the proper taxing authority; **(iii)** send proof of payment to Novartis; and **(iv)** reasonably assist Novartis in its efforts to obtain a credit for such tax payment. Each Party will reasonably assist the other Party in lawfully claiming exemptions from and/or minimizing such deductions or withholdings under double taxation laws or similar circumstances.

(d) Without limiting any other rights or remedies available to Novartis hereunder, if resTORbio does not pay any amount due on or before the due date, any such payment shall bear interest at a rate of four percentage points (4%) above the six (6) months LIBOR for US dollars on the date the payment was due or the highest rate permitted by law (whichever is lower), computed from the date such payment was due until the date resTORbio makes the payment.

8.8 **Records and Audit Rights**.

(a) resTORbio will keep, and will cause its Affiliates and sublicensees to keep, complete, true and accurate books and records in accordance with its Accounting Standards in relation to Net Sales and royalties payable to Novartis hereunder. resTORbio will keep, and will cause its Affiliates and sublicensees to keep, such books and records for at least three (3) years following the Calendar Quarter to which they pertain.

(b) Novartis may, upon written notice to resTORbio, appoint an internationally- recognized independent accounting firm (which is reasonably acceptable to resTORbio) (the "Auditor") to inspect the relevant reports, statements, records or books of accounts (as applicable) of resTORbio or its Affiliates or sublicensees to verify the accuracy of any Sales & Royalty Report. Before beginning its audit, the Auditor will execute an undertaking reasonably acceptable to resTORbio by which the Auditor will keep confidential all Information reviewed during such audit. The Auditor will have the right to disclose to Novartis its conclusions regarding any payment owed under this Agreement.

(c) resTORbio and its Affiliates and sublicensees will make their records available for inspection by such Auditor during regular business hours at such place or places where such records are customarily kept, upon receipt of reasonable advance notice from Novartis. The records will be reviewed solely to verify the accuracy of the Sales & Royalty Reports. Such inspection right will not be exercised more than once in any Calendar Year and not more frequently than once with respect to records covering any specific period of time. In addition, Novartis will only be entitled to audit the relevant books and records of resTORbio relating to a Sales & Royalty Report for a period of three (3) Calendar Years after receipt of the applicable Sales & Royalty Report. Novartis will hold in confidence all Information received and all Information learned in the course of any audit or inspection, except to the extent necessary to enforce its rights under this Agreement or if disclosure is required by law, regulation or judicial order.

(d) The Auditor will provide its audit report and basis for any determination to resTORbio at the time such report is provided to Novartis, before it is considered final. resTORbio will have the right to request a further determination by such Auditor as to matters which resTORbio disputes

within thirty (30) days following receipt of such report. resTORbio will provide Novartis and the Auditor with a reasonably detailed statement of the grounds upon which it disputes any findings in the audit report and the Auditor will undertake to complete such further determination within thirty (30) days after the dispute notice is provided, which determination will be limited to the disputed matters. Any matter that remains unresolved will be resolved in accordance with the dispute resolution procedures contained in Section 16.5.

(e) In the event that the final result of the inspection reveals an undisputed underpayment or overpayment by resTORbio, the underpaid or overpaid amount will be settled promptly.

(f) Novartis will pay for such audits, as well as its own expenses associated with enforcing its rights with respect to any payments hereunder, except that in the event there is any upward adjustment in aggregate amounts payable for any Calendar Quarter shown by such audit of more than four percent (4%) of the amount paid, resTORbio will pay for such audit.

8.9 **No Projections**. Novartis and resTORbio acknowledge that nothing in this Agreement will be construed as representing an estimate or projection of anticipated sales of any Product, and that the Milestones and Net Sales levels set forth above or elsewhere in this Agreement or that have otherwise been discussed by the Parties are merely intended to define the Milestone Payments and royalty obligations to Novartis in the event such Milestones or Net Sales levels are achieved. *resTORbio MAKES NO REPRESENTATION OR WARRANTY, EITHER EXPRESS OR IMPLIED, THAT IT WILL BE ABLE TO SUCCESSFULLY COMMERCIALIZE ANY PRODUCT OR, IF COMMERCIALIZED, THAT ANY PARTICULAR NET SALES LEVEL OF SUCH PRODUCT WILL BE ACHIEVED.*

8.10 **Adjustment to Milestone Payments**. The Parties will collaborate in good faith to maximize the chances of the material supply as described in Section 6.1 as soon as practical.

If the material is not made available to resTORbio by April 3, 2017 (after resTORbio provides all information reasonably required by Novartis within not later than March 24, 2017), then resTORbio will receive a non-refundable credit of USD$[***] to be applied against any milestone payments under Section 8.3 or 8.4 of this Agreement.

9. INTELLECTUAL PROPERTY.

9.1 **Inventions and Know-How.** All inventions, whether or not reduced to practice, and Know- How arising from resTORbio's activities under this Agreement, including any Patent Rights covering such inventions, will be owned by resTORbio, subject to the licenses to Novartis and its Affiliates to RAD001 Improvements set forth in Section 2.3.

9.2 **Ownership of Results and Data.** All data and results arising from resTORbio's activities under this Agreement, including but not limited to Development, clinical and regulatory data and Information generated for regulatory purposes relating to a Product will be owned by resTORbio.

9.3 **Patent Prosecution**.

(a) *[Reserved]*

(b) resTORbio will have the sole right to control Prosecution and Maintenance of all RAD001 Patents, BEZ235 Patents, and BEZ235/RAD001 Combination Patents (the "Licensed Patents") at resTORbio's expense, using counsel reasonably acceptable to Novartis. resTORbio will keep Novartis informed of important issues relating to the Prosecution and Maintenance of the Novartis Patents, and will furnish to Novartis copies of documents relevant to such Prosecution and Maintenance in sufficient time, but no later than 14 days, prior to the filing of such document to allow for review and comment by Novartis and resTORbio will reasonably consider all of such comments. Novartis will cooperate with and assist resTORbio in the Prosecution and Maintenance of the Novartis Patents including by **(i)** making its relevant scientists and scientific records reasonably available and **(ii)** signing and delivering (or using reasonable efforts to have signed and delivered), subject to reimbursement of out of pocket costs by resTORbio, all documents reasonably necessary in connection with such Prosecution and Maintenance. resTORbio will notify Novartis of any decision not to continue to pay the expenses of Prosecution and Maintenance of any Novartis Patent, which notice must be delivered at least sixty (60) days prior to any payment due date. In such event, Novartis, at its sole discretion and expense, shall have the right to continue Prosecution and Maintenance of such Novartis Patent in such country and, thereafter, such Novartis Patent shall no longer be considered a Novartis Patent licensed to resTORbio in such country. In the event that Novartis undertakes such Prosecution and Maintenance, resTORbio will provide Novartis all reasonable assistance and cooperation in relation thereto, including providing any necessary powers of attorney and any other required documents or instruments.

9.4 **Third Party Infringement**.

(a) Each Party will promptly notify the other of any infringement in the Field by a Third Party of any of the Novartis Patent or misappropriation of any Novartis Know-How in the Field of which it becomes aware, including any filing of an Abbreviated New Drug Application in the United States or such similar filing under applicable law in jurisdictions other than the United States. Each Party shall provide the other Party with all available evidence supporting such infringement, suspected infringement, unauthorized use or misappropriation or suspected unauthorized use or misappropriation (collectively, "Third Party Infringement").

(b) resTORbio will have the first right to bring and control any legal action in connection with the Third Party Infringement relating to any Novartis Patent in the Field at its own expense as it reasonably determines appropriate, and Novartis will have the right, at its own expense, to be represented in any such action by counsel of its own choice. If resTORbio fails to bring an action or proceeding with respect to, or to terminate, infringement of any Novartis Patent

(i) within ninety (90) days following the notice of alleged infringement (or twenty (20) days after resTORbio receives the relevant ANDA notification), or

(ii) prior to twenty (20) days before the time limit, if any, set forth in the appropriate laws and regulations for the filing of such actions, whichever comes first, Novartis will have the right to bring and control any such action at its own expense and by counsel of its own choice, and resTORbio will have the right, at its own expense, to be represented in any such action by counsel of its own choice; *provided*, *however*, that if resTORbio notifies Novartis in writing prior to twenty (20) days before such time limit for the filing of any such action that resTORbio intends to file such action before the time limit, then resTORbio will be obligated to file such action before the time limit, and Novartis will not have the right to bring and control such action.

(c) At the request of the Party controlling the Third Party Infringement claim, the other Party will provide assistance in connection therewith, including by executing reasonably appropriate documents, access to such Party's premises and employees, cooperating reasonably in discovery and joining as a party to the action if required.

(d) In connection with any such proceeding, resTORbio will not enter into any settlement admitting the invalidity of, or otherwise impairing Novartis' rights in, the Novartis Technology without the prior written consent of Novartis, which will not be unreasonably withheld or delayed.

(e) Any recoveries resulting from such an action relating to a Third Party Infringement will be first applied against payment of each Party's costs and expenses in connection therewith. In the event that resTORbio brought such action, any remainder will be retained by resTORbio; *provided*, *however*, any such amount will be considered Net Sales hereunder and will be subject to a royalties and sales milestones (as applicable) to Novartis under this Agreement. In the event that Novartis brought such action, the remainder will be retained by Novartis.

9.5 **Patent Invalidity Claim**. If a Third Party at any time asserts a claim that any Novartis Patent is invalid or otherwise unenforceable (an "Invalidity Claim"), whether as a defense in an infringement action brought by a Party pursuant to Section 9.4, in a declaratory judgment action or any patent office proceeding anywhere in the world (e.g., inter-partes review or European opposition) or otherwise, resTORbio shall have the first right, but not the obligation, to defend such Invalidity Claim and Novartis shall cooperate with resTORbio in preparing and formulating a response to such Invalidity Claim. If resTORbio does not defend an Invalidity Claim brought against a Novartis Patent, Novartis may defend such Invalidity Claim and the coordination provisions of Section 9.4(c) will apply to such Invalidity Claim, *mutatis mutandis* as they apply to Third Party Infringement suits. Neither Party may, without the consent of the other Party, settle or compromise any Invalidity Claim in any manner which would **(a)** have an adverse effect on such other Party's rights or obligations hereunder or **(b)** be an admission of liability on behalf of the other Party (*provided*, *however*, that the Party initiating such suit may settle such suit without such consent if such settlement involves only the receipt of money from, or the payment of money to, such Third Party and the Party settling such suit makes all such

payments to such Third Party). To the extent such Invalidity Claim is raised as a defense in an infringement action brought by a Party pursuant to Section 9.4, the expense provisions of Section 9.4 will apply and counsel to the Party controlling the infringement action shall act as the ministerial liaison with the court.

9.6 **Trademarks**. resTORbio will have the right to brand the Products using resTORbio related trademarks and any other trademarks and trade names it determines appropriate for the Products, which may vary by country or within a country ("Product Marks"). resTORbio will own all rights in the Product Marks and register and maintain the Product Marks in the countries and regions it determines reasonably necessary. In no event will resTORbio use any Novartis trademarks (including but not limited to ZORTESS CERTICAN, AFINITOR, or VOTUBIA) in connection with the research, Development, or Commercialization of Compounds or Products under this Agreement

9.7 **Patent Extensions**.

(a) If requested by resTORbio, Novartis will cooperate in obtaining patent term restoration (under but not limited to the Drug Price Competition and Patent Term Restoration Act), supplemental protection certificates or their equivalents, and patent term extensions with respect to the Novartis Patents in any country and/or region where applicable. Novartis will provide all reasonable assistance requested by resTORbio, including permitting resTORbio to proceed with applications for such in the name of Novartis, if deemed appropriate by resTORbio, and executing documents and providing any relevant information to resTORbio.

(b) As between the Parties, resTORbio will in its sole discretion determine which, if any, Novartis Patents it will apply to extend; *provided*, *however*, that resTORbio will give Novartis 45 days' notice before doing so and reasonably consider any input from Novartis with respect to the extension of any Novartis Patents.

10. CONFIDENTIALITY

10.1 **Duty of Confidence**.

(a) Subject to the other provisions of this Section 10, all Information disclosed by a Party or its Affiliates under this Agreement will be maintained in confidence and otherwise safeguarded by the recipient Party. The recipient Party may only use the Information for the purposes of this Agreement and pursuant to the rights granted to the recipient Party under this Agreement. Subject to the other provisions of this Section 10, each Party will hold as confidential such Information of the other Party or its Affiliates in the same manner and with the same protection as such recipient Party maintains its own confidential information. Subject to the other provisions of this Section 10, a recipient Party may only disclose Information of the other Party to employees, agents, contractors, consultants and advisers of the Party and its Affiliates and sublicensees and to Third Parties to the extent reasonably necessary for the purposes of, and for those matters undertaken pursuant to, this Agreement; *provided* that such Persons are bound to maintain the confidentiality of the Information in a manner consistent with the confidentiality provisions of this Agreement.

(b) With respect to Novartis' obligations under this Section 10, all Novartis Know- How, to the extent relating to Compounds and Products in the Field, will be considered Information of resTORbio during the Term of the Agreement and Novartis will maintain in confidence and otherwise safeguard such Novartis Know-How as such in accordance with this Section 10 (it being understood that the exceptions in Sections 10.2(b) and (c) will not apply to Novartis with respect to Novartis Know-How); *provided, however*, that for the avoidance of doubt, all Know-How owned or Controlled by either Party about RAD001 generally and/or RAD001 outside the Field shall be deemed to be Information of Novartis.

10.2 **Exceptions**. The obligations under this Section 10 will not apply to any information to the extent the recipient Party can demonstrate by competent evidence that such information:

(a) is (at the time of disclosure) or becomes (after the time of disclosure) known to the public or part of the public domain through no breach of this Agreement by the recipient Party or its Affiliates;

(b) was known to, or was otherwise in the possession of, the recipient Party or its Affiliates prior to the time of disclosure by the disclosing Party or any of its Affiliates;

(c) is disclosed to the recipient Party or an Affiliate on a non-confidential basis by a Third Party who is entitled to disclose it without breaching any confidentiality obligation to the disclosing Party or any of its Affiliates; or

(d) is independently developed by or on behalf of the recipient Party or its Affiliates, as evidenced by its written records, without reference to the Information disclosed by the disclosing Party or its Affiliates under this Agreement.

Specific aspects or details of Information will not be deemed to be within the public domain or in the possession of the recipient Party merely because the Information is embraced by more general information in the public domain or in the possession of the recipient Party.

Further, any combination of Information will not be considered in the public domain or in the possession of the recipient Party merely because individual elements of such Information are in the public domain or in the possession of the recipient Party unless the combination and its principles are in the public domain or in the possession of the recipient Party.

10.3 **Authorized Disclosures**.

(a) In addition to disclosures allowed under Section 10.1 and 10.2, either Party may disclose Information belonging to the other Party or its Affiliates to the extent such disclosure is necessary in the following instances: **(i)** filing or prosecuting Patent Rights as permitted by this Agreement; **(ii)** in connection with

Regulatory Filings for Products; **(iii)** prosecuting or defending litigation as permitted by this Agreement; **(iv)** complying with applicable court orders or governmental regulations; **(v)** in connection with an offering of securities or securities law disclosure requirements if counsel determines that such disclosure is required; or **(vi)** to the extent otherwise necessary or appropriate in connection with exercising the license and other rights granted to it hereunder.

(b) In addition, resTORbio and its Affiliates and sublicensees may disclose Information of Novartis to Third Parties as may be necessary or useful in connection with the Development, manufacture or Commercialization of the Compounds and/or Product(s) as permitted by this Agreement, including in connection with subcontracting transactions; *provided*, *however*, that to the extent such Information relates to RAD001 (alone or in combination) and is not otherwise permitted under Section 5.1, any such disclosure shall be subject to Novartis' written approval (which will not be unreasonably withheld or delayed more than 30 days).

(c) In addition, either Party may disclose the terms of this Agreement and Information pertaining to Products in connection with an assignment or potential assignment of this Agreement, a loan, financing or investment transaction, or an acquisition, merger, consolidation or similar transaction (or for such Persons to determine their interest in performing such activities or entering into such transactions), in each case on the condition that any Third Parties to whom such disclosures are made agree to be bound by confidentiality and non-use obligations no less rigorous than those contained in this Agreement.

(d) In the event the recipient Party is required to disclose Information of the disclosing Party by law or in connection with bona fide legal process, such disclosure will not be a breach of this Agreement; provided that the recipient Party **(i)** informs the disclosing Party as soon as reasonably practicable of the required disclosure; **(ii)** limits the disclosure to the required purpose; and **(iii)** at the disclosing Party's request and expense, assists in an attempt to object to or limit the required disclosure.

10.4 **Ongoing Obligation for Confidentiality**. Upon early termination of this Agreement for any reason, each Party and its Affiliates will immediately return to the other Party or destroy any Information disclosed by the other Party, except for one copy which may be retained in its confidential files for archive purposes.

11. TERM AND TERMINATION

11.1 **Term**. The term of this Agreement will commence upon the Effective Date and continue on a country-by-country basis until the expiry of the Royalty Term in such country, unless earlier terminated as permitted by this Agreement.

11.2 **Termination for Cause**.

(a) If either Novartis or resTORbio is in material breach of any material obligation hereunder, the non-breaching Party may give written notice to the breaching Party specifying the claimed particulars of such breach, and in the event such material breach is not cured within sixty (60) days after such notice, the non- breaching Party will have the right (but not the obligation) thereafter to terminate this Agreement immediately by giving written notice to the breaching Party to such effect; *provided, however*, that if such breach is capable of being cured but cannot be cured within such sixty (60) day period and the breaching Party initiates actions to cure such breach within such period and thereafter diligently pursues such actions, the breaching Party will have an additional thirty (30) days (or such longer period agreed upon by the Parties) to cure such breach. Any termination by any Party under this Section and the effects of termination provided herein will be without prejudice to any damages or other legal or equitable remedies to which it may be entitled

(b) If resTORbio does not receive total equity or other non-dilutive (including grants and partnerships or sublicenses, but excluding debt instruments) financing of at least USD$15 million by the third anniversary of the Effective Date, then Novartis will have the right, at its discretion, to terminate this Agreement upon 90 days' advance to resTORbio, unless during such 90 day period, resTORbio receives such equity or other non-dilutive financing.

11.3 **Insolvency.** If an Insolvency Event occurs, (a) resTORbio will give immediate (not longer than three business days') notice to Novartis of such occurrence, and (b) Novartis will have the right to immediately terminate this Agreement by written notice to resTORbio**.**

11.4 **Termination by resTORbio Without Cause**. resTORbio may terminate this Agreement without cause at any time after the Effective Date in its entirety or on a Product-by-Product or country-by-country basis at any time on sixty (60) days' prior written notice.

11.5 **Partial Termination for Failure to Use Commercially Reasonable Efforts on a RAD001 Product.** If resTORbio does not use, or ceases to use, Commercially Reasonable Efforts to research, Develop, and Commercialize a Product incorporating RAD001 for a period of three years, but is otherwise not in breach of its obligation to research, Develop, and Commercialize a Product under Article 7 (*e.g.*, resTORbio is using Commercially Reasonable Efforts to research, Develop, and Commercialize a BEZ235-only Product), then Novartis will have the right to terminate the licenses and rights set forth in this Agreement with respect to RAD001 (*i.e.*, the license grants by Novartis to resTORbio, all rights of reference granted by Novartis to resTORbio relating to RAD001, all rights to RAD001 supply, *etc*.) by delivering written notice to resTORbio; *provided, however* that all other aspects of this Agreement (including the license grants to BEZ235 and all rights of reference to BEZ235) as well as the license to Novartis to RAD001 Improvements will survive such a termination.

11.6 **Rights in Bankruptcy**. The Parties acknowledge that this Agreement constitutes an executory contract under Section 365 of the Code for the license of "intellectual property" as defined under Section 101 of the Code and constitutes a license of "intellectual property" for purposes of any similar laws in any other country. The Parties further acknowledge that resTORbio, as licensee of such rights under this Agreement, will retain and may fully exercise all of its protections, rights and elections under the Code, including, but not limited to, Section 365(n) of the Code, and any similar laws in any other country. In the event of the commencement of a bankruptcy proceeding by or against Novartis under the Code and any similar laws in any other country, resTORbio will be entitled to a complete duplicate of

(or complete access to, as appropriate) any such intellectual property and all embodiments of such intellectual property, and the same, if not already in its possession, will be promptly delivered to it **(a)** upon any such commencement of a bankruptcy proceeding upon its written request therefor, unless Novartis elects to continue to perform all of its obligations under this Agreement, or **(b)** if not delivered under (a) above, following the rejection of this Agreement by or on behalf of Novartis upon written request therefor by resTORbio. All rights, powers and remedies of resTORbio provided for in this Section 11.6 are in addition to and not in substitution for any and all other rights, powers and remedies now or hereafter existing at law or in equity (including, without limitation, under the Code and any similar laws in any other country).

12. EFFECT OF TERMINATION

12.1 **Termination by resTORbio for Cause**. Upon termination of this Agreement by resTORbio pursuant to Section 11.2:

(a) the licenses and other rights granted by Novartis to resTORbio under the Novartis Technology and the covenant not to sue set forth in Section 2.4 will terminate and resTORbio shall not have any rights to use or exercise any rights under the Novartis Technology; and

(b) except as set forth in this Section and in Section 12.3, the rights and obligations of the Parties hereunder will terminate as of the date of such termination.

12.2 **Termination by Novartis for Cause or by resTORbio Without Cause**. Upon termination of this Agreement by Novartis pursuant to Section 11.2 or Section 11.3 or by resTORbio pursuant to Section 11.4:

(a) all licenses and other rights granted by Novartis to resTORbio under the Novartis Technology will terminate and resTORbio shall not have any rights to use or exercise any rights under the Novartis Technology

(b) the license to RAD001 Improvements will remain in full force and effect;

(c) the provisions of Article 9 will terminate;

(d) within thirty (30) days of termination, resTORbio will provide to Novartis a fair and accurate summary report of the status of the Development, manufacture and Commercialization of all Compounds and Products in the Field in each country through the effective date of termination;

(e) resTORbio will grant, and hereby does grant, to Novartis and its Affiliates, solely for the Development, manufacture and Commercialization of Products in the Field, a perpetual, irrevocable, exclusive, worldwide, fully paid-up license,with the right to grant sublicenses, under all Patent Rights and Know-How Controlled by resTORbio and its Affiliates and sublicensees as of the effective date of termination, that are specifically related to the Development, manufacture and Commercialization of Products in the Field;

(f) to the extent permitted by applicable law, resTORbio will transfer to Novartis or its designee, solely for the Development, manufacture and Commercialization of Products in the Field, all right, title, and interest in and to all preclinical and clinical data, and all other supporting data, including pharmacology, toxicology, chemistry and biology data, and documented technical and other information or materials Controlled by resTORbio and its Affiliates and sublicensees to the extent related to the Development, manufacture and Commercialization of Products in the Field; *provided* that resTORbio may retain a single copy of such items for its records as required by applicable law;

(g) to the extent permitted by applicable law, resTORbio will transfer to Novartis or its designee all Regulatory Filings, Regulatory Approvals (including reimbursement and pricing approvals), the contents of any global safety database, records of all interactions with Regulatory Authorities, in each case to the extent related to Products in the Field, that resTORbio and its Affiliates and sublicensees Control as of the effective date of such termination. If resTORbio is restricted under applicable law from transferring ownership of any of the foregoing items to Novartis or its designee, resTORbio will grant, and hereby does grant, to Novartis (or its designee) a right of reference or use to such item. resTORbio will take all permitted actions reasonably necessary to effect such transfer or grant of right of reference or use to Novartis or its designee;

(h) to the extent reasonably requested by Novartis, resTORbio will transfer to Novartis any license agreements or other contracts between resTORbio or any of its Affiliates and any Third Party that are specific to the Products in the Field (including, as applicable, clinical trial and manufacturing agreements), to the extent such agreements are in effect as of the effective date of termination and such assignment or transfer is permitted at no cost or expense to resTORbio, and to facilitate introductions of Novartis to the applicable subcontractors, licensors, manufacturing vendors, clinical trial sites, clinical trial investigators and the like;

(i) Novartis will have the right to purchase from resTORbio all of the inventory of the Products held by resTORbio and its Affiliates and sublicensees as of the effective date of termination at a price equal to resTORbio's actual manufacturing cost, determined in accordance with Accounting Standards, but only if such Products meet the applicable release specifications;

(j) for a period of six (6) months following the effective date of termination, resTORbio will provide such assistance as may be reasonably necessary to transfer manufacturing documents and materials that are used by resTORbio and its Affiliates and sublicensees (or their subcontractor(s)) in the manufacture of Products, and cooperate with Novartis in reasonable respects to transfer to Novartis, or Novartis' designated contract manufacturer, the manufacturing technologies (including all relevant Know-How) that are used in the manufacture of the Products;

(k) Novartis will pay to resTORbio, on a Product-by-Product basis for each Product for which a Phase III Clinical Trial had been Initiated prior to the effective date of termination, royalties on Net Sales of such Product by or under the authority

of Novartis, its Affiliates or licensees or sublicensees, at fifty percent (50%) of the rates set forth in Section 8 in accordance with the same schedule and other terms and conditions as resTORbio would have otherwise been obligated to pay royalties to Novartis for Products under Article 8, *mutatis mutandis* (including, for the avoidance of doubt, provisions relating to reductions in royalty rates arising from a loss of Patent Rights, set offs for in-licensed Third Party intellectual property, *etc*.);

(l) except as set forth in this Section and in Section 12.3, the rights and obligations of the Parties hereunder will terminate as of the date of such termination;

(m) Novartis will thereafter indemnify, defend and hold resTORbio and the resTORbio Indemnitees harmless in the manner forth in Section 14.2(a) as if Novartis were resTORbio and the resTORbio Indemnitees were the Novartis Indemnitees, *mutatis mutandis* for all claims arising after the effective date of such termination, and resTORbio's indemnification obligations under that Section 14.2(a) shall thereupon cease for claims arising after the effective date of such termination; and

(n) Section 2.4 will terminate.

12.3 **Survival**. Expiration or termination of this Agreement will not relieve the Parties of any obligation accruing prior to such expiration or termination. Without limiting the foregoing, the provisions of Article 1, 11, 12, 14, and 16 will survive expiration or termination of this Agreement. The provisions of Article 10 (Confidentiality) will survive the termination or expiration of this Agreement for a period of ten (10) years.

12.4 **Termination Not Sole Remedy**. Termination is not the sole remedy under this Agreement and, whether or not termination is effected and notwithstanding anything contained in this Agreement to the contrary, all other remedies will remain available except as agreed to otherwise herein. For the avoidance of doubt, nothing in this Agreement shall obligate a Party to terminate this Agreement in the event that the other Party breaches any obligation of this Agreement, and failure to terminate this Agreement shall not prohibit or modify the recovery of damages pursuant to Section 16.5.

12.5 **Termination of RAD001 License Only.** If Novartis terminates the license with respect to RAD001 only pursuant to Section 11.5, then the provisions of Section 12.2(a) through 12.2(o) will apply, but only with respect to RAD001.

13. REPRESENTATIONS, WARRANTIES AND COVENANTS

13.1 **Representations and Warranties by Each Party**. Each Party represents and warrants to the other as of the Effective Date that:

(a) it is a corporation duly organized, validly existing, and in good standing under the laws of its jurisdiction of formation;

(b) it has full corporate power and authority to execute, deliver, and perform this Agreement, and has taken all corporate action required by law and its organizational documents to authorize the execution and delivery of this Agreement and the consummation of the transactions contemplated by this Agreement;

(c) this Agreement constitutes a valid and binding agreement enforceable against it in accordance with its terms, except as enforceability may be limited by bankruptcy, fraudulent conveyance, insolvency, reorganization, moratorium and other laws relating to or affecting creditors' rights generally and by general equitable principles and public policy constraints (including those pertaining to limitations and/or exclusions of liability, competition laws, penalties and jurisdictional issues including conflicts of laws);

(d) all consents, approvals and authorizations from all governmental authorities or other Third Parties required to be obtained by such Party in connection with this Agreement have been obtained;

(e) the execution and delivery of this Agreement and all other instruments and documents required to be executed pursuant to this Agreement, and the consummation of the transactions contemplated hereby do not and will not **(i)** conflict with or result in a breach of any provision of its organizational documents; **(ii)** result in a breach of any agreement to which it is a party; or **(iii)** violate any law; and

(f) neither such Party nor, to the actual knowledge of such Party, any employee, agent or subcontractor of such Party involved or to be involved in the Development of the Compounds or the Products has been debarred under Subsection (a) or (b) of Section 306 of the Federal Food, Drug and Cosmetic Act (21 U.S.C. 335a).

13.2 **Covenants by resTORbio**.

(a) No Person who is known by resTORbio **(a)** to have been debarred under Subsection (a) or (b) of Section 306 of said Act, or **(b)** to be on any of the FDA clinical investigator enforcement lists (including, but not limited to, the **(i)** Disqualified/Totally Restricted List, **(ii)** Restricted List and **(iii)** Adequate Assurances List), will be employed by or on behalf of resTORbio or its Affiliates or otherwise participate in the performance of any activities hereunder; and

(b) resTORbio will maintain, general liability insurance with limits not less than those reasonably suited to address claims that could reasonably arise from the Development and Commercialization of pharmaceutical products (and in any event with combined limits of not less than $1,000,000 per occurrence and $1,000,000 per accident for bodily injury, including death, and property damage). At Novartis' written request, resTORbio will provide Novartis with evidence of resTORbio's insurance. resTORbio will name Novartis as an additional insured party under such insurance policy, and will provide to Novartis at least 30 days prior written notice of any change or cancellation to resTORbio's insurance program.

13.3 **Representations and Warranties by Novartis**. Novartis represents and warrants to resTORbio as of the Effective Date that:

(a) *Exhibit B* sets forth a true and correct list of all Novartis Patents as of the Effective Date having claims covering the Compounds or the Products in the Field;

(b) Novartis is the sole and exclusive owner, or exclusive licensee of all of the Novartis Patents free from encumbrances; *provided, however*, that University of Pennsylvania co-owns or has rights to certain Patent Rights relating to the use of BEZ235 and RAD001 in conjunction with CAR-T cell therapies;

(c) Novartis has the right to grant to resTORbio the licenses under the Novartis Technology that it purports to grant hereunder;

(d) Novartis has the right to use and disclose and to enable resTORbio to use and disclose (in each case under appropriate conditions of confidentiality) the Novartis Know-How free from encumbrances;

(e) Novartis has filed and prosecuted patent applications within the Novartis Patents in good faith and complied with all duties of disclosure with respect thereto;

(f) Novartis has not granted to any Third Party, including any academic organization or agency, any rights to the Compounds or Products in the Field; *provided, however*, that Novartis has granted rights to the University of Pennsylvania to use BEZ235 and RAD001 in connection with CAR-T cell therapies;

(g) Novartis has not received any written notice alleging that the Development, registration, manufacture, use or Commercialization of the Compounds or Products infringes the Patent Rights or misappropriates the Know-How of any Third Party; *provided, however*, that no representation or warranty is given with respect to RAD001 alone (*i.e.*, other than in combination with BEZ235).

(h) Novartis has not initiated or been involved in any proceedings or Claims in which it alleges that any Third Party is or was infringing or misappropriating any Novartis Technology relating to BEZ235 or BEZ235 in combination with RAD001, nor have any such proceedings been threatened by Novartis, nor does Novartis have any actual knowledge of a valid basis for any such proceedings; *provided*, *however*, that for the avoidance of doubt, no representation or warranty is given with respect to RAD001 alone (*i.e.*, other than in combination with BEZ235).

(i) Novartis has taken precautions, consistent with its usual business practice, to preserve the confidentiality of the Novartis Know-How;

(j) Novartis has not entered into a government funding relationship that would result in rights to any Compounds or Products residing in the US Government, National Institutes of Health, National Institute for Drug Abuse or other agency, and the licenses granted hereunder are not subject to overriding obligations to the US Government as set forth in Public Law 96 517 (35 U.S.C. 200-204), as amended, or any similar obligations under the laws of any other country; and

(k) **(i)** Novartis has not granted any Third Party rights that would otherwise interfere or be inconsistent with resTORbio's rights hereunder, **(ii)** there are no agreements or arrangements to which Novartis or any of its Affiliates is a party relating to the Products, Compounds, Novartis Patents, or Novartis Know-How that would materially limit the rights granted to resTORbio under this Agreement or that materially restrict or will result in a material restriction on resTORbio's ability to Develop, manufacture or Commercialize the Compounds and the Products in the Field, and **(iii)** Novartis shall not following the Effective Date grant, any license, sublicense or other right to exploit any rights that would prevent it from granting the licenses granted to resTORbio under this Agreement in the Field.

13.4 **Covenants of Novartis**. Novartis covenants that:

(a) it will not grant any interest in the Novartis Patents or Novartis Know-How which is inconsistent with the terms and conditions of this Agreement; and

(b) if, at any time after execution of this Agreement, it becomes aware that it or any employee, agent or subcontractor of Novartis who participated in the Development or manufacture of a Compound or Product is on, or is being added to the FDA Debarment List or any of the three FDA Clinical Investigator Restriction Lists referenced in Section 13.1(f), it will provide written notice of this to resTORbio within five (5) days of its becoming aware of this fact.

13.5 **No Other Warranties**. Except as expressly provided in this Article 13, the Novartis Technology is licensed hereunder "as is". Nothing in this Agreement shall be construed as a representation made or warranty given by Novartis that it will be successful in prosecuting any Novartis Patents, that any patents will issue based on pending applications or that any such pending applications or patents issued thereon will be valid. *EXCEPT AS EXPRESSLY STATED IN THIS SECTION 13, **(A)** NO REPRESENTATION, CONDITION OR WARRANTY WHATSOEVER IS MADE OR GIVEN BY OR ON BEHALF OF NOVARTIS OR NOVARTIS; AND **(B)** ALL OTHER CONDITIONS AND WARRANTIES WHETHER ARISING BY OPERATION OF LAW OR OTHERWISE ARE HEREBY EXPRESSLY EXCLUDED, INCLUDING ANY CONDITIONS AND WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON- INFRINGEMENT.*

14. INDEMNIFICATION; LIABILITY

14.1 **Indemnification by Novartis**. Novartis will indemnify and hold resTORbio, its Affiliates, and their respective officers, directors and employees ("resTORbio Indemnitees") harmless from and against any Claims against them to the extent arising or resulting from the breach of any of the covenants, warranties or representations made by Novartis to resTORbio under this Agreement; *provided, however*, that Novartis will not be obliged to so indemnify, defend and hold harmless the resTORbio Indemnitees for any Claims for which resTORbio has an obligation to indemnify Novartis Indemnitees pursuant to Section 14.2 or to the extent that such Claims arise from the breach, negligence or willful misconduct of resTORbio or the resTORbio Indemnitees.

14.2 **Indemnification by resTORbio**. resTORbio will indemnify and hold Novartis, its Affiliates, and their respective officers, directors and employees ("Novartis Indemnitees") harmless from and against any Claims against them to the extent arising or resulting from:

(a) actions by resTORbio, its Affiliates and sublicensees, and their respective employees, agents and subcontractors, in connection with the Development, manufacture or Commercialization of the Compounds or Products, including, for the avoidance of doubt, all product liability claims (whether arising during Development or Commercialization) relating to any Compound or Product (whether pursuant to design defect, manufacturing defect, failure to notify, or otherwise); or

(b) the breach of any of the covenants, warranties, or representations made by resTORbio to Novartis under this Agreement;

provided, *however*, that resTORbio will not be obliged to so indemnify, defend and hold harmless the Novartis Indemnitees for any Claims for which Novartis has an obligation to indemnify resTORbio Indemnitees pursuant to Section 14.1 or to the extent that such Claims arise from the breach, negligence or willful misconduct of Novartis or the Novartis Indemnitees.

14.3 **Indemnification Procedure**.

(a) For the avoidance of doubt, all indemnification claims in respect of a resTORbio Indemnitee or Novartis Indemnitee will be made solely by resTORbio or Novartis, respectively.

(b) A Party seeking indemnification hereunder ("Indemnified Party") will notify the other Party ("Indemnifying Party") in writing reasonably promptly after the assertion against the Indemnified Party of any Claim or fact in respect of which the Indemnified Party intends to base a claim for indemnification hereunder ("Indemnification Claim Notice"), but the failure or delay to so notify the Indemnifying Party will not relieve the Indemnifying Party of any obligation or liability that it may have to the Indemnified Party, except to the extent that the Indemnifying Party demonstrates that its ability to defend or resolve such Claim is adversely affected thereby. The Indemnification Claim Notice will contain a description of the claim and the nature and amount of the Claim (to the extent that the nature and amount of such Claim is known at such time). Upon the request of the Indemnifying Party, the Indemnified Party will furnish promptly to the Indemnifying Party copies of all correspondence, communications and official documents (including court documents) received or sent in respect of such Claim.

(c) Subject to the provisions of Sections (d) and (e) below, the Indemnifying Party will have the right, upon written notice given to the Indemnified Party within thirty (30) days after receipt of the Indemnification Claim Notice to assume the defense and handling of such Claim, at the Indemnifying Party's sole expense, in which case the provisions of Section 14.3(d) below will govern. The assumption of the defense of a Claim by the Indemnifying Party will not be construed as acknowledgement that the Indemnifying Party is liable to

indemnify any indemnitee in respect of the Claim, nor will it constitute a waiver by the Indemnifying Party of any defenses it may assert against any Indemnified Party's claim for indemnification. In the event that it is ultimately decided that the Indemnifying Party is not obligated to indemnify or hold an Indemnitee harmless from and against the Claim, the Indemnified Party will reimburse the Indemnifying Party for any and all costs and expenses (including attorneys' fees and costs of suit) and any losses incurred by the Indemnifying Party in its defense of the Claim. If the Indemnifying Party does not give written notice to the Indemnified Party, within thirty (30) days after receipt of the Indemnification Claim Notice, of the Indemnifying Party's election to assume the defense and handling of such Claim, the provisions of Section 14.3(e) below will govern.

(d) Upon assumption of the defense of a Claim by the Indemnifying Party: **(i)** the Indemnifying Party will have the right to and will assume sole control and responsibility for dealing with the Claim; **(ii)** the Indemnifying Party may, at its own cost, appoint as counsel in connection with conducting the defense and handling of such Claim any law firm or counsel reasonably selected by the Indemnifying Party; **(iii)** the Indemnifying Party will keep the Indemnified Party informed of the status of such Claim; and **(iv)** the Indemnifying Party will have the right to settle the Claim on any terms the Indemnifying Party chooses; *provided*, *however*, that it will not, without the prior written consent of the Indemnified Party, agree to a settlement of any Claim which could lead to liability or create any financial or other obligation on the part of the Indemnified Party for which the Indemnified Party is not entitled to indemnification hereunder or which admits any wrongdoing or responsibility for the claim on behalf of the Indemnified Party. The Indemnified Party will cooperate with the Indemnifying Party and will be entitled to participate in, but not control, the defense of such Claim with its own counsel and at its own expense. In particular, the Indemnified Party will furnish such records, information and testimony, provide witnesses and attend such conferences, discovery proceedings, hearings, trials and appeals as may be reasonably requested in connection therewith. Such cooperation will include access during normal business hours by the Indemnifying Party to, and reasonable retention by the Indemnified Party of, records and information that are reasonably relevant to such Claim, and making the Indemnified Party, the Indemnitees and its and their employees and agents available on a mutually convenient basis to provide additional information and explanation of any records or information provided.

(e) If the Indemnifying Party does not give written notice to the Indemnified Party as set forth in Section 14.3(c) or fails to conduct the defense and handling of any Claim in good faith after having assumed such, the Indemnified Party may, at the Indemnifying Party's expense, select counsel reasonably acceptable to the Indemnifying Party in connection with conducting the defense and handling of such Claim and defend or handle such Claim in such manner as it may deem appropriate. In such event, the Indemnified Party will keep the Indemnifying Party timely apprised of the status of such Claim and will not settle such Claim without the prior written consent of the Indemnifying Party, which consent will not be unreasonably withheld. If the Indemnified Party defends or handles such Claim, the Indemnifying Party will cooperate with the Indemnified Party, at the Indemnified Party's request but at no expense to the Indemnified Party, and will be entitled to participate in the defense and handling of such Claim with its own counsel and at its own expense.

14.4 **Mitigation of Loss**. Each Indemnified Party will take and will procure that its Affiliates take all such reasonable steps and action as are necessary or as the Indemnifying Party may reasonably require in order to mitigate any Claims (or potential losses or damages) under this Section 14. Nothing in this Agreement will or will be deemed to relieve any Party of any common law or other duty to mitigate any losses incurred by it.

14.5 **Special, Indirect and Other Losses**. *NEITHER PARTY NOR ANY OF ITS AFFILIATES SHALL BE LIABLE IN CONTRACT, TORT, NEGLIGENCE BREACH OF STATUTORY DUTY OR OTHERWISE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES OR FOR ANY ECONOMIC LOSS OR LOSS OF PROFITS SUFFERED BY THE OTHER PARTY, EXCEPT TO THE EXTENT ANY SUCH DAMAGES ARE REQUIRED TO BE PAID TO A THIRD PARTY AS PART OF A CLAIM FOR WHICH A PARTY PROVIDES INDEMNIFICATION UNDER THIS SECTION 14.*

15. PUBLICATIONS AND PUBLICITY

15.1 **Publications**.

(a) Each Party and its Affiliates shall have the right to make disclosures pertaining to a Compound or Product to Third Parties in publications in accordance with the following procedure: The publishing Party will provide the non-publishing Party with an advance copy of the proposed publication, and the other Party will then have thirty (30) days prior to submission of any publication in which to recommend any changes it reasonably believes are necessary to preserve any Patent Rights or Know-How Controlled by or licensed to the non-publishing Party in whole or in part to the non-publishing Party. If the non-publishing Party informs the publishing Party that such Publication, in the non-publishing Party's reasonable judgment, could be expected to have a material adverse effect on any patentable invention owned by or licensed, in whole or in part, to the

non-publishing Party (other than pursuant to a license granted under this Agreement), or on any Know-How which is Information of the non-publishing Party, or which could have a material adverse effect on the Development or Commercialization of a Product, the publishing Party shall delay or prevent such publication as follows: **(i)** with respect to a patentable invention, such publication shall be delayed sufficiently long (not to exceed sixty (60) days) to permit the timely preparation and filing of a patent application; and **(ii)** with respect to Know-How which is Information of such non-publishing Party or which could have a material adverse effect on the Development or Commercialization of a Product, such Know-How or Information shall be deleted from the publication.

(b) For the avoidance of doubt, resTORbio or any of its Affiliates may, without any required consents from Novartis publish or have published information about clinical trials related to the Products, including the results of such clinical trials, as required by applicable law or regulation.

15.2 **Publicity**.

(a) Neither Party will use the name, symbol, trademark, trade name or logo of the other Party or its Affiliates in any press release, publication or other form of public disclosure without the prior written consent of the other Party in each instance except for those disclosures for which consent has already been obtained.

(b) resTORbio may issue a press release, in the form attached as *Exhibit F*, having provided notice to Novartis within two (2) business days ahead of the release, to announce the execution of this Agreement. Except as required by judicial order or applicable law, or as set forth below, neither Party shall make any public announcement concerning this Agreement beyond the scope of the initial press release without the prior written consent of the other Party. For the avoidance of doubt, **(i)** resTORbio may issue press releases and other public statements as it deems appropriate in connection with the Development and Commercialization of Products under this Agreement (so long as such release is not issued as a joint release with Novartis, Novartis' name is not in the title of such release, and no quotes from Novartis personnel are included), and **(ii)** Novartis may issue press releases and other public statements required by securities law disclosure requirements in connection with the achievement of Milestones under this Agreement.

(c) Either Party may also disclose the existence and terms of this Agreement in confidence to its attorneys and advisors, and to potential acquirors (and their respective professional advisors), in connection with a potential merger, acquisition or reorganization and to existing and potential investors or lenders of such Party, as a part of their due diligence investigations, or to existing and potential sublicensees or to permitted sublicensees and assignees, or to any other Person described in Section 10.3(c) or this 15.2(c), in each case under an agreement to keep the terms of this Agreement confidential under terms of confidentiality and non-use substantially no less rigorous than the terms contained in this Agreement and to use such information solely for the purpose permitted pursuant to Section 10.3(c) or this 15.2(c).

(d) Notwithstanding the foregoing, each Party may make any disclosures required of it to comply with any duty of disclosure it may have pursuant to law or governmental regulation or pursuant to the rules of any recognized stock exchange. If a disclosure required by law, governmental regulation or the rules of any recognized stock exchange, the Parties will coordinate with each other with respect to the timing, form and content of such required disclosure. If so requested by the other Party, the Party subject to such obligation will use commercially reasonable efforts to obtain an order protecting to the maximum extent possible the confidentiality of such provisions of this Agreement as reasonably requested by the other Party. If the Parties are unable to agree on the form or content of any required disclosure, such disclosure will be limited to the minimum required as determined by the disclosing Party in consultation with its legal counsel. Without limiting the foregoing, each Party will consult with the other Party on the provisions of this Agreement, together with exhibits or other attachments attached hereto, to be redacted in any filings made by Novartis or resTORbio with the Securities and Exchange Commission (or other regulatory body) or as otherwise required by law.

16. GENERAL PROVISIONS

16.1 **Assignment**. Neither Party may assign its rights and obligations under this Agreement without the other Party's prior written consent, except that either Party may **(i)** assign its rights and obligations under this Agreement or any part hereof to one or more of its Affiliates; or **(ii)** assign this Agreement in its entirety to a successor to all or substantially all of its business or assets to which this Agreement relates. Any permitted assignee will assume all obligations of its assignor under this Agreement (or related to the assigned portion in case of a partial assignment). Any attempted assignment in contravention of the foregoing will be void. Subject to the terms of this Agreement, this Agreement will be binding upon and inure to the benefit of the Parties and their respective successors and permitted assigns.

16.2 **Extension to Affiliates**. resTORbio will have the right to extend the rights, immunities and obligations granted in this Agreement to one or more of its Affiliates. All applicable terms and provisions of this Agreement will apply to any such Affiliate to which this Agreement has been extended to the same extent as such terms and provisions apply to resTORbio. resTORbio will remain primarily liable for any acts or omissions of its Affiliates.

16.3 **Severability**. Should one or more of the provisions of this Agreement become void or unenforceable as a matter of law, then this Agreement will be construed as if such provision were not contained herein and the remainder of this Agreement will be in full force and effect, and the Parties will use their commercially reasonable efforts to substitute for the invalid or unenforceable provision a valid and enforceable provision which conforms as nearly as possible with the original intent of the Parties.

16.4 **Governing Law and Jurisdiction**. This Agreement will be governed by and construed under the laws of the Commonwealth of Massachusetts, USA, without giving effect to the conflicts of laws provision thereof. The United Nations Convention on Contracts for the International Sale of Goods (1980) will not apply to the interpretation of this Agreement.

16.5 **Dispute Resolution**.

(a) In the event of a dispute under this Agreement, the Parties will refer the dispute to the Alliance Managers for discussion and resolution. If the Alliance Managers are unable to resolve such a dispute within thirty (30) days of the dispute being referred to them, either Party may require that the Parties forward the matter to the Senior Officers (or designees with similar authority to resolve such dispute), who will attempt in good faith to resolve such dispute. If the Senior Officers cannot resolve such dispute within thirty (30) days of the matter being referred to them, either Party will be free to initiate the arbitration proceeding outlined in Section 16.5(b) to resolve the matter.

(b) Any unresolved disputes between the Parties relating to, arising out of or in any way connected with this Agreement or any term or condition hereof, or the performance by either Party of its obligations hereunder, whether before or after termination of this Agreement, will be resolved by final and binding arbitration. Whenever a Party decides to institute arbitration proceedings, it will give written notice to that effect to the other Party. Arbitration will be held in Boston,

Massachusetts, USA, in accordance with the commercial arbitration rules of the International Chamber of Commerce ("ICC"). The arbitration will be conducted by a panel of three arbitrators appointed in accordance with ICC rules; *provided* that each Party will within fifteen (15) days after the institution of the arbitration proceedings appoint an arbitrator, and such arbitrators will together, within thirty (30) days, select a third arbitrator as the chair of the arbitration panel, and each arbitrator will have significant experience in the biopharmaceutical industry. If the two initial arbitrators are unable to select a third arbitrator within such thirty (30) day period, the third arbitrator will be appointed in accordance with ICC rules. The arbitrators will render their opinion within forty-five (45) days of the final arbitration hearing. No arbitrator (nor the panel of arbitrators) will have the power to award punitive damages or to award costs and expenses of the proceeding or reasonable attorney's fees to any Party under this Agreement and such award is expressly prohibited. Decisions of the panel of arbitrators will be final and binding on the Parties. Judgment on the award so rendered may be entered in any court of competent jurisdiction.

16.6 **Force Majeure**. In the event that either Party is prevented from performing its obligations under this Agreement as a result of any contingency beyond its reasonable control ("Force Majeure"), including but not limited to, any actions of governmental authorities or agencies, war, hostilities between nations, civil commotions, riots, national industry strikes, lockouts, sabotage, shortages in supplies, energy shortages, fire, floods and acts of nature such as typhoons, hurricanes, earthquakes, or tsunamis, the Party so affected will not be responsible to the other Party for any delay or failure of performance of its obligations hereunder, for so long as Force Majeure prevents such performance. In the event of Force Majeure, the Party immediately affected thereby will give prompt written notice to the other Party specifying the Force Majeure event complained of, and will use commercially reasonable efforts to resume performance of its obligations. Notwithstanding the foregoing, if such a Force Majeure induced delay or failure of performance continues for a period of more than three (3) consecutive months, either Party may terminate this Agreement upon written notice to the other Party.

16.7 **Waivers and Amendments**. The failure of any Party to assert a right hereunder or to insist upon compliance with any term or condition of this Agreement will not constitute a waiver of that right or excuse a similar subsequent failure to perform any such term or condition by the other Party. No waiver will be effective unless it has been given in writing and signed by the Party giving such waiver. No provision of this Agreement may be amended or modified other than by a written document signed by authorized representatives of each Party.

16.8 **Relationship of the Parties**. Nothing contained in this Agreement will be deemed to constitute a partnership, joint venture, or legal entity of any type between Novartis and resTORbio, or to constitute one as the agent of the other. Moreover, each Party will not construe this Agreement, or any of the transactions contemplated hereby, as a partnership for any tax purposes. Each Party will act solely as an independent contractor, and nothing in this Agreement will be construed to give any Party the power or authority to act for, bind, or commit the other.

16.9 **Notices**. All notices, consents, waivers, and other communications under this Agreement must be in writing and will be deemed to have been duly given when: **(a)** delivered by hand (with written confirmation of receipt); or **(b)** when received by the addressee, if sent by an internationally recognized overnight delivery service (receipt requested), in each case to the appropriate addresses set forth below (or to such other addresses as a Party may designate by notice):

If to resTORbio:

resTORbio, Inc.
501 Boylston Street, Suite 6102
Boston, Massachusetts 02116 USA
Attn: Chief Executive Officer with

a required copy to:

Choate, Hall & Stewart LLP
Two International Place
Boston, MA 02110 USA
Attn: Robert A. Licht, Esq.

If to Novartis:

Novartis International Pharmaceutical Ltd
Lichtstrasse 35
CH-4056 Basel
Switzerland

with a required copy to:

Novartis Institutes for BioMedical Research, Inc.
250 Massachusetts Avenue
Cambridge, MA 02139 USA
Attn: General Counsel

16.10 **Further Assurances**. resTORbio and Novartis will execute, acknowledge and deliver any and all such other documents and take any such other action as may be reasonably necessary to carry out the intent and purposes of this Agreement.

16.11 **Compliance with Law**. Each Party will perform its obligations under this Agreement in accordance with all applicable laws. No Party will, or will be required to, undertake any activity under or in connection with this Agreement which violates, or which it believes, in good faith, may violate, any applicable law.

16.12 **No Third Party Beneficiary Rights**. The provisions of this Agreement are for the sole benefit of the Parties and their successors and permitted assigns, and they will not be construed as conferring any rights to any Third Party (including any third party beneficiary rights).

16.13 **Expenses**. Except as otherwise expressly provided in this Agreement, each Party will pay the fees and expenses of its respective lawyers and other experts and all other expenses and costs incurred by such Party incidental to the negotiation, preparation, execution and delivery of this Agreement.

16.14 **Entire Agreement**. This Agreement, together with its Exhibits and schedules, sets forth the entire agreement and understanding of the Parties as to the subject matter hereof and supersedes all proposals, oral or written, and all other prior communications between the Parties with respect to such subject matter, including the Prior Confidentiality Agreement. In the event of any conflict between a substantive provision of this Agreement and any Exhibit or schedule hereto, the substantive provisions of this Agreement will prevail.

16.15 **Counterparts**. This Agreement may be executed in two or more counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument. Signatures provided by facsimile transmission or in Adobe™ Portable Document Format (.pdf) sent by electronic mail shall be deemed to be original signatures.

16.16 **Cumulative Remedies**. No remedy referred to in this Agreement is intended to be exclusive, but each will be cumulative and in addition to any other remedy referred to in this Agreement or otherwise available under law.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties, intending to be bound, have caused this Agreement to be executed by their duly authorized representatives.

NOVARTIS INTERNATIONAL

PHARMACEUTICAL LTD.

By: /s/ Felix R. Ehrat
Name: Felix R. Ehrat
Title: Group General Counsel

By: /s/ Lars Windhorn

Name: Lars Windhorn

Title: Head Finance
NIBR Europe

RESTORBIO, INC.

By: /s/ Chen Schor
Name: Chen Schor
Title:

COMPOUNDS

BEZ235:

The chemical name of BEZ235 is:

[***]

The molecular formula of the freebase is [***]. The molar mass of the freebase is [***] $g \cdot mol^{-1}$. The structural formula of the freebase is:

[***]

RAD001:

everolimus, an inhibitor of mammalian target of rapamycin (mTOR), is an antineoplastic agent.

The chemical name of everolimus is
[***].

The molecular formula is [***] and the molecular weight is [***]. The structural formula is:

[***]

[***]

EXHIBIT B-1—[***]

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Exhibit B-3—[***]

Case reference	Internal Title	Country	Filing Number	Grant Number	Name
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Case reference	Internal Title	Country	Filing Number	Grant Number	Name
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Case reference	Internal Title	Country	Filing Number	Grant Number	Name
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EXHIBIT C

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EXHIBIT D

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AMENDMENT TO OFFER LETTER

This AMENDMENT TO OFFER LETTER (the "Amendment") is made by and between reSTORbio, Inc., a Delaware corporation (the "Company") and Joan Mannick, M.D. (the "Executive"), and is effective as of the closing of the Company's first underwritten public offering of its equity securities pursuant to an effective registration statement under the Securities Act of 1933, as amended (the "Effective Date"). Capitalized terms used and not defined herein shall have the meanings ascribed to such terms in the Offer Letter (as defined below).

WHEREAS, the Company and the Executive entered into an Offer Letter dated March 31, 2017 (the "Offer Letter") and desire to amend the Offer Letter as set forth herein; and

WHEREAS, except as expressly provided in this Amendment, all other terms of the Offer Letter shall continue in full force and effect on and after the date of this Amendment.

1. Section 3(a) shall be amended by (i) deleting "$318,250.00" and replacing it with "$360,000.00" and (ii) deleting the last sentence of such section.

2. Section 5(a)(iii) of the Offer Letter shall be amended by deleting the phrase "including without limitation any termination without Cause before or following a "Change of Control", as defined below" where it appears in the first sentence thereof. Section 5(a)(iii) of the Offer Letter shall further be amended by deleting the last paragraph thereof and replacing it with the following:

> "If your employment is terminated by the Company without Cause or you terminate your employment for Good Reason, in either case occurring on or within twelve (12) months following a Change of Control (as defined below), then in lieu of (and not in addition to) the payments and benefits provided for in the first paragraph of Section 5(a)(iii) above, you will be entitled to: (A) your Accrued Obligations, (B) a lump sum payment equal to the sum of 1.0 times (x) your then current Base Salary plus (y) your target bonus under Section 3(b), (C) continued coverage under the Company's health and dental plans on the same terms as prior to such termination until the earlier of (x) the expiration of twelve (12) months following the termination of your employment, and (y) the date you commence new employment which offers health coverage that would disqualify you from continued COBRA coverage pursuant to law, and (D) notwithstanding anything to the contrary set forth in any applicable option or stock-based award agreement, all time-based stock options and other time-based stock-based awards you hold shall immediately accelerate and become fully exercisable or nonforfeitable as of the date of termination. Any release required by Section 5(a)(iii) must be executed and non-revocable within 60 days following the date of termination (or such lesser period of time set forth therein)."

3. Section 7 of the Agreement is amended by adding the following after the last sentence in the definition of "Change of Control": "Notwithstanding the foregoing, a Change of Control shall be deemed to occur only to the extent such event is also a "change in control event" within the meaning of Section 409A."

4. The Offer Letter is hereby amended by adding the following new Section 16 at the end thereof:

"**16. Section 280G.**

(i) Anything in this Agreement to the contrary notwithstanding, in the event that the amount of any compensation, payment or distribution by the Company to or for your benefit, whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise, calculated in a manner consistent with Section 280G of the Internal Revenue Code of 1986, as amended ("Section 280G") (the "Aggregate Payments"), would be subject to the excise tax imposed by Section 4999 of the Internal Revenue Code of 1986, as amended ("Section 4999") then the Aggregate Payments shall be reduced (but not below zero) so that the sum of all of the Aggregate Payments shall be $1.00 less than the amount at which you becomes subject to the excise tax imposed by Section 4999; provided that such reduction shall only occur if it would result in you receiving a higher After Tax Amount (as defined below) than you would receive if the Aggregate Payments were not subject to such reduction. In such event, the Aggregate Payments shall be reduced in the following order, in each case, in reverse chronological order beginning with the Aggregate Payments that are to be paid the furthest in time from consummation of the transaction that is subject to Section 280G; (1) cash payments not subject to Section 409A of the Code; (2) cash payments subject to Section 409A; (3) equity-based payments and acceleration; and (4) non-cash forms of benefits; provided that in the case of all the foregoing Aggregate Payments all amounts or payments that are not subject to calculation under Treas. Reg. §1.280G-1, Q&A-24(b) or (c) shall be reduced before any amounts that are subject to calculation under Treas. Reg. §1.280G-1, Q&A-24(b) or (c).

(ii) For purposes of this Section 17, the "After Tax Amount" means the amount of the Aggregate Payments less all federal, state, and local income, excise and employment taxes imposed on you as a result of your receipt of the Aggregate Payments. For purposes of determining the After Tax Amount, you shall be deemed to pay federal income taxes at the highest marginal rate of federal income taxation applicable to individuals for the calendar year in which the determination is to be made, and state and local income taxes at the highest marginal rates of individual taxation in each applicable state and locality, net of the maximum reduction in federal income taxes which could be obtained from deduction of such state and local taxes.

(iii) The determination as to whether a reduction in the Aggregate Payments shall be made pursuant to this Section 17 shall be made by a

nationally recognized accounting firm selected by the Company (the "Accounting Firm"), which shall provide detailed supporting calculations both to the Company and you within 15 business days of termination date, if applicable, or at such earlier time as is reasonably requested by the Company or you. Any determination by the Accounting Firm shall be binding upon you and the Company."

5. Counterparts. This First Amendment may be executed in counterparts, each of which when so executed and delivered shall be considered an original; but such counterparts shall together constitute one and the same document.

[Signature page follows]

IN WITNESS WHEREOF, this Amendment has been executed by duly authorized officers of the Company and by the Executive.

RESTORBIO, INC.

By: _____
Name:
Date:

EXECUTIVE

By: _____
Joan Mannick, M.D.

[Signature Page to Amendment to Offer Letter]

AMENDMENT TO OFFER LETTER

This AMENDMENT TO OFFER LETTER (the "Amendment") is made by and between reSTORbio, Inc., a Delaware corporation (the "Company") and Chen Schor (the "Executive"), and is effective as of the closing of the Company's first underwritten public offering of its equity securities pursuant to an effective registration statement under the Securities Act of 1933, as amended (the "Effective Date"). Capitalized terms used and not defined herein shall have the meanings ascribed to such terms in the Offer Letter (as defined below).

WHEREAS, the Company and the Executive entered into an Offer Letter dated March 31, 2017 (the "Offer Letter") and desire to amend the Offer Letter as set forth herein; and

WHEREAS, except as expressly provided in this Amendment, all other terms of the Offer Letter shall continue in full force and effect on and after the date of this Amendment.

1. Section 3(a) shall be amended by (i) deleting "$361,000.00" and replacing it with "$450,000.00" and (ii) deleting the last sentence of such section.

2. Section 3(b) shall be amended by deleting "40%" in the first sentence thereof and replacing it with "50%".

3. Section 5(a)(iii) of the Offer Letter shall be amended by deleting the phrase "including without limitation any termination without Cause before or following a "Change of Control", as defined below" where it appears in the first sentence thereof. Section 5(a)(iii) of the Offer Letter shall further be amended by deleting the last paragraph thereof and replacing it with the following:

> "If your employment is terminated by the Company without Cause or you terminate your employment for Good Reason, in either case occurring on or within twelve (12) months following a Change of Control (as defined below), then in lieu of (and not in addition to) the payments and benefits provided for in the first paragraph of Section 5(a)(iii) above, you will be entitled to: (A) your Accrued Obligations, (B) a lump sum payment equal to the sum of 1.5 times (x) your then current Base Salary plus (y) your target bonus under Section 3(b), (C) continued coverage under the Company's health and dental plans on the same terms as prior to such termination until the earlier of (x) the expiration of eighteen (18) months following the termination of your employment, and (y) the date you commence new employment which offers health coverage that would disqualify you from continued COBRA coverage pursuant to law, and (D) notwithstanding anything to the contrary set forth in any applicable option or stock-based award agreement, all time-based stock options and other time-based stock-based awards you hold shall immediately accelerate and become fully exercisable or nonforfeitable as of the date of termination. Any release required by Section 5(a)(iii) must be executed and non-revocable within 60 days following the date of termination (or such lesser period of time set forth therein)."

4. Section 7 of the Agreement is amended by adding the following after the last sentence in the definition of "Change of Control": "Notwithstanding the foregoing, a Change of Control shall be deemed to occur only to the extent such event is also a "change in control event" within the meaning of Section 409A."

5. The Offer Letter is hereby amended by adding the following new Section 16 at the end thereof:

"**16. Section 280G.**

(i) Anything in this Agreement to the contrary notwithstanding, in the event that the amount of any compensation, payment or distribution by the Company to or for your benefit, whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise, calculated in a manner consistent with Section 280G of the Internal Revenue Code of 1986, as amended ("Section 280G") (the "Aggregate Payments"), would be subject to the excise tax imposed by Section 4999 of the Internal Revenue Code of 1986, as amended ("Section 4999") then the Aggregate Payments shall be reduced (but not below zero) so that the sum of all of the Aggregate Payments shall be $1.00 less than the amount at which you becomes subject to the excise tax imposed by Section 4999; provided that such reduction shall only occur if it would result in you receiving a higher After Tax Amount (as defined below) than you would receive if the Aggregate Payments were not subject to such reduction. In such event, the Aggregate Payments shall be reduced in the following order, in each case, in reverse chronological order beginning with the Aggregate Payments that are to be paid the furthest in time from consummation of the transaction that is subject to Section 280G; (1) cash payments not subject to Section 409A of the Code; (2) cash payments subject to Section 409A; (3) equity-based payments and acceleration; and (4) non-cash forms of benefits; provided that in the case of all the foregoing Aggregate Payments all amounts or payments that are not subject to calculation under Treas. Reg. §1.280G-1, Q&A-24(b) or (c) shall be reduced before any amounts that are subject to calculation under Treas. Reg. §1.280G-1, Q&A-24(b) or (c).

(ii) For purposes of this Section 17, the "After Tax Amount" means the amount of the Aggregate Payments less all federal, state, and local income, excise and employment taxes imposed on you as a result of your receipt of the Aggregate Payments. For purposes of determining the After Tax Amount, you shall be deemed to pay federal income taxes at the highest marginal rate of federal income taxation applicable to individuals for the calendar year in which the determination is to be made, and state and local income taxes at the highest marginal rates of individual taxation in each applicable state and locality, net of the maximum reduction in federal income taxes which could be obtained from deduction of such state and local taxes.

(iii) The determination as to whether a reduction in the Aggregate Payments shall be made pursuant to this Section 17 shall be made by a nationally recognized accounting firm selected by the Company (the "Accounting Firm"), which shall provide detailed supporting calculations both to the Company and you within 15 business days of termination date, if applicable, or at such earlier time as is reasonably requested by the Company or you. Any determination by the Accounting Firm shall be binding upon you and the Company."

6. Counterparts. This First Amendment may be executed in counterparts, each of which when so executed and delivered shall be considered an original; but such counterparts shall together constitute one and the same document.

[Signature page follows]

IN WITNESS WHEREOF, this Amendment has been executed by duly authorized officers of the Company and by the Executive.

RESTORBIO, INC.

By: _____
Name:
Date:

EXECUTIVE

By: _____
Chen Schor

OFFICE LEASE AGREEMENT

This Office Lease Agreement (this "Lease") is made and entered into as of January 8, 2018 (the "Effective Date"), by and between 500 BOYLSTON & 222 BERKELEY OWNER (DE) LLC, a Delaware limited liability company ("Landlord"), and resTORbio, Inc., a Delaware corporation ("Tenant").

1. **Basic Lease Information**.

1.01 "Building" shall mean the 25-story building (consisting of a 6-story low-rise portion, a 19-story high-rise portion, and 3 levels of parking space below grade) located at 500 Boylston Street, Boston, Massachusetts 02116 and commonly known as 500 Boylston Street.

1.02 "Premises" shall mean the area shown on Exhibit A to this Lease. The Premises are located on a portion of the twelfth (12th) floor of the Building and known as Suite 1210.

1.03 "Rentable Floor Area of the Premises": 4,544 square feet.

1.04 "Estimated Term Commencement Date": January 1, 2018.

"Term Commencement Date": See Section 3.01.

"Rent Commencement Date": March 1, 2018, subject to Paragraph C.2 of Exhibit B.

1.05 "Term Expiration Date": The last day of the thirty sixth (36th) full calendar month following the Rent Commencement Date.

1.06 "Base Rent":

Period	Annual Base Rent Rate Per Square Foot of Rentable Floor Area	Monthly Base Rent
Lease Year 1:	$ 50.00	$18,933.33*
Lease Year 2:	$ 51.00	$19,312.00
Lease Year 3:	$ 52.00	$19,690.67

*Subject to the Rent Waiver Period under Section 4.01 below.

As used above, the first "Lease Year" shall commence on the Term Commencement Date and end on the day immediately preceding the first anniversary of the Rent Commencement Date (provided that if the Rent Commencement Date does not occur on the first day of a calendar month, the first Lease Year shall further include the balance of the calendar month such first anniversary occurs), and each subsequent Lease Year shall mean each successive period of twelve (12) calendar months following the first Lease Year during the initial Term, provided that the last Lease Year of the initial Term shall end on the Term Expiration Date set forth above for the initial Term.

1.07 "Tenant's Proportionate Share": 0.70% for the initial Premises, subject to Exhibit B.

1.08 "Additional Rent" for Expenses and Taxes: See Section 4.01.

1.09 "Tenant Work Allowance": Not applicable.

1.10 "Landlord Delivery Work" means the work that Landlord is obligated to perform in the Premises pursuant to the "Work Letter" attached to this Lease as Exhibit C.

1.11 Additional Provisions: See Exhibit F
1. Parking

1.12 "Letter of Credit" shall mean the letter of credit in the amount of $84,000.00, as provided in Section 6 and Exhibit H attached hereto.

1.13 "Broker(s)": Jones Lang LaSalle ("Tenant's Broker"), which represented Tenant in connection with this Lease.

1.14 "Permitted Use": Executive, professional or corporate offices, including ancillary uses thereof in accordance with this Lease, but specifically excluding medical or dental offices, utility company offices, employment agency offices (other than executive or professional search firms), governmental or quasi-governmental offices, or a provider of temporary office space or facilities on a contract basis. For purposes hereof, uses ancillary to the Permitted Uses shall include customary coffee stations for use only by the employees and business invitees of Tenant.

1.15 "Notice Address(es)":

For Landlord:

500 Boylston & 222 Berkeley Owner (DE) LLC
c/o Oxford Properties Group
125 Summer Street
Boston, Massachusetts 02110
Attention: Director of Leasing

500 Boylston & 222 Berkeley Owner (DE) LLC
c/o Oxford Properties Group
125 Summer Street
Boston, Massachusetts 02110
Attn: Director of Legal

With copy of any notices
to Landlord sent to:

DLA Piper LLP (US)
33 Arch Street, 26th Floor
Boston, MA 02110
Attn: John L. Sullivan, Esq.

For Tenant:

Prior to Term Commencement Date:

resTORbio, Inc.
501 Boylston Street
Boston, MA 02116
Attn.: John McCabe

After Term Commencement Date:

resTORbio, Inc.
500 Boylston Street
12th floor
Boston, MA 02116
Attn.: John McCabe

In each case, with a copy of any
notices to Tenant sent to:

Anderson & Kreiger LLP
50 Milk Street, 21st Floor
Boston, MA 02109
Attn: David L. Wiener, Esq.

1.16 "Business Day(s)" are Monday through Friday of each week, exclusive of New Year's Day, Presidents Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day ("Holidays"). Landlord may designate additional Holidays that are commonly recognized by other office buildings in the area where the Building is located. "Building Service Hours" are 8:00 A.M. to 6:00 P.M. on Business Days.

1.17 "Property" means the Building and the parcel(s) of land on which it is located and, at Landlord's discretion, the particular configuration of the parking facilities and other improvements, if any, serving the Building and the parcel(s) of land on which they are located. "Office Section" means that portion of the Building from time to time dedicated to office uses. "Retail Section" means that portion of the Building from time to time dedicated to retail uses.

1.18 "Project" shall mean the Property together with the adjoining building and other improvements commonly known as 222 Berkeley Street and the parcel(s) of land in which they are located, including the parking facilities from time to time serving the Building and such other building and the common areas and facilities in or about such buildings that from time to time serve both buildings in common.

1.19 Other Defined Terms: Other capitalized terms shall have the meanings set forth in the Lease and its Exhibits below. References in this Lease to numbered Sections shall be deemed to refer to the numbered Sections of this Lease, unless otherwise specified.

1.20 Exhibits: The following exhibits and attachments are incorporated into and made a part of this Lease:

Exhibit A (Outline and Location of Premises)
Exhibit B (Expenses and Taxes)
Schedule B-1 (Cleaning Specifications)
Exhibit C (Work Letter)
Exhibit D (Commencement Letter)
Exhibit E (Building Rules and Regulations)
Exhibit F (Additional Provision)
Exhibit G [intentionally omitted]
Exhibit H (Letter of Credit)

2. Lease Grant.

2.01 Premises. Landlord hereby leases the Premises to Tenant and Tenant hereby leases the Premises from Landlord. The Premises exclude the exterior faces of exterior walls, the common stairways and stairwells, elevators and elevator wells, fan rooms, electric and telephone closets, janitor closets, freight elevator vestibules, and pipes, ducts, conduits, wires and appurtenant fixtures serving other parts of the Building (exclusively or in common), and other Common Areas (as defined below) of the Building. If the Premises include the entire rentable area of any floor, the common corridors, elevator lobby, and restroom facilities located on such full floor(s) shall be considered part of the Premises.

2.02 Appurtenant Rights. During the Term, Tenant shall have, as appurtenant to the Premises, the non-exclusive rights to use in common (subject to reasonable nondiscriminatory rules of general applicability to tenants and other users of the Building from time to time made by Landlord of which Tenant is given written notice): (a) the common lobbies, corridors, stairways, elevators and loading

platform of the Building, and the pipes, ducts, conduits, wires and appurtenant meters and equipment serving the Premises in common with others; (b) common driveways and walkways necessary for access to the Building; (c) if the Premises include less than the entire rentable floor area of any floor, the common corridors, elevator lobby, and restroom facilities located on such floor; and (d) all other areas or facilities in or about the Project from time to time designated for general use in common by Tenant, other Project tenants, and Landlord (collectively, the "Common Areas").

3. Term and Commencement Date.

3.01 Term. The "Term" of this Lease shall begin at 12:01 a.m. on the earlier to occur of the following dates under clauses (a) or (b), which date shall be the "Term Commencement Date":

(a) the date on which Tenant first enters into possession of all or any portion of the Premises for the regular conduct of its business. (The event described in the prior sentence shall not be deemed to occur by virtue of any entry by Tenant into the Premises under Exhibit C for the installation or testing of Tenant's computers or other equipment, or the installation of other property of Tenant in the Premises); or

(b) the Substantial Completion Date (as defined in Exhibit C).

The Term of this Lease shall end at 11:59 p.m. on the Term Expiration Date set forth in Section 1, unless sooner terminated in accordance with the provisions of this Lease. After the determination of the Term Commencement Date, Tenant shall execute and deliver a commencement letter in the form attached as Exhibit D (the "Commencement Letter") within thirty (30) days after receipt of such Commencement Letter from Landlord. Tenant's failure to execute and return the Commencement Letter, or to provide written objection to the statements contained in the Commencement Letter, within thirty (30) days after its delivery to Tenant shall be deemed an approval by Tenant of the statements contained therein.

3.02 Initial Tenant Work. As used herein, the "Initial Tenant Work" shall mean all Alterations (as defined in Section 8) performed, or to be performed, in or about the Premises that are required initially to put the Premises in condition suitable for Tenant's use and occupancy. The Initial Tenant Work shall be performed by Landlord in accordance with, and subject to, the provisions of Exhibit C attached hereto. Subject to Landlord's obligations with respect to the Initial Tenant Work as expressly and more particularly provided in Exhibit C, the Premises shall be leased by Tenant in their current "as is" condition and configuration without any representations or warranties by Landlord.

3.03 Delivery. By taking possession of the Premises, Tenant agrees that the Premises are in good order and satisfactory condition, subject to Landlord's obligations under Paragraph C.4 of Exhibit C. The parties acknowledge that the Premises are currently vacant and free of any other party, with the construction of the Initial Tenant Work by Landlord in progress. Any delay in the delivery of the Premises or in the occurrence of the Term Commencement Date shall not give rise to any liability or default by Landlord or affect any of the terms of this Lease or Tenant's obligation to accept the Premises when delivered, except as expressly set forth in Section 3.01 and Paragraph C.2 of Exhibit C, as the case may be. Except as otherwise provided in this Lease, Tenant shall not be permitted to take possession of or enter the Premises before the Term Commencement Date without Landlord's permission. If Tenant takes possession of (or enters the Premises under Paragraph C.3 of Exhibit C) before the Term Commencement Date, any such possession or entry by Tenant before the Term Commencement Date shall be subject to the terms and conditions of this Lease; provided, however, except for the cost of services used or requested by Tenant (e.g., after-hours HVAC service), Tenant shall not be required to pay Rent for any such possession or entry before the Term Commencement Date during which Tenant,

with Landlord's approval, has entered, or is in possession of, the Premises for the sole purpose of performing improvements or installing furniture, equipment or other personal property.

4. Rent.

4.01 Base Rent and Additional Rent. During the Term (but subject to following subparagraph of this Section 4.01 below), Tenant hereby covenants and agrees to pay to Landlord, without any setoff or deduction (except to the extent expressly set forth in this Lease), (a) all Base Rent (as provided in Section 1), (b) Tenant's Proportionate Share of Expenses and Taxes (as provided in Exhibit B attached hereto), and (c) all other Additional Rent due for the Term (collectively referred to as "Rent"). "Additional Rent" means all sums (exclusive of Base Rent) that Tenant is required to pay to Landlord from time to time under this Lease.

Notwithstanding the foregoing, Landlord agrees to waive payment of the monthly amounts of (i) Base Rent and (ii) Additional Rent for Tenant's Proportionate Share of Expenses and Taxes for the original Premises for the period commencing on the Term Commencement Date and ending on the date immediately preceding the Rent Commencement Date set forth in Section 1 (the "Rent Waiver Period"). In the event that the Rent Waiver Period does not end on the last day of a calendar month, then on the first day of the calendar month in which the Rent Waiver Period expires, Tenant shall pay to Landlord the amount of the Base Rent and Additional Rent for the portion of the calendar month that follows the last day of the Rent Waiver Period, pro-rated on a per diem basis.

4.02 Manner and Timing of Payments. Base Rent and other recurring monthly charges of Additional Rent shall be due and payable in advance on the first day of each calendar month without notice or demand. All other items of Rent shall be due and payable by Tenant within thirty (30) days after billing by Landlord. Rent shall be made payable to the entity, and sent to the address provided in this Lease or at such other place that Landlord from time to time designates in writing for such purposes and shall be paid by Tenant by good and sufficient check payable in United States of America currency or by electronic or wire transfer to an account from time to time designated in writing by Landlord. Landlord's acceptance of less than the entire amount of Rent shall be considered, unless otherwise specified by Landlord, a payment on account of the oldest obligation due from Tenant hereunder, notwithstanding any statement to the contrary contained on or accompanying any such payment from Tenant. Rent for any partial month during the Term shall be prorated on a per diem basis. Tenant shall pay and be liable for all rental, sales and use taxes (but excluding income taxes), if any, imposed upon or measured by Rent. No endorsement or statement on a check or letter accompanying payment shall be considered an accord and satisfaction.

5. Compliance with Laws; Use.

Tenant shall use the Premises only for the Permitted Use and shall not use or permit the use of the Premises for any other purpose. Tenant shall comply with all statutes, codes, ordinances, orders, rules and regulations of any municipal or governmental entity whether in effect now or later, including the Americans with Disabilities Act ("Law(s)"), regarding the particular manner of Tenant's use and occupancy of the Premises (other than general office use in accordance with the terms of this Lease), the Tenant's Property from to time installed by Tenant in the Premises, and any Alterations (as defined in Section 8.01), if any, in or about the Premises performed by Tenant after the Initial Tenant Work originally performed by Landlord under Exhibit C. In addition, Tenant shall, at its sole cost and expense, promptly comply with any Laws that relate to the Base Building (defined below), but only to the extent such obligations are triggered by Tenant's particular manner of use or occupancy of the Premises (other than for general office use in accordance with the terms of this Lease), the Tenant's Property from to time installed by Tenant in the Premises, or any Alterations, if any, in or about the Premises performed by

Tenant after the Initial Tenant Work originally performed by Landlord under Exhibit C. "Base Building" shall include the structural portions of the Building, the common restrooms, and the Building mechanical, electrical, and plumbing systems and equipment located in the internal core of the Building on the floor or floors on which the Premises are located. Tenant shall promptly provide Landlord with copies of any notices it receives regarding an alleged violation of Law. Tenant shall not exceed the standard density limit for the Building. Tenant shall not use or permit the use of any portion of the Premises in a manner that results in objectionable noise, odors, or vibrations emanating from the Premises or any equipment installed by Tenant or any party acting under or through Tenant. Without limiting the generality of the foregoing sentence, Tenant shall not use any portion of the Premises for a personal fitness or exercise area or install or use any exercise equipment therein. Tenant shall comply with the rules and regulations of the Building attached as Exhibit E and such other reasonable rules and regulations adopted by Landlord from time to time, including (if Tenant performs any Alterations after the Initial Tenant Work originally performed by Landlord under Exhibit C) the Building's rules and regulations for the performance of Alterations. If the Premises or any portion thereof are located on a multi-tenant floor, Tenant shall cause all portions of such Premises that are visible from the Common Areas on such floors to be arranged, furnished, and lighted in a manner in which such Premises appears at all times to be occupied for the Permitted Use.

6. Letter of Credit.

Concurrently with Tenant's execution and delivery of this Lease, Tenant shall deliver to Landlord a clean, irrevocable letter of credit in the amount set forth in Section 1, which shall comply with, and may be drawn by Landlord in accordance with, the provisions of Exhibit H attached hereto (such letter of credit, together with any renewal or replacement thereof in accordance herewith, being referred to herein as the "Letter of Credit").

7. Building Services.

7.01 Building Services. Landlord shall furnish Tenant with the following services (with the costs thereof included in Expenses in accordance with and subject to under Exhibit B): (a) water for use in the Base Building restrooms; (b) Building standard heat and air conditioning in season during Building Service Hours; (c) Building standard janitorial service (in accordance with Exhibit B-1 attached hereto) on Business Days; (d) elevator service; (e) electricity in accordance with the terms and conditions in Section 7.02; (f) access to the Building for Tenant and its employees 24 hours per day/7 days per week, subject to the terms of this Lease and such protective services or monitoring systems, if any, as Landlord may from time to time impose, including, without limitation, sign-in procedures and/or presentation of identification cards; and (g) such other services as Landlord reasonably determines are necessary or appropriate for the Property. In addition, Tenant shall have the right to receive HVAC service during hours other than Building Service Hours by paying Landlord's then standard charge for additional HVAC service (currently $85 per hour) and providing such prior notice as is reasonably specified by Landlord. If Tenant is permitted to connect any supplemental HVAC units to the Building's condenser water loop or chilled water line, such permission shall be conditioned upon Landlord having adequate excess capacity from time to time and such connection and use shall be subject to Landlord's reasonable approval and reasonable restrictions imposed by Landlord, and Landlord shall have the right to charge Tenant a Building standard connection fee and/or a monthly usage fee, as reasonably determined by Landlord. If, at Tenant's request, Landlord, or an affiliated or third party service provider, provides any services that are not Landlord's express obligation under this Lease, including, without limitation, any repairs which are Tenant's responsibility pursuant to Section 9 below, Tenant shall pay to the applicable service provider the cost of such services plus a reasonable administrative charge.

7.02 Tenant Electricity. Tenant shall pay to Landlord, as Additional Rent, the costs of electricity used in or for the Premises (including, without limitation, air handling units or other HVAC equipment serving the Premises) and, if applicable, for any special equipment installed by or for Tenant elsewhere in the Building, by a separate charge payable by Tenant to Landlord based on check-meters installed for the Premises (or for any applicable portion thereof or equipment serving the Premises) or, for any portion of the Premises or equipment that from time to time does not have operational check-meters, based on reasonable allocations prepared by Landlord's building engineer for the space and period in question. (The parties acknowledge that the Premises are not separately check-metered.) Tenant shall make estimated monthly payments for the electricity charges hereunder, in advance on the first day of each month or partial month of the Term, based on amounts estimated by Landlord from time to time for such electricity charges, subject to periodic reconciliations based on actual check-meter readings and utility rates for the space and period in question. Without the consent of Landlord, Tenant's use of electrical service shall not exceed the Building standard usage, per square foot, as reasonably determined by Landlord, based upon the Building standard electrical design load. Landlord shall have the right to measure electrical usage by commonly accepted methods, including the installation of measuring devices such as submeters and check-meters, which to the extent not in place prior to the Effective Date may be installed by either party, at its election and at its own expense. If it is determined, for any electrical service that is not separately check-metered to Tenant, that Tenant is using electricity in such quantities or during such periods as to cause the total cost of Tenant's electrical usage, on a monthly, per-rentable-square-foot basis, to materially exceed that which Landlord reasonably deems to be standard for the Building, Tenant shall pay Landlord Additional Rent for the cost of such excess electrical usage and, if applicable, for the cost of purchasing and installing the measuring device(s). Notwithstanding the foregoing, to the extent any electricity service is from time to time metered directly by the utility company to the Premises, Tenant shall timely pay the separate charges for such electricity service directly to the applicable utility company and, if requested by Landlord from time to time, provide copies of such utility company invoices and evidence of such payments.

7.03 Interruption of Services. Landlord's failure to furnish, or any interruption, diminishment or termination of services due to the application of Laws, the failure of any equipment, the performance of maintenance, repairs, improvements or alterations, utility interruptions or the occurrence of an event of Force Majeure (defined in Section 22.06) (collectively a "Service Failure") shall not render Landlord liable to Tenant, constitute a constructive eviction of Tenant, give rise to an abatement of Rent, nor relieve Tenant from the obligation to fulfill any covenant or agreement, except as provided in the next sentence. If the Premises, or a material portion of the Premises, are made untenantable for a period in excess of five (5) consecutive Business Days as a result of a Service Failure that is reasonably within the control of Landlord to correct, then Tenant, as its sole remedy, shall be entitled to receive an abatement of Rent payable hereunder during the period following such five-(5)-Business-Day period and ending on the day the service has been restored. If the entire Premises has not been rendered untenantable by the Service Failure, the amount of abatement shall be equitably prorated. This Section shall not apply to any Service Failure arising from a casualty event governed by Section 14 below.

7.04 Reservations. Without limiting the generality of the foregoing, Landlord reserves the right from time to time to modify components of the access procedures for the Building or other portions of the Property, to change the number of lobby attendants, or to institute, modify, supplement, or discontinue any particular access control procedures or equipment for the Building, whether during or after business hours. Landlord does not warrant or guarantee the effectiveness of any such system or procedures. Tenant expressly disclaims any such warranty, guarantee, or undertaking by Landlord with respect thereto and acknowledges that access control procedures from time to time in effect are solely for the convenience of tenants generally and are not intended to secure the Premises or to guarantee the physical safety of any persons in or about the Premises or the Property. Tenant shall be responsible for securing the Premises, including without limitation by Tenant's installation of access card readers or other security

equipment for the Premises in accordance with Exhibit C and/or Section 8 and by restricting or monitoring access into and from the Premises by its employees or other invitees. At the time that any Tenant employee (or other person acting under or through Tenant) who has been issued a Building access card is terminated or otherwise ceases to work at the Premises, Tenant shall retrieve and destroy the Building access card for such person and, in accordance with the Building's standard procedures, notify the Building's property manager that such person should be removed from the active list for Building access cards.

8. Alterations

8.01 Alterations. Tenant shall not make alterations, repairs, additions or improvements or install any Cable (collectively referred to as "Alterations") in the Premises, without first obtaining the written consent of Landlord in each instance, which consent shall not be unreasonably withheld or delayed. "Cable" shall mean and refer to any electronic, fiber, phone and data cabling and related equipment that is installed by or for the exclusive benefit of Tenant or any party acting under or through Tenant. Prior to starting work on any Alterations, Tenant shall furnish Landlord with plans and specifications (which shall be in CAD format if requested by Landlord); names of contractors reasonably acceptable to Landlord (provided that Landlord may designate specific contractors with respect to Base Building and vertical Cable, as may be described more fully below); required permits and approvals; evidence of contractor's and subcontractor's insurance in amounts reasonably required by Landlord and naming as additional insureds the Landlord, the managing agent for the Building, and such other Additional Insured Parties (as defined in Section 13) as Landlord may designate in writing for such purposes; and any security for performance in amounts reasonably required by Landlord. Landlord may designate specific contractors with respect to oversight, installation, repair, connection to, and removal of vertical Cable. All Cable shall be clearly marked with adhesive plastic labels (or plastic tags attached to such Cable with wire) to show Tenant's name, suite number, and the purpose of such Cable (i) every 6 feet outside the Premises (specifically including, but not limited to, the electrical room risers and any Common Areas), and (ii) at the termination point(s) of such Cable. Changes to the plans and specifications must also be submitted to Landlord for its approval. Alterations shall be constructed in a good and workmanlike manner using materials of a quality reasonably approved by Landlord, and Tenant shall ensure that no Alteration impairs any Building system or Landlord's ability to perform its obligations hereunder. Tenant shall reimburse Landlord for any reasonable third-party expenses incurred by Landlord in connection with the review, inspection, and coordination of Tenant's plans for Alterations and Tenant's performance thereof and pay to Landlord or its managing agent a fee for Landlord's administrative oversight and coordination of any Alterations equal to 2.5% of the hard costs of such Alterations. (For the avoidance of doubt, the review costs and fee under the preceding sentence shall not apply to the Initial Tenant Work under Exhibit C.) Upon completion, Tenant shall furnish "as-built" plans (in CAD format, if requested by Landlord) for Alterations, customary AIA completion affidavits, full and final waivers of lien, any applicable certificate of occupancy for the space affected by such Alterations, and any other items required under the Building's construction rules and regulations for closing out the particular work in question. Landlord's approval of an Alteration shall not be deemed to be a representation by Landlord that the Alteration complies with Law or will not adversely affect any Building system. If any Alteration requires any change to the Base Building, any Building system, or any Common Area, then such changes shall be made at Tenant's sole cost and expense and performed, at Landlord's election, either by Tenant's contractor or a contractor engaged by Landlord. Notwithstanding the foregoing, Landlord's consent shall not be required for any Alteration that satisfies all of the following criteria (a "Cosmetic Alteration"): (a) is of a cosmetic nature such as painting, wallpapering, hanging pictures and installing carpeting; (b) is not visible from the exterior of the Premises or Building; (c) will not affect the Base Building (defined in Section 5); and (d) does not require work to be performed inside the walls or above the ceiling of the Premises. Cosmetic Alterations shall be subject to all the other provisions of this Section 8.03, to the extent applicable thereto.

8.02 Liens. Tenant shall not cause or permit any mechanics' or other liens to be placed upon the Property, the Premises, or Tenant's leasehold interest hereunder in connection with any work or service done or purportedly done by or for the benefit of Tenant, its subtenants, or any other party acting under or through Tenant. Tenant shall give Landlord notice at least fifteen (15) days prior to the commencement of any work in the Premises to afford Landlord the opportunity, where applicable, to post and record notices of non-responsibility. Tenant, within ten (10) days after receipt of notice from Landlord, shall fully discharge any such lien by settlement, by bonding or by insuring over the lien in the manner prescribed by the applicable lien Law. If Tenant fails to timely discharge such lien within such period, Tenant shall be deemed in Default under this Lease and, in addition to any other remedies available to Landlord as a result of such Default by Tenant, Landlord, at its option, may bond, insure over or otherwise discharge the lien. Tenant shall reimburse Landlord for any amount paid by Landlord to discharge such lien, including, without limitation, reasonable attorneys' fees. Landlord shall have the right to require Tenant to post a performance or payment bond in connection with any work or service done or purportedly done by or for the benefit of Tenant. Tenant acknowledges and agrees that all such work or service is being performed for the sole benefit of Tenant and not for the benefit of Landlord.

8.03 Leasehold Improvements. All Leasehold Improvements shall, except as expressly provided in this Lease, remain upon the Premises at the end of the Term without compensation to Tenant. "Leasehold Improvements" shall mean and include all Initial Tenant Work and other leasehold improvements from time to time existing in or to the Premises, including without limitation any such leasehold improvements (if any) that exist as of the Term Commencement Date under this Lease or that are made by or for the benefit of Tenant (or any party acting under or through Tenant) before the Term Commencement Date or thereafter from time to time during the Term. Landlord, by written notice to Tenant at least thirty (30) days prior to the Term Expiration Date, may require Tenant, at Tenant's expense, to remove any Alterations performed by Tenant (excluding the Initial Tenant Work) or other affixed installations made by Tenant (or any party acting under or through Tenant) under this Lease, or under any prior lease or other agreement to which Tenant was a party or otherwise, that, in Landlord's reasonable judgment, are of a nature that would require removal and repair costs that are materially in excess of the removal and repair costs associated with standard office improvements ("Required Removables"). Required Removables shall include, without limitation, internal stairways, raised floors, private baths and showers, vaults, rolling file systems and structural alterations and modifications. Tenant, at the time Tenant requests approval for a proposed Alteration, may request in writing that Landlord advise Tenant whether the Alteration or any portion thereof, is a Required Removable. Within ten (10) Business Days after receipt of Tenant's request, Landlord shall advise Tenant in writing as to which portions of the alteration or other improvements are Required Removables. The Required Removables shall be removed by Tenant before the expiration or earlier termination of this Lease in accordance with Section 20. For the avoidance of doubt, Tenant shall not be required to remove any portion of the Initial Tenant Work performed by Landlord under Exhibit C.

9. Repairs and Maintenance.

9.01 Tenant Obligations. Tenant acknowledges and agrees that, during the Term, Tenant is responsible for identifying any conditions in the Premises that are dangerous or in need of maintenance or repair and that Landlord shall not be responsible for performing inspections to identify any such conditions. Tenant, at its sole cost and expense, shall perform all maintenance and repairs to the Premises that are not Landlord's express responsibility under this Lease, and keep the Premises in good condition and repair, reasonable wear and tear (and damage from casualty or condemnation) excepted. Tenant's repair and maintenance obligations include, without limitation, repairs to: (a) floor covering; (b) interior partitions; (c) doors; (d) the interior side of demising walls; (e) Alterations (described in Section 8); (f) supplemental air conditioning units, kitchens, including hot water heaters, plumbing, and similar facilities exclusively serving the Premises or any portion thereof, whether such items are installed by

Tenant or are currently existing in the Premises; and (g) any Cable. Tenant shall maintain in effect throughout the Term maintenance contracts for any such supplemental air conditioning units or other specialty equipment exclusively serving the Premises and, from time to time upon Landlord's request, provide Landlord with a copy of such maintenance contract and reasonable evidence of its service record. All repairs and other work performed by Tenant or its contractors, including that involving Cable, shall be subject to the terms of Section 8.01 above. If Tenant fails to make any repairs to the Premises for more than twenty (20) days after written notice from Landlord (although notice shall not be required in an emergency), Landlord may make the repairs, and, within thirty (30) days after demand, Tenant shall pay to Landlord the reasonable cost of the repairs, together with an administrative charge in an amount equal to ten percent (10%) of the cost of the repairs.

9.02 Landlord Obligations. Landlord shall keep and maintain in good repair and working order and perform maintenance upon (a) the structural elements of the Building; (b) the mechanical (including HVAC), electrical, plumbing and fire/life safety systems serving the Building in general; (c) the Common Areas; (d) the roof of the Building; (e) the exterior windows of the Building; and (f) the elevators serving the Building. Subject to reasonable wear and tear (and, if applicable, casualty and condemnation) and the provisions of Section 10 below, Landlord shall from time to time make repairs for which Landlord is responsible hereunder.

10. Entry by Landlord.

Landlord may enter the Premises to inspect, show or clean the Premises or to perform or facilitate the performance of repairs, alterations or additions to the Premises or any portion of the Building. Except in emergencies or to provide Building services, Landlord shall provide Tenant with reasonable prior verbal notice of entry at least twenty four (24) hours in advance of such entry. In connection with any such entry for non-emergency work performed during Building Service Hours, Landlord shall use reasonable efforts, consistent with the operation of a first-class high rise building, not to unreasonably interfere with Tenant's use of the Premises. If reasonably necessary, Landlord may temporarily close all or a portion of the Premises to perform repairs, alterations and additions; provided, that, except in emergencies, any such work that would unreasonably prevent the use of a substantial portion of the Premises during Building Service Hours will be performed on weekends or after Building Service Hours. Any such entry by Landlord shall not constitute a constructive eviction or entitle Tenant to an abatement or reduction of Rent, except that in the event that the Premises or a portion thereof are closed in excess of five (5) consecutive days, then Tenant shall be provided with a per diem abatement of Rent for the Premises (or applicable closed portion thereof) beginning on the sixth (6^{th}) day following such closure until the Premises or the applicable portion of the Premises is no longer closed on account of such Landlord entry.

11. Assignment and Subletting.

11.01 Transfers. Except in connection with a Permitted Transfer (defined in Section 11.04), Tenant shall not assign, sublease, transfer or encumber any interest in this Lease or allow any third party to use all or any portion of the Premises (in each such case, collectively or individually, a "Transfer" to a "Transferee") without the prior written consent of Landlord, which consent shall not be unreasonably withheld, conditioned or delayed if Landlord does not exercise its recapture rights under Section 11.02. Without limitation, it is agreed that Landlord's consent shall not be considered unreasonably withheld if the proposed Transferee is a governmental entity or an occupant of the Project or if the proposed Transferee, whether or not an occupant of the Project, has been in discussions with Landlord regarding the leasing of space within the Project within the preceding year. If the entity(ies) that directly or indirectly controls the voting shares/rights of Tenant (other than through the ownership of voting securities listed on a recognized securities exchange) changes at any time, any such change or series of related changes that directly or indirectly effects a transfer or change of at least a majority of the

ownership interests or voting shares/rights in Tenant (a "Change of Control Transfer") shall constitute a Transfer that is subject to the provisions of Section 11.04. Any Transfer in violation of this Section shall, at Landlord's option, be deemed a Default by Tenant as described in Section 16.01, and shall be voidable by Landlord. In no event shall any Transfer, including without limitation a Permitted Transfer, release or relieve Tenant from any obligation under this Lease, and the Tenant originally named in this Lease shall remain primarily liable for the performance of the tenant's obligations under this Lease, as amended from time to time.

11.02 Process. Tenant shall provide Landlord with financial statements for the proposed Transferee (or, in the case of a Change of Control Transfer, for the proposed new controlling entity(ies)), a fully executed copy of the proposed assignment, sublease, or other Transfer documentation, and such other information as Landlord may reasonably request. Within fifteen (15) Business Days after receipt of the required information and documentation, Landlord shall either: (a) consent to the Transfer by execution of a consent agreement in a form reasonably designated by Landlord; (b) reasonably refuse to consent to the Transfer in writing; or (c) in the event of a proposed assignment of this Lease or subletting of all or part of the Premises, recapture the portion of the Premises that Tenant is proposing to Transfer. If Landlord exercises its right to recapture, this Lease shall automatically be amended (or terminated if the entire Premises is being assigned or sublet) to delete the applicable portion of the Premises effective on the proposed effective date of the Transfer, although Landlord may require Tenant to execute a reasonable amendment or other document reflecting such reduction or termination. Notwithstanding the foregoing, in the event that Landlord elects to recapture hereunder, Tenant shall have the right to withdraw such notice of Transfer by delivering to Landlord notice of such election within five (5) days after Landlord's delivery of notice electing to exercise Landlord's right to recapture hereunder. Tenant shall pay to Landlord the reasonable costs and attorneys' fees incurred by Landlord in connection with such requested Transfer.

11.03 Excess Payments. In the event, if any, that (i) all rent and other consideration which Tenant receives as a result of a Transfer exceeds (ii) the Rent payable to Landlord for the portion of the Premises and Term covered by the Transfer, then Tenant shall, at Landlord's election, pay to Landlord an amount equal to fifty percent (50%) of such excess, from time to time on a monthly basis upon Tenant's receipt of such excess; provided that in determining any such excess, Tenant may deduct from the excess all reasonable and customary expenses directly incurred by Tenant in connection with such Transfer, except that any construction costs incurred by Tenant in connection with such Transfer shall be deducted on a straight-line basis over the term of the applicable Transfer. If Tenant is in Default, Landlord may require that all sublease payments be made directly to Landlord, in which case Tenant shall receive a credit against Rent in the amount of Tenant's share of payments received by Landlord.

11.04 Permitted Transfers. Tenant may assign this Lease to a successor to Tenant by merger, consolidation, or the purchase of all or substantially all of Tenant's assets (any of the foregoing, a "Successor"), or assign this Lease or sublet all or a portion of the Premises to an Affiliate (defined below), or effect a Change of Control Transfer, in each case without the consent of Landlord, provided that all of the following conditions are satisfied (a "Permitted Transfer"): (a) Tenant must not be in Default at the time of the proposed Transfer; (b) Tenant must give Landlord written notice at least fifteen (15) Business Days before such Transfer; and (c) except in the case of a sublease to an Affiliate, the Credit Requirement (defined below) must be satisfied. Tenant's notice to Landlord shall include information and documentation evidencing that the Transfers qualifies as a Permitted Transfer hereunder and that each of the above conditions has been satisfied. If requested by Landlord, Tenant's Successor (or, as the case may be, the Tenant's Affiliate to which the Lease may be assigned in accordance with this Section 11.04) shall sign and deliver to Landlord a commercially reasonable form of assumption agreement. "Affiliate" shall mean an entity controlled by, controlling or under common control with Tenant. The "Credit Requirement" shall be deemed satisfied if, as of the date immediately preceding the

date of the Permitted Transfer, the financial strength of (i) the entity with which Tenant is to merge or consolidate or to which the Lease is otherwise to be assigned (by any of the means described above) or continued in the case of a Change of Control Transfer or (ii) the purchaser of all or substantially all of the assets of Tenant is not less than that of Tenant, as determined (x) based on credit ratings of such entity and Tenant by both Moody's and Standard & Poor's (or by either such agency alone, if applicable ratings by the other agency do not exist), or (y) if such credit ratings do not exist, then in accordance with certified financial statements for such entity and Tenant covering their last two fiscal years ending before the Transfer. In the event that, at any time after a Permitted Transfer, the Affiliate to which the Permitted Transfer is made ceases to qualify as an Affiliate of the original Tenant, such event shall be deemed a Transfer that is subject to the provisions of Sections 11.01, 11.02, and 11.03 above.

11.05 Prohibited Matters. Without limiting Landlord's right to withhold its consent to any transfer by Tenant, and regardless of whether Landlord shall have consented to any such transfer, neither Tenant nor any other person having an interest in the possession, use or occupancy of the Premises or any part thereof shall enter into any lease, sublease, license, concession, assignment or other transfer or agreement for possession, use or occupancy of all or any portion of the Premises which provides for rent or other payment for such use, occupancy or utilization based, in whole or in part, on the net income or profits derived by any person or entity from the space so leased, used or occupied, and any such purported lease, sublease, license, concession, assignment or other transfer or agreement shall be absolutely void and ineffective as a conveyance of any right or interest in the possession, use or occupancy of all or any part of the Premises.

12. Notices.

All demands, approvals, consents or notices (collectively referred to as a "notice") shall be in writing and delivered by hand or sent by registered, express, or certified mail, with return receipt requested or with delivery confirmation requested from the U.S. postal service, or sent by overnight or same day courier service at the party's respective Notice Address(es) set forth in Section 1; provided, however, notices sent by Landlord regarding general Building operational matters may be posted in the Building mailroom or the general Building newsletter or sent via e-mail to the e-mail address provided by Tenant to Landlord for such purpose. In addition, if the Building is closed (whether due to emergency, governmental order or any other reason), then any notice address at the Building shall not be deemed a required notice address during such closure, and, unless Tenant has provided an alternative valid notice address to Landlord for use during such closure, any notices sent during such closure may be sent via e-mail or in any other practical manner reasonably designed to ensure receipt by the intended recipient. Each notice shall be deemed to have been received on the earlier to occur of actual delivery or the date on which delivery is refused, or, if Tenant has vacated the Premises or any other Notice Address of Tenant without providing a new Notice Address, three (3) Business Days after notice is deposited in the U.S. mail or with a courier service in the manner described above. Either party may, at any time, change its Notice Address (other than to a post office box address) by giving the other party written notice of the new address.

13. Indemnity and Insurance.

13.01 Indemnification. Except to the extent caused by the negligence or willful misconduct of Landlord or any Landlord Related Parties (defined below), and to the maximum extent permitted under applicable law, Tenant shall indemnify, defend and hold Landlord and Landlord Related Parties harmless against and from all liabilities, obligations, damages, penalties, claims, actions, costs, charges and expenses, including, without limitation, reasonable attorneys' fees and other professional fees (collectively referred to as "Losses"), which may be imposed upon, incurred by or asserted against Landlord or any of the Landlord Related Parties by any third party and arising out of or in connection with any damage or injury occurring in the Premises or any acts or omissions (including violations of

Law) of Tenant, its trustees, managers, members, principals, beneficiaries, partners, officers, directors, employees and agents (the "Tenant Related Parties") or any of Tenant's transferees, contractors or licensees. To the maximum extent permitted under applicable law, Tenant hereby waives all claims against and releases Landlord and its trustees, managers, members, principals, beneficiaries, partners, officers, directors, employees, Mortgagees (defined in Section 21) and agents (the "Landlord Related Parties") from all claims for any injury to or death of persons, damage to property or business loss in any manner related to (a) Force Majeure, (b) acts of third parties, (c) the bursting or leaking of any tank, water closet, drain or other pipe, or (d) the inadequacy or failure of any security or protective services, personnel or equipment.

13.02 Tenant's Insurance. Tenant shall maintain the following coverages in the following amounts throughout the Term (and during any other periods before or after the Term during which Tenant or any Tenant Related Party enters into or occupies all or any portion of the Premises):

(a) Commercial General Liability Insurance covering claims of bodily injury, personal injury and property damage arising out of Tenant's operations and contractual liabilities, including coverage formerly known as broad form, on an occurrence basis, with minimum primary limits of $1,000,000 each occurrence and $2,000,000 annual aggregate not more than $25,000 self-insured retention) and a minimum excess/umbrella limit of $5,000,000.

(b) Property insurance covering (i) Tenant's Property (as defined below), and (ii) any Leasehold Improvements in the Premises performed or installed by Tenant under Section 8.01 (any such Leasehold Improvements performed or installed by Tenant being referred to herein as "Tenant-Insured Improvements"), excluding the Initial Tenant Work (which Initial Tenant Work will be insured under Landlord's property policy for the Building). Such insurance shall be written on a special cause of loss form for physical loss or damage, for the full replacement cost value (subject to reasonable deductible amounts) without deduction for depreciation of the covered items and in amounts that meet any co-insurance clauses of the policies of insurance, and shall include coverage for damage or other loss caused by fire or other peril, including vandalism and malicious mischief, theft, water damage of any type, including sprinkler leakage, bursting or stoppage of pipes, and explosion, and providing business interruption coverage for a period of one year.

(c) Worker's Compensation and Employer's Liability or other similar insurance to the extent required by Law.

The minimum limits of insurance required to be carried by Tenant shall not limit Tenant's liability. Such insurance shall (i) be issued by an insurance company that has an A.M. Best rating of not less than A-VIII; (ii) be in form and content reasonably acceptable to Landlord; and (iii) provide that it shall not be canceled or materially changed without thirty (30) days' prior notice to Landlord, except that ten (10) days' prior notice may be given in the case of nonpayment of premiums. Tenant's Commercial General Liability Insurance shall (a) name Landlord, Landlord's managing agent, and any other party designated by Landlord ("Additional Insured Parties") as additional insureds; and (b) be primary insurance as to all claims thereunder and provide that any insurance carried by Landlord is excess and non-contributing with Tenant's insurance. Landlord shall be designated as a loss payee with respect to Tenant's property insurance on any Tenant-Insured Improvements. Tenant shall deliver to Landlord, on or before the Term Commencement Date and at least thirty (30) days before the expiration dates thereof, certificates from Tenant's insurance company on the forms currently designated "ACORD 28" (Evidence of Commercial Property Insurance) and "ACORD 25-S" (Certificate of Liability Insurance) or the equivalent. Attached to the ACORD 25-S (or equivalent) there shall be an endorsement naming the Additional Insured Parties as additional insureds which shall be binding on Tenant's insurance company

and shall expressly require the insurance company to notify each Additional Insured Party in writing at least thirty (30) days before any termination or material change to the policies, except that ten (10) days' prior notice may be given in the case of nonpayment of premiums. Notwithstanding the foregoing, if the foregoing requirement that the insurance company provide prior notice to Landlord of cancellation or material change of the applicable policy cannot reasonably be obtained based on then-prevailing insurance industry practices, Tenant shall so advise Landlord of such unavailability and shall instead provide Landlord with notice of any such cancellation or material change as provided above. If reasonably requested by Landlord to confirm the particular coverages required hereunder, Tenant shall deliver to Landlord, in addition to such certificates, a copy of the particular policy (or applicable portion thereof in question) evidencing the coverage required to be carried under Section 13.02.

Tenant shall maintain such increased amounts of the insurance required to be carried by Tenant under this Section 13.02, and such other types and amounts of insurance covering the Premises and Tenant's operations therein, as may be reasonably requested by Landlord, but not in excess of the amounts and types of insurance then being required by landlords of buildings comparable to and in the vicinity of the Building.

13.03. Tenant's Property. All furnishings, fixtures, equipment, and other personal property and effects of Tenant and of all persons claiming through Tenant which from time to time may be on the Premises or elsewhere in the Project or in transit thereto or therefrom (collectively, "Tenant's Property") shall be at the sole risk of Tenant to the maximum extent permitted by law and shall be kept insured by Tenant throughout the Term (and during any other periods before or after the Term during which Tenant or any Tenant Related Party enters into or occupies all or any portion of the Premises) at Tenant's expense in accordance with Section 13.02. Tenant's Property expressly includes all business fixtures and equipment, including without limitation any security or access control systems installed for the Premises, filing cabinets and racks, removable cubicles and partitions, kitchen equipment, computers and related equipment, raised flooring, supplemental cooling equipment, audiovisual and telecommunications equipment, non-building standard signage, and other tenant equipment installations, in each case including related conduits, cabling, and brackets or mounting components therefor and any connectors to base building systems and in each case whether installed or affixed in or about the Premises, in building core areas, or elsewhere in the Project in accordance with Section 2.02 and Section 8.01, as the case may be.

13.04 Waiver of Subrogation. Subject to Section 14, each party waives, and shall cause its insurance carrier to waive, any right of recovery against the other for any loss of or damage to property which loss or damage is (or, if the insurance required hereunder had been carried, would have been) covered by insurance. For purposes of this Section 13.04, any deductible or self-insured retention with respect to a party's insurance shall be deemed covered by, and recoverable by such party under, valid and collectable policies of insurance.

14. Casualty Damage.

14.01 Casualty. If all or any portion of the Premises becomes untenantable or inaccessible by fire or other casualty to the Premises or the Common Areas (collectively a "Casualty"), Landlord, with reasonable promptness, shall cause a general contractor selected by Landlord to provide Landlord with a written estimate of the amount of time required, using standard working methods, to substantially complete the repair and restoration of the Premises and any Common Areas necessary to provide access to the Premises ("Completion Estimate"). Landlord shall promptly forward a copy of the Completion Estimate to Tenant. If the Completion Estimate indicates that the Premises or any Common Areas necessary to provide access to the Premises cannot be made tenantable within two hundred seventy (270) days from the date the repair is started, then either party shall have the right to terminate this Lease upon

written notice to the other within ten (10) days after Tenant's receipt of the Completion Estimate. Tenant, however, shall not have the right to terminate this Lease if the Casualty was caused by the negligence or intentional misconduct of Tenant or any Tenant Related Parties. In addition, Landlord, by notice to Tenant within ninety (90) days after the date of the Casualty, shall have the right to terminate this Lease if: (1) the Premises have been materially damaged and less than two (2) years of the Term remain after the date of the Casualty; (2) any Mortgagee requires that the insurance proceeds be applied to the payment of the mortgage debt; or (3) a material uninsured loss to the Building or Premises occurs.

14.02 Restoration. If this Lease is not terminated, Landlord shall promptly and diligently, subject to reasonable delays for insurance adjustment or other matters beyond Landlord's reasonable control, restore the Premises (including the Initial Tenant Work, but not any Tenant Property) and Common Areas, subject to the following provisions. Such restoration shall be to substantially the same condition that existed prior to the Casualty, except for modifications required by Law or any other modifications to the Common Areas deemed desirable by Landlord. Notwithstanding Section 13.04, upon notice from Landlord, Tenant shall assign or endorse over to Landlord (or to any party designated by Landlord) all property insurance proceeds payable to Tenant under Tenant's insurance with respect to Tenant-Insured Improvements (if any); provided if the estimated cost to repair such Tenant-Insured Improvements exceeds the amount of insurance proceeds received by Landlord from Tenant's insurance carrier, the excess cost of such repairs shall be paid by Tenant to Landlord prior to Landlord's commencement of repairs. Within fifteen (15) days after demand, Tenant shall also pay Landlord for any additional excess costs that are determined during the performance of the repairs to such Tenant-Insured Improvements. In no event shall Landlord be required to spend more for the restoration of the Premises and Common Areas than the proceeds received by Landlord, whether from Landlord's insurance proceeds or proceeds from Tenant. Landlord shall not be liable for any inconvenience to Tenant, or injury to Tenant's business resulting in any way from the Casualty or the repair thereof. Provided that Tenant is not in Default, during any period of time that all or a material portion of the Premises is rendered untenantable as a result of a Casualty, the Rent shall abate for the portion of the Premises that is untenantable and not used by Tenant. Notwithstanding the foregoing, Landlord may, at its election, require Tenant to perform the restoration work for any Tenant-Insured Improvements, in which event Tenant shall be responsible for performing the restoration work for such Tenant-Insured Improvements (including any revisions thereto that Tenant may wish to make, pursuant to plans approved by Landlord under Section 8) and the rent abatement period under the preceding sentence shall not exceed the period of time required to diligently perform the restoration of such Tenant-Insured Improvements.

15. Condemnation.

Either party may terminate this Lease if any material part of the Premises is taken or condemned for any public or quasi-public use under Law, by eminent domain or private purchase in lieu thereof (a "Taking"). Landlord shall also have the right to terminate this Lease if there is a Taking of any portion of the Building or Property which would have a material adverse effect on Landlord's ability to profitably operate the remainder of the Building. The terminating party shall provide written notice of termination to the other party within forty five (45) days after it first receives notice of the Taking. The termination shall be effective as of the effective date of any order granting possession to, or vesting legal title in, the condemning authority. If this Lease is not terminated, Base Rent and Tenant's Proportionate Share shall be appropriately adjusted to account for any reduction in the square footage of the Building or Premises. All compensation awarded for a Taking shall be the property of Landlord. The right to receive compensation or proceeds are expressly waived by Tenant, provided, however, Tenant may file a separate claim for Tenant's Property and Tenant's reasonable relocation expenses, provided the filing of the claim does not diminish the amount of Landlord's award. If only a part of the Premises is subject to a Taking and this Lease is not terminated, Landlord, with reasonable diligence, will restore the remaining portion of the Premises as nearly as practicable to the condition immediately prior to the Taking.

16. Events of Default.

16.01 Default. In addition to any other Default specifically described in this Lease, each of the following occurrences shall be a "Default": (a) Tenant's failure to pay any portion of Rent when due, if the failure continues for ten (10) days after written notice to Tenant ("Monetary Default"); (b) Tenant's failure (other than a Monetary Default) to comply with any term, provision, condition or covenant of this Lease, if the failure is not cured within thirty (30) days after written notice to Tenant provided, however, if Tenant's failure to comply cannot reasonably be cured within such thirty-30)-day period, Tenant shall be allowed additional time (not to exceed an additional sixty (60) days) as is reasonably necessary to cure the failure so long as Tenant begins the cure within such thirty-(30)-day period and diligently pursues the cure to completion; (c) Tenant effects or permits a Transfer without Landlord's required approval or otherwise in violation of Section 11 of this Lease; (d) Tenant becomes insolvent, makes a transfer in fraud of creditors, makes an assignment for the benefit of creditors, admits in writing its inability to pay its debts when due or forfeits or loses its right to conduct business; (e) the leasehold estate is taken by process or operation of Law; (f) if a receiver, guardian, conservator, trustee in bankruptcy or similar officer shall be appointed by a court of competent jurisdiction to take charge of all or any part of Tenant's property and such appointment is not discharged within ninety (90) days thereafter, or if a petition including, without limitation, a petition for reorganization or arrangement is filed by Tenant under any bankruptcy law or is filed against Tenant or the Guarantor and, in the case of a filing against Tenant only, the same shall not be dismissed within ninety (90) days from the date upon which it is filed, or (g) Tenant is in default beyond any notice and cure period under any other lease or agreement with Landlord at the Project. In addition, if Landlord provides Tenant with notice of Tenant's failure to comply with any specific provision of this Lease on two (2) separate occasions during any twelve-(12)-month period, any subsequent violation of such provision within such twelve-(12)-month period shall, at Landlord's option, constitute a Default by Tenant without the requirement of any further notice or cure period as provided above. All notices sent under this Section shall be in satisfaction of, and not in addition to, any notice required by Law.

16.02. Remedies. Upon the occurrence of any Default, Landlord may, immediately or at any time thereafter, elect to terminate this Lease by notice of termination, by entry, or by any other means available under law and may recover possession of the Premises as provided herein. Upon termination by notice, by entry, or by any other means available under law, Landlord shall be entitled immediately, in the case of termination by notice or entry, and otherwise in accordance with the provisions of law to recover possession of the Premises from Tenant and those claiming through or under the Tenant. Such termination of this Lease and repossession of the Premises shall be without prejudice to any remedies which Landlord might otherwise have for arrears of rent or for a prior breach of the provisions of this Lease. Tenant waives any statutory notice to quit and equitable rights in the nature of further cure or redemption, and Tenant agrees that upon Landlord's termination of this Lease Landlord shall be entitled to re-entry and possession in accordance with the terms hereof. Landlord may, without notice, store Tenant's personal property (and those of any person claiming under Tenant) at the expense and risk of Tenant or, if Landlord so elects, Landlord may sell such personal property at public auction or auctions or at private sale or sales after thirty (30) days' notice to Tenant and apply the net proceeds to the earliest of installments of rent or other charges owing Landlord. Tenant agrees that a notice by Landlord alleging any default shall, at Landlord's option (the exercise of such option shall be indicated by the inclusion of the words "notice to quit" in such notice), constitute a statutory notice to quit. If Landlord exercises its option to designate a notice of default hereunder as a statutory notice to quit, any grace periods provided for herein shall run concurrently with any statutory notice periods. Tenant further agrees that it shall not interpose any counterclaim or set-off in any summary proceeding or in any action based in whole or in part on non-payment of Rent, unless Tenant would have no right to commence an independent proceeding to seek to recover on account of such claim.

16.03. Reimbursement of Expenses. In the case of termination of this Lease pursuant to this Section 16, Tenant shall reimburse Landlord for all expenses arising out of such termination, including without limitation, all costs incurred in collecting amounts due from Tenant under this Lease (including attorneys' fees, costs of litigation and the like); all expenses incurred by Landlord in attempting to relet the Premises or parts thereof (including advertisements, brokerage commissions, Tenant's allowances, costs of preparing space, and the like); all of Landlord's then unamortized costs of any work allowances provided to Tenant for the Premises; and all Landlord's other reasonable expenditures necessitated by the termination. The reimbursement from Tenant shall be due and payable immediately from time to time upon notice from Landlord that an expense has been incurred, without regard to whether the expense was incurred before or after the termination. Notwithstanding anything in this Lease to the contrary, except as specifically provided for under the terms of this Section 16 or Section 19 of this Lease, in no event shall Tenant ever be liable to Landlord for consequential, punitive, or indirect damages.

16.04. Damages. Landlord may elect by written notice to Tenant within one year following such termination to be indemnified for loss of rent by a lump sum payment representing the then present value of the amount of rent and additional charges which would have been paid in accordance with this Lease for the remainder of the Term minus the then present value of the aggregate fair market rent and additional charges payable for the Premises for the remainder of the Term (if less than the rent and additional charges payable hereunder), estimated as of the date of the termination, and taking into account reasonable projections of vacancy and time required to re-lease the Premises. (For the purposes of calculating the rent which would have been paid hereunder for the lump sum payment calculation described herein, the last full year's Additional Rent under Section 4 is to be deemed constant for each year thereafter. The Federal Reserve discount rate (or equivalent) shall be used in calculating present values.) Should the parties be unable to agree on a fair market rent, the matter shall be submitted, upon the demand of either party, to the Boston, Massachusetts office of the American Arbitration Association, with a request for arbitration in accordance with the rules of the Association by a single arbitrator who shall be an MAI appraiser with at least ten years' experience as an appraiser of major office buildings in downtown Boston. The parties agree that a decision of the arbitrator shall be conclusive and binding upon them. If, at the end of the Term, the rent which Landlord has actually received from the Premises is less than the aggregate fair market rent estimated as aforesaid, Tenant shall thereupon pay Landlord the amount of such difference. If and for so long as Landlord does not make the election provided for in this Section 16.04 above, Tenant shall indemnify Landlord for the loss of rent by a payment at the end of each month which would have been included in the Term, representing the excess of the rent which would have been paid in accordance with this Lease (i.e., Base Rent and Additional Rent that would have been payable to be ascertained monthly) over the rent actually derived from the Premises by Landlord for such month (the amount of rent deemed derived shall be the actual amount less any portion thereof attributable to Landlord's reletting expenses described in Section 16.03 which have not been reimbursed by Tenant thereunder).

In lieu of the damages, indemnity, and full recovery by Landlord of the sums payable under the foregoing provisions of this Section 16.04, Landlord may, by written notice to Tenant within six months after termination under any of the provisions contained in Section 16 and before such full recovery, elect to recover, and Tenant shall thereupon pay, as minimum liquidated damages under this Section 16.04, an amount equal to (i) the aggregate of the Base Rent and Additional Rent for the twelve-month period ending one year after the termination date (or, if lesser, for the balance of the Term had it not been terminated), plus (ii) the amount of Base Rent and Additional Rent of any kind accrued and unpaid at the time of termination, and minus (iii) the amount of any recovery by Landlord under the foregoing provisions of this Section 16 up to the time of payment of such liquidated damages (but reduced by any amounts of reimbursement under Section 16.03). The amount under clause (i) represents a reasonable forecast of the minimum damages expected to occur in the event of a breach, taking into account the uncertainty, time and cost of determining elements relevant to actual damages, such as fair market rent,

time and costs that may be required to re-lease the Premises, and other factors. Liquidated damages hereunder shall not be in lieu of any claims for reimbursement under Section 16.03.

Free rent amounts, rent holidays, rent waivers, rent forgivenesses and the like (collectively "Free Rent Amounts"), if any, have been agreed to by Landlord as inducements for Tenant to enter into and faithfully to perform all of its obligations contained in this Lease. For all purposes under this Lease, upon the occurrence of any event under Section 16.01 and the lapse of any applicable grace or notice period, any Free Rent Amounts set forth in this Lease shall be deemed void as of the date of execution hereof as though such Free Rent Amounts had never been included in this Lease, and calculations of amounts due hereunder, damages and the like shall be determined accordingly. The foregoing shall occur automatically without the requirement of any further notice or action by Landlord not specifically required by Section 16.01, whether or not this Lease is then or thereafter terminated on account of the event in question, and whether or not Tenant thereafter corrects or cures any such event.

Any obligation imposed by law upon Landlord to relet the Premises after any termination of the Lease shall be subject to the reasonable requirements of Landlord to lease to high quality tenants on such terms as Landlord may from time to time deem appropriate and to develop the Project in a harmonious manner with an appropriate mix of uses, tenants, floor areas and terms of tenancies, and the like, and Landlord shall not be obligated to relet the Premises to any party to whom Landlord or its affiliate may desire to lease other available space in the Project.

16.05 Curative Action. If Tenant is in Default of any of its non-monetary obligations under this Lease, Landlord shall have the right, but not the obligation, to perform any such obligation. Tenant shall reimburse Landlord for the cost of such performance upon demand, together with an administrative charge equal to ten percent (10%) of the cost of the work performed by Landlord.

16.06 Claims in Bankruptcy. Nothing herein shall limit or prejudice the right of Landlord to prove and obtain in a proceeding for bankruptcy, insolvency, arrangement or reorganization, by reason of the termination, an amount equal to the maximum allowed by a statute or law in effect at the time when, and governing the proceedings in which, the damages are to be proved, whether or not the amount is greater than, equal to, or less than the amount of the loss or damage which Landlord has suffered.

16.07 Late Charges and Fees. If Tenant does not pay any Rent when due hereunder, then without notice and in addition to all other remedies hereunder, Tenant shall pay to Landlord an administration fee in the amount of four percent (4%) of the unpaid Rent, plus interest on such unpaid amount at the rate of one and one half percent (1.5%) per month from the date such amount was due until the date paid (which interest, as accrued to date, shall be payable from time to time upon Landlord's demand); provided, however, in no event shall such interest exceed the maximum amount permitted to be charged by applicable law. Notwithstanding the foregoing, Tenant shall be entitled to a grace period of five (5) days for the first late payment of Rent in any twelve-(12)-month period prior to the imposition of the foregoing amounts. In addition, Tenant shall pay to Landlord a reasonable fee for any checks returned by Tenant's bank for any reason.

16.08. Enforcement Costs. Tenant shall pay to Landlord, as Additional Rent, the costs and expenses, including reasonable attorneys' fees, incurred in enforcing any obligations of Tenant under this Lease with which Tenant has failed to comply.

16.09 General. The repossession or re-entering of all or any part of the Premises shall not relieve Tenant of its liabilities and obligations under this Lease. No right or remedy of Landlord shall be exclusive of any other right or remedy, and each right and remedy shall be cumulative and in addition to any other right and remedy now or subsequently available to Landlord at law or in equity. Without

limiting the generality of the foregoing, in addition to the other remedies provided in this Lease, Landlord shall be entitled to the restraint by court order of the violation or attempted or threatened violation of any of the provisions of this Lease or of applicable Law or to a decree compelling specific performance of any such provisions.

17. Limitation of Liability.

17.01 Liability of the Parties.

(a) Landlord's Liability. Tenant agrees from time to time to look only to Landlord's interest in the Building for satisfaction of any claim against Landlord hereunder or under any other instrument related to the Lease (including any separate agreements among the parties and any notices or certificates delivered by Landlord) and not to any other property or assets of Landlord. If Landlord from time to time transfers its interest in the Building (or part thereof which includes the Premises), then from and after each such transfer Tenant shall look solely to the interests in the Building of each of Landlord's transferees for the performance of all of the obligations of Landlord hereunder (or under any related instrument). The obligations of Landlord shall not be binding on any direct or indirect partners (or members, trustees or beneficiaries) of Landlord or of any successor, individually, but only upon Landlord's or such successor's interest described above. If Landlord shall refuse or fail to provide any consent or approval for any matter for which Landlord's consent or approval is required under this Lease or is otherwise requested by Tenant, Landlord shall not be liable for damages as a result thereof, and Tenant's sole remedy to enforce any alleged obligation of Landlord to provide such consent or approval shall be an action for specific performance, injunction, or declaratory relief.

(b) Tenant's Liability. Tenant is a Delaware corporation. Landlord agrees from time to time to look only to Tenant, and not to any officers, directors, or shareholders of Tenant, for satisfaction of any claim against Tenant hereunder or under any other instrument related to the Lease (including any separate agreements among the parties and any notices or certificates delivered by Tenant).

17.02 Assignment of Rents.

(a) With reference to any assignment by Landlord of Landlord's interest in this Lease, or the rents payable hereunder, conditional in nature or otherwise, which assignment is made to the holder of a mortgage on property which includes the Premises, Tenant agrees that the execution thereof by Landlord, and the acceptance thereof by the holder of such mortgage shall never be treated as an assumption by such holder of any of the obligations of Landlord hereunder unless such holder shall, by notice sent to Tenant, specifically otherwise elect and, except as aforesaid, such holder shall be treated as having assumed Landlord's obligations hereunder only upon foreclosure of such holder's mortgage and the taking of possession of the Premises.

(b) In no event shall the acquisition of Landlord's interest in the Property by a purchaser which, simultaneously therewith, leases Landlord's entire interest in the Property back to the seller thereof be treated as an assumption by operation of law or otherwise, of Landlord's obligations hereunder, but Tenant shall look solely to such seller-lessee, and its successors from time to time in title, for performance of Landlord's obligations hereunder. In any such event, this Lease shall be subject and subordinate to the lease to such purchaser. For all purposes, such seller-lessee, and its successors in title, shall be the Landlord hereunder unless and until Landlord's position shall have been assumed by such purchaser-lessor.

(c) Except as provided in paragraph (b) of this Section 17.02, in the event of any transfer of title to the Property by Landlord, Landlord shall thereafter be entirely freed and relieved from the performance and observance of all covenants and obligations hereunder. Tenant hereby agrees to enter into such agreements or instruments as may, from time to time, be requested in confirmation of the foregoing.

17.03 Landlord Default. In the event Tenant alleges that Landlord is in default under any of Landlord's obligations under this Lease, Tenant agrees to give any Mortgagee (as defined in Section 21), by registered mail, a copy of any notice of default which is served upon the Landlord, provided that prior to such notice, Tenant has been notified, in writing (whether by way of notice of an assignment of lease, request to execute an estoppel letter, or otherwise), of the address of any such Mortgagee. Tenant further agrees that if Landlord shall have failed to cure such default within the time provided by law or such additional time as may be provided in this Lease or such notice to Landlord, such Mortgagee shall have a period of thirty (30) days after the last date on which Landlord could have cured such default within which such Mortgagee will be permitted, but not be obligated, to cure such default. If such default cannot be cured within such thirty-(30)-day period, then such Mortgagee shall have such additional time as may be necessary to cure such default, if prior to the end of such thirty-(30)-day period such Mortgagee has commenced and is diligently pursuing such cure or the remedies under the Mortgage necessary for Mortgagee to be able to effect such cure, in which event Tenant shall have no right with respect to such default while such cure and remedies are being diligently pursued by such Mortgagee. Except as may be expressly provided in this Lease, in no event shall Tenant have the right to terminate the Lease nor shall Tenant's obligation to pay Base Rent or other charges under this Lease abate based upon any default by Landlord of its obligations under the Lease. In no event shall Landlord or any Landlord Related Party ever be liable to Tenant for loss of profits, loss of business, or indirect or consequential damages suffered by Tenant from whatever cause.

18. Relocation.

Landlord, at its expense, at any time before or during the Term, may relocate Tenant from the Premises to space, which shall be located on a floor on or above the ninth (9th) floor, of reasonably comparable size and utility (meaning substantially the same number and size of offices and conference rooms and with comparable or better finishes) ("Relocation Space") within the Project upon not less than one hundred twenty (120) days' prior written notice to Tenant. From and after the date of the relocation, the Base Rent and Tenant's Proportionate Share shall be adjusted based on the Rentable Floor Area of the Relocation Space, provided that the Rent payable by Tenant for such Relocation Space shall not exceed the Rent that Tenant would have paid for the original Premises in the absence of such relocation. Landlord shall pay Tenant's reasonable costs of relocation, including all costs for moving Tenant's furniture, equipment, supplies and other personal property, as well as the cost of printing and distributing change of address notices to Tenant's customers and one month's supply of stationery showing the new address, and refund Tenant's Contribution Amount under Exhibit C within thirty (30) days after Tenant's request following the effective date of such relocation.

19. Holding Over.

If Tenant fails to surrender all or any part of the Premises at the expiration or earlier termination of this Lease, any such occupancy of all or any part of the Premises after such expiration or termination shall be that of a tenancy at sufferance. Any such occupancy after such expiration or termination shall be subject to all the terms and provisions of this Lease, except that Tenant shall pay an amount for such occupancy (on a per month basis without reduction for partial months during the holdover) equal to 150% (for up to the first thirty (30) days of any such holdover, and thereafter 200%) of the greater of (i) the Rent due for the month immediately preceding the holdover or (ii) the fair market rent then being obtained for comparable space in the Building. No holdover by Tenant or payment by Tenant after the expiration or earlier termination of this Lease shall be construed to extend the Term or prevent Landlord from

immediate recovery of possession of the Premises by summary proceedings or otherwise. In addition, if as a result of such holdover that exceeds thirty (30) days, Landlord is unable to deliver possession of space to a new tenant or to perform improvements therein for a new tenant due to Tenant's failure to timely vacate all or part of the Premises, Tenant shall be liable to Landlord for all damages and losses that Landlord suffers from the holdover.

20. Surrender of Premises.

At the expiration or earlier termination of this Lease or Tenant's right of possession hereunder, Tenant shall remove all Tenant's Property from the Premises, remove all Required Removables (if any) under Section 8.03, and quit and surrender the Premises to Landlord, broom clean, and in good order, condition and repair, ordinary wear and tear (and, if applicable, damage due to casualty or condemnation or other damage which Landlord is obligated to repair hereunder) excepted. Tenant shall repair any damage caused by the installation or removal of Tenant's Property or Required Removables. If Tenant fails to remove any of Tenant's Property or to restore or repair the Premises to the required condition as provided herein upon the expiration of the Term of this Lease (or, as applicable, within two (2) days after any earlier termination of this Lease or Tenant's right to possession hereunder), then Landlord, upon written notice to Tenant and at Tenant's sole cost and expense, shall be entitled, but not obligated, to remove and store Tenant's Property and/or perform such restoration or repair of the Premises. Landlord shall not be responsible for the value, preservation, or safekeeping of Tenant's Property, and Tenant shall pay to Landlord, upon demand, the expenses and storage charges so incurred. If Tenant fails to remove Tenant's Property from the Premises or storage, within thirty (30) days after notice, Landlord may deem all or any part of Tenant's Property to be abandoned and, at Landlord's option, title to Tenant's Property shall vest in Landlord or Landlord may dispose of Tenant's Property in any manner Landlord deems appropriate.

21. Subordination to Mortgages; Estoppel Certificate.

21.01 Subordination. This Lease is and shall be subject and subordinate to any mortgage(s), deed(s) of trust, deeds to secure debt, ground lease(s) or other lien(s) now or subsequently arising upon the Premises, the Building or the Project, and to all renewals, modifications, refinancings, and extensions thereof (collectively referred to as a "Mortgage"). The party having the benefit of a Mortgage shall be referred to as a "Mortgagee". This clause shall be self-operative, but upon request from Landlord or a Mortgagee, Tenant shall execute a subordination agreement in favor of the Mortgagee in such Mortgagee's standard form, with such commercially reasonable changes as Tenant may request that are acceptable to Mortgagee for other comparable leases in the Building. As an alternative, any Mortgagee shall have the right at any time to subordinate its Mortgage to this Lease. Upon request, Tenant, without charge, shall attorn to any successor to Landlord's interest in this Lease. In the event Mortgagee enforces it rights under the Mortgage, Tenant, at Mortgagee's option, will attorn to Mortgagee or its successor; provided, however, that Mortgagee or its successor shall not be liable for or bound by (i) any payment of any Rent installment which may have been made more than thirty (30) days before the due date of such installment, (ii) any act or omission of or default by Landlord under this Lease (but Mortgagee, or such successor, shall be subject to the continuing obligations of landlord under the Lease arising from and after such succession, but only to the extent of Mortgagee's, or such successor's, interest in the Property as provided in Section 17), (iii) any credits, claims, setoffs or defenses which Tenant may have against Landlord, or (iv) any obligation under this Lease to maintain a fitness facility at the Project, if any. Tenant, upon the reasonable request by Mortgagee or such successor in interest, shall execute and deliver an instrument or instruments confirming such attornment.

21.02 Modification of Lease. If any Mortgagee requires a modification of this Lease, which modification will not cause an increased cost or expense to Tenant or in any other way materially and adversely change the rights and obligations of Tenant hereunder, Tenant agrees that this Lease may be so

modified and agrees to execute whatever documents are reasonably required therefor and to deliver the same to Landlord within ten (10) business days following a request therefor. At the request of Landlord or any Mortgagee, Tenant agrees to execute a short form of this Lease and deliver the same to Landlord within ten (10) business days following the request therefor.

21.03 Estoppel Certificate. Tenant shall, within ten (10) Business Days after receipt of a written request, execute and deliver a commercially reasonable estoppel certificate addressed to Landlord and any parties reasonably requested by Landlord, such as a current or prospective Mortgagee or purchaser of the Building. Without limitation, such estoppel certificate may include a certification as to the status of this Lease and any particular obligations thereunder, the existence of any defaults, and the amount of Rent that is then due and payable.

21.04 Tenant Information. Upon Landlord's request from time to time (but not more than once per calendar year, unless a Default occurs), Tenant shall provide to Landlord the financial statements for Tenant for its most recent fiscal year and fiscal quarter. Financial statements for each fiscal year shall be prepared and certified by a certified public accountant. If audited financials are not otherwise prepared, unaudited financials complying with generally accepted accounting principles and certified by the principal financial officer of Tenant shall suffice for purposes of this Section. If requested by Tenant, such financial statements shall be furnished pursuant to a confidentiality agreement in a form reasonably provided by Landlord for such purpose.

22. Miscellaneous.

22.01 Measurement of Floor Area. Landlord and Tenant stipulate and agree that the Rentable Floor Area of the Premises originally leased to Tenant shall be conclusively deemed to be as specified in Section 1 and that the Rentable Floor Area of the Office Section of the Building is as specified in Exhibit B as of the date hereof. Any change in the Rentable Floor Area of the Premises on account of expansion shall be conclusively deemed to be as specified in any applicable expansion provisions under Exhibit F (if any) or in any amendment hereafter executed by Landlord and Tenant in connection with such expansion (if any). Any other change in the Rentable Floor Area of the Premises on account of casualty, condemnation, or the like shall be determined in accordance with the measurement standard that was originally used to determine the stipulated Rentable Floor Area for the space in question. Any change in the Rentable Floor Area of the Office Section of the Building on account of casualty, condemnation, or other changes to the Building shall be determined from time to time by Landlord based on area computations supplied by Landlord's architect, which determinations shall be conclusive. References in this Lease to floor area measurements and square footage shall mean Rentable Floor Area unless the reference explicitly provides otherwise.

22.02 Notice of Lease. Tenant shall not record this Lease or any memorandum or notice without Landlord's prior written consent.

22.03 Governing Law, Etc. This Lease shall be interpreted and enforced in accordance with the Laws of the state or commonwealth in which the Building is located and Landlord and Tenant hereby irrevocably consent to the jurisdiction and proper venue of such state or commonwealth. This Lease contains all of the agreements and understandings between Landlord and Tenant with respect to the Premises and supersedes all prior writings and dealings between them with respect thereto, including all lease proposals, letters of intent and other documents. Neither party is relying upon any warranty, statement or representation not contained in this Lease. If any term or provision of this Lease shall to any extent be void or unenforceable, the remainder of this Lease shall not be affected. This Lease may be amended only by a writing signed by all of the parties hereto. The titles are for convenience only and shall not be considered a part of the Lease. Where the phrases "persons acting under Tenant" or "persons

claiming under Tenant" or similar phrases are used, such persons shall include subtenants, sub-subtenants, and licensees, and all employees, agents, independent contractors and invitees of Tenant or of such other parties. The enumeration of specific examples of or inclusions in a general provision shall not be construed as a limitation of the general provision. If Tenant is granted any extension option, expansion option, or other right or option, the exercise of such right or option (and notice thereof) must be unconditional to be effective, time always being of the essence to the exercise of such right or option; and if Tenant purports to condition the exercise of any option or to vary its terms in any manner, then the option granted shall be void and the purported exercise shall be ineffective. Unless otherwise stated herein, any consent or approval required hereunder may be given or withheld in the sole absolute discretion of the party whose consent or approval is required. Nothing herein shall be construed as creating the relationship between Landlord and Tenant of principal and agent, or of partners or joint venturers, or any relationship other than landlord and tenant. If there is more than one Tenant or if Tenant is comprised of more than one party or entity, the obligations imposed upon Tenant shall be joint and several obligations of all such parties and entities, any requests or demands from any one person or entity comprising Tenant shall be deemed to have been made by all such persons or entities, and notices to any one person or entity comprising Tenant shall be deemed to have been given to all such persons and entities. Tenant's covenants contained in this Lease are independent and not dependent, and Tenant hereby waives the benefit of any statute or judicial law to the contrary. Tenant's obligation to pay Rent shall not be discharged or otherwise affected by any law or regulation now or hereafter applicable to the Premises, or any other restriction on Tenant's use, or (except as expressly provided in this Lease) any casualty or taking, or any failure by Landlord to perform any covenant contained herein, or any other occurrence; and no termination or abatement remedy that is not expressly provided for in this Lease for any breach or failure by Landlord to perform any obligation under this Lease shall be implied or applicable as a matter of law.

22.04 Representations. Tenant represents and warrants to Landlord, and agrees, that each individual executing this Lease on behalf of Tenant is authorized to do so on behalf of Tenant and that the entity(ies) or individual(s) constituting Tenant or Guarantor, or which may own or control Tenant or Guarantor, or which may be owned or controlled by Tenant or Guarantor, or any of Tenant's or Guarantor's affiliates, or any of their respective partners, members, shareholders or other equity owners, and their respective employees, officers, directors, representatives or agents are not and at no time will be (i) in violation of any Laws relating to terrorism or money laundering, or (ii) among the individuals or entities with whom U.S. persons or entities are restricted from doing business under regulations of the Office of Foreign Assets Control ("OFAC") of the Department of the Treasury (including those named on OFAC's Specially Designated Nationals and Blocked Persons List for the purpose of identifying suspected terrorists or on the most current list published by the U.S. Treasury Department Office of Foreign Assets Control at its official website, http://www.treasury.gov/resource-center/sanctions/SDN-List/Pages/default.aspx or any replacement website or other replacement official publication of such list) or under any statute, executive order (including the September 24, 2001, Executive Order Blocking Property and Prohibiting Transactions with Persons Who Commit, Threaten to Commit, or Support Terrorism, known as Executive Order 13224), or other governmental action and Tenant will not Transfer this Lease to, contract with or otherwise engage in any dealings or transactions or be otherwise associated with such persons or entities.

Landlord represents and warrants to Tenant that Landlord is (i) not currently identified on the Specially Designated Nationals and Blocked Persons List maintained by OFAC and/or on any other similar list maintained by OFAC pursuant to any authorizing statute, executive order or regulation, (ii) not a person or entity with whom a citizen of the United States is prohibited to engage in transactions by any trade embargo, economic sanction, or other prohibition of United States law, regulation, or Executive Order of the President of the United States, including specifically the Executive Order Blocking Property and Prohibiting Transactions With Persons Who Commit, Threaten to Commit, or Support Terrorism

dated September 24, 2001 (as such may be amended) and (iii) the owner of the Project, the Property, and the Building in fee simple, and that it has the full power to execute this Lease and lease the Premises as provided in this Lease and that each individual executing this Lease on behalf of Landlord is authorized to do so on behalf of Landlord.

22.05 Waiver of Trial by Jury; No Other Waiver. Landlord and Tenant hereby waive any right to trial by jury in any proceeding based upon a breach of this Lease. No failure by either party to declare a default immediately upon its occurrence, nor any delay by either party in taking action for a default, nor Landlord's acceptance of Rent with knowledge of a default by Tenant, shall constitute a waiver of the default, nor shall it constitute an estoppel. The delivery of keys to Landlord or to Landlord's property manager shall not operate as a termination of this Lease or a surrender of the Premises.

22.06 Time Periods. Whenever a period of time is prescribed for the taking of an action by Landlord or Tenant (other than the payment of the Security Deposit or Rent), the period of time for the performance of such action shall be extended by the number of days that the performance is actually delayed due to strikes, acts of God, shortages of labor or materials, war, terrorist acts, pandemics, civil disturbances and other causes beyond the reasonable control of the performing party ("Force Majeure").

22.07 Transfer of the Property. Landlord shall have the right from time to time to transfer and assign, in whole or in part, all of its rights and obligations under this Lease and in the Building and the Project. Upon transfer, Landlord shall be released from any further obligations hereunder and Tenant agrees to look solely to the successor in interest of Landlord for the performance of such obligations, to the extent that any successor pursuant to a voluntary, third party transfer (but not as part of an involuntary transfer resulting from a foreclosure or deed in lieu thereof) shall have assumed Landlord's obligations under this Lease from and after the date of the transfer.

22.08 Submission. The submission of this Lease to Tenant or a summary of some or all of its provisions for examination does not constitute a reservation of or option for the Premises or an offer to lease, and no legal obligations shall arise with respect to the Premises or other matters herein unless and until such time as this Lease is executed and delivered by Landlord and Tenant and approved by the holder of any mortgage on the Building having the right to approve this Lease.

22.09 Brokers. Tenant represents that it has dealt directly with and only with the Broker(s) (described in Section 1) as a broker, agent or finder in connection with this Lease. Tenant shall indemnify and hold Landlord and the Landlord Related Parties harmless from all claims of any other brokers, agents or finders claiming to have represented Tenant in connection with this Lease. Landlord shall indemnify and hold Tenant and the Tenant Related Parties harmless from all claims of any brokers, agents or finders claiming to have represented Landlord in connection with this Lease. Any assistance rendered by any agent or employee of Landlord in connection with this Lease or any subsequent amendment or modification or any other document related hereto has been or will be made as an accommodation to Tenant solely in furtherance of consummating the transaction on behalf of Landlord, and not as agent for Tenant.

22.10 Survival. The expiration of the Term, whether by lapse of time, termination or otherwise, shall not relieve either party of any obligations that accrued prior to or which may continue to accrue after the expiration or termination of this Lease.

22.11 Quiet Enjoyment. This Lease is subject to all easements, restrictions, agreements, and encumbrances of record to the extent in force and applicable. Landlord covenants that Tenant, on paying the Rent and performing the tenant obligations in this Lease, shall peacefully and quietly have, hold and enjoy the Premises, free from any claim by Landlord or persons claiming under Landlord, but subject to

all of the terms and provisions hereof, provisions of Law, and rights of record to which this Lease is or may become subordinate. This covenant is in lieu of any other so called quiet enjoyment covenant, either express or implied. This covenant shall be binding upon Landlord and its successors only during its or their respective periods of ownership of the Building.

22.12 Reservations. This Lease does not grant any rights to light or air over or about the Project. Landlord excepts and reserves exclusively to itself any and all rights not specifically granted to Tenant under this Lease. Landlord reserves the right to make changes to the Project as Landlord deems appropriate. Wherever this Lease requires Landlord to provide a customary service or to act in a reasonable manner (whether in incurring an expense, establishing a rule or regulation, providing an approval or consent, or performing any other act), this Lease shall be deemed also to provide that whether such service is customary or such conduct is reasonable shall be determined by reference to the practices of owners of buildings that (i) are comparable to the Building in size, age, class, quality and location, and (ii) at Landlord's option, have been, or are being prepared to be, certified under the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system or a similar rating system.

22.13 Rents from Real Property. Landlord and Tenant agree that all rental payable by Tenant to Landlord, which includes all sums, charges, or amounts of whatever nature to be paid by Tenant to Landlord in accordance with the provisions of this Lease, shall qualify as "rents from real property" within the meaning of both Sections 512(b)(3) and 856(d) of the Internal Revenue Code of 1986, as amended (the "Code") and the U.S. Department of Treasury Regulations promulgated thereunder (the "Regulations"). In the event that Landlord, in its sole discretion, determines that there is any risk that all or part of any rental shall not qualify as "rents from real property" for the purposes of Sections 512(b)(3) or 856(d) of the Code and the Regulations promulgated thereunder, Tenant agrees (i) to cooperate with Landlord by entering into such amendment or amendments as Landlord deems necessary to qualify all payments as "rents from real property," (ii) to permit an assignment of this Lease and (iii) to allow Landlord to assign any and all obligations that Landlord has under this Lease to a third party; provided, however, that any adjustments required pursuant to this paragraph shall be made so as to produce the equivalent rental payments (in economic terms) payable prior to such adjustment.

22.14 Unrelated Business Taxable Income. Landlord shall have the right at any time and from time to time to unilaterally amend the provisions of this Lease, if Landlord is advised by its counsel that all or any portion of the monies paid by Tenant to Landlord hereunder are, or may be deemed to be, unrelated business income within the meaning of the Code or the Regulations, and Tenant agrees that it will execute all documents or instruments necessary to effect such amendment or amendments, provided that no such amendment shall result in Tenant having to pay in the aggregate more money on account of its occupancy of the Premises under the terms of this Lease, as so amended, and provided further that no such contract shall result in Tenant having materially greater obligations or receiving less services, or services of a lesser quality than it is presently entitled to receive under this Lease. Any services which Landlord is required to furnish pursuant to the provisions of this Lease may, at Landlord's option, be furnished from time to time, in whole or in part, by employees of Landlord or Landlord's managing agent or its employees or by one or more third parties hired by Landlord or Landlord's managing agent. Tenant agrees that upon Landlord's written request it will enter into direct agreements with Landlord's managing agent or other parties designated by Landlord for the furnishing of any such services required to be furnished by Landlord hereunder, in the form and content approved by Landlord, provided however that no such contract shall result in Tenant having to pay in the aggregate more money on account of its occupancy of the Premises under the terms of this Lease, and provided further that no such contract shall result in Tenant having materially greater obligations or receiving less services, or services of a lesser quality than it is presently entitled to receive under this Lease.

22.15 ERISA. Tenant represents that (a) neither Tenant nor any entity controlling or controlled by Tenant owns a ten percent (10%) or more interest (within the meaning of Prohibited Transaction Class Exemption 84-14) in JPMorgan Chase Bank, N.A. ("JPMorgan") or any of JPMorgan's affiliates, and (b) neither JPMorgan, nor, to Tenant's actual knowledge (after having used reasonable efforts to ascertain the accuracy of such information), any of its affiliates, owns a ten percent (10%) or more interest in Tenant or any entity controlling or controlled by Tenant.

22.16 Execution. This Lease may be executed in one or more counterparts and, when executed by each party, shall constitute an agreement binding on all parties notwithstanding that all parties are not signatories to the original or the same counterpart provided that all parties are furnished a copy or copies thereof reflecting the signature of all parties. Transmission of a facsimile or by email of a pdf copy of the signed counterpart of the Lease shall be deemed the equivalent of the delivery of the original, and any party so delivering a facsimile or pdf copy of the signed counterpart of the Lease by email transmission shall in all events deliver to the other party an original signature promptly upon request.

Landlord and Tenant have executed this Lease as a sealed Massachusetts instrument in two or more counterparts as of the Effective Date of this Lease set forth above.

LANDLORD:

500 BOYLSTON & 222 BERKELEY OWNER (DE) LLC,
a Delaware limited liability company

By: /s/ Chad Remis
Name: Chad Remis
Title: Vice President

By: /s/ Kristen E. Binck
Name: Kristen E. Binck
Title: Assistant Secretary

TENANT:

resTORbio, Inc.
a Delaware corporation

By: /s/ Chen Schor
Name: Chen Schor
Title: President and CEO

EXHIBIT A

OUTLINE AND LOCATION OF PREMISES

This Exhibit is attached to and made a part of the Office Lease Agreement (the "Lease") by and between 500 BOYLSTON & 222 BERKELEY OWNER (DE) LLC, a Delaware limited liability company ("Landlord"), and **resTORbio, Inc.** ("Tenant"), for space in the Building located at 500 Boylston Street, Boston, Massachusetts 02116.

[*see attached floor plan*]

500 BOYLSTON STREET

FLOOR PLAN

12TH FLOOR - AS BUILT PLAN - 4,544 SF

OXFORD

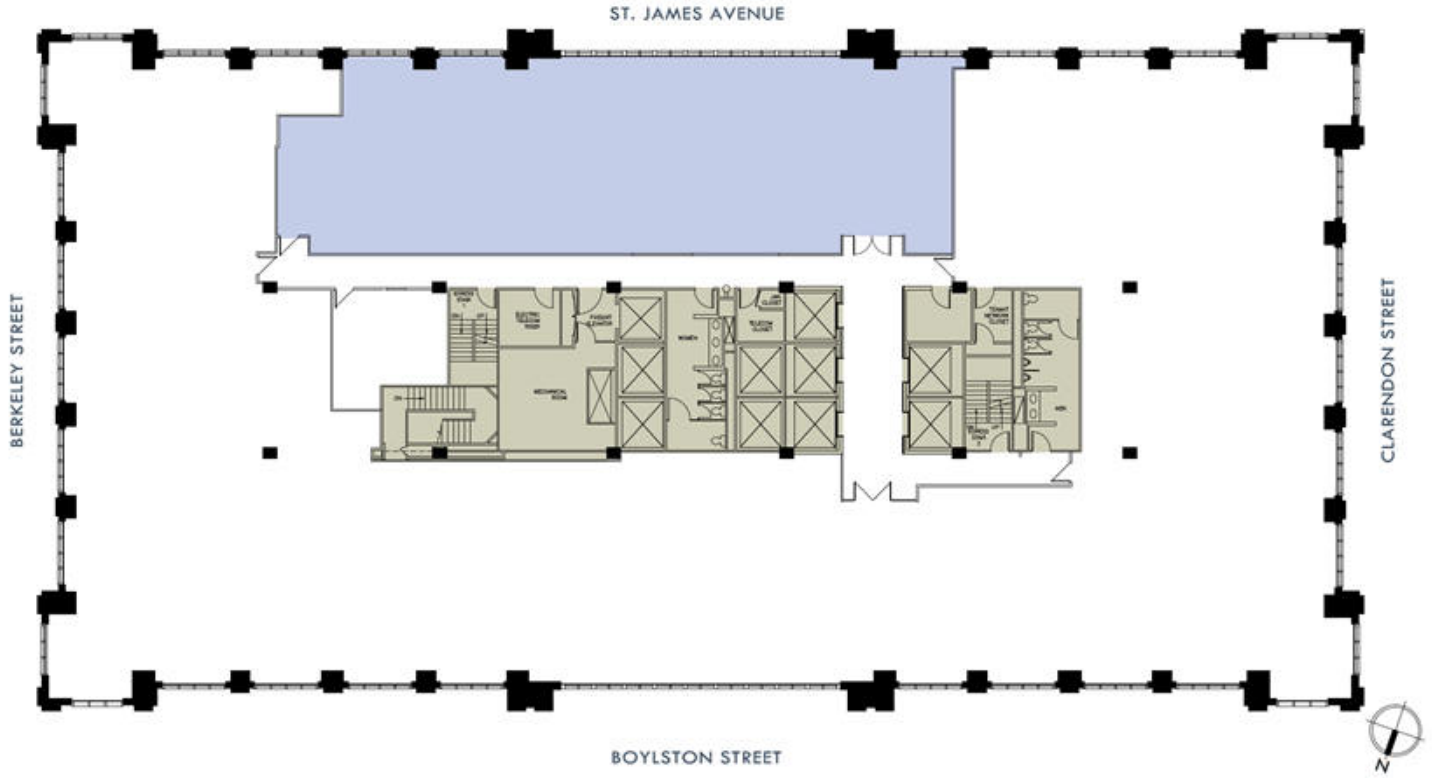


EXHIBIT B

EXPENSES AND TAXES

This Exhibit is attached to and made a part of the Office Lease Agreement (the "Lease") by and between 500 BOYLSTON & 222 BERKELEY OWNER (DE) LLC, a Delaware limited liability company ("Landlord"), and resTORbio, Inc. ("Tenant"), for space in the Building located at 500 Boylston Street, Boston, Massachusetts 02116. Capitalized terms used but not defined herein shall have the meanings given in the Lease.

1. Payments.

1.01 Expenses and Taxes. Tenant shall pay Tenant's Proportionate Share of (a) the amount of Expenses (defined below) for each calendar year during the Term and (b) the amount of Taxes (defined below) for each calendar year during the Term. Landlord shall provide Tenant with a good faith estimate of the Expenses and Taxes for each calendar year during the Term. On or before the first day of each month, Tenant shall pay to Landlord a monthly installment equal to one-twelfth of Tenant's Proportionate Share of Landlord's estimate of the Expenses and Taxes. If Landlord determines that its good faith estimate of the Expenses or of the Taxes was incorrect by a material amount, Landlord may from time to time provide Tenant with a revised estimate. After its receipt of the revised estimate, Tenant's monthly payments shall be based upon the revised estimate. If Landlord does not provide Tenant with an estimate of the Expenses or the Taxes by January 1 of a calendar year, Tenant shall continue to pay monthly installments based on the previous year's estimate(s) until Landlord provides Tenant with the new estimate. Upon delivery of the new estimate, an adjustment shall be made for any month for which Tenant paid monthly installments based on the previous year's estimate. Tenant shall pay Landlord the amount of any underpayment within thirty (30) days after receipt of the new estimate. Any overpayment shall be refunded to Tenant within thirty (30) days or credited against the next due future installment(s) of Additional Rent. Appropriate adjustments (including adjustments in the amounts of Expenses and Taxes, which are calculated on an annual basis as set forth above) shall be made for any portion of a year at the beginning or end of the Term or for any year during which changes occur in the percentage of occupancy of the Building or in the Rentable Floor Area to which Landlord furnishes particular services.

1.02 Reconciliation. As soon as is practical following the end of each calendar year, Landlord shall furnish Tenant with a statement of the actual Expenses and the actual Taxes for the prior calendar year. If the amount of estimated Expenses or estimated Taxes for the prior calendar year is more than the actual Expenses or actual Taxes, as the case may be, for the prior calendar year, Landlord shall either provide Tenant with a refund or apply any overpayment by Tenant against Additional Rent due or next becoming due, provided that, if the Term expires before the determination of the overpayment, Landlord shall refund any overpayment to Tenant after first deducting the amount of Rent due. If the amount of estimated Expenses or estimated Taxes for the prior calendar year is less than the actual Expenses or actual Taxes, as the case may be, for such prior year, Tenant shall pay Landlord, within thirty (30) days after its receipt of the statement of Expenses or Taxes, any underpayment for the prior calendar year. Landlord's annual statement with respect to Expenses and Taxes, or any other statement regarding other Additional Rent, shall be binding upon, and may not be disputed by, Tenant unless the statement is incorrect and is disputed by Tenant, within one hundred twenty (120) days after Tenant's receipt of Landlord's statement, by a notice to Landlord specifically stating the grounds for dispute. Tenant's failure so to dispute Landlord's statement shall constitute a waiver of Tenant's right to dispute the statement. Notwithstanding any dispute concerning any Landlord's statement, payments shall be made by the parties in accordance with Landlord's statement at the time and in the manner set forth above, and if necessary there shall be a further adjustment between the parties at the time the dispute is resolved.

2. Property Operating Expenses.

2.01 "Expenses" means all costs and expenses incurred in each calendar year in connection with operating, maintaining, repairing, and managing the Building, the Property, and the Common Areas of the Project, subject to the provisions of this Section 2. Expenses include, without limitation: (a) all labor and labor related costs, including wages, salaries, bonuses, taxes, insurance, uniforms, training, retirement plans, pension plans and other employee benefits (which shall be equitably prorated by Landlord between the Building and other buildings or properties to which the applicable employee is providing services); (b) management fees in an amount equal to three percent (3%) of the gross revenues of the Building; (c) the cost of equipping, staffing and operating an on-site and/or off-site management office for the Building (including, without limitation, the market rental for the management office located in the Building), provided if the management office services one or more other buildings or properties, the shared costs and expenses of equipping, staffing and operating such management office(s) shall be equitably prorated and apportioned by Landlord between the Building and the other buildings or properties; (d) costs of accounting and IT services (which shall be equitably prorated by Landlord between the Building and other buildings or properties to which such services are provided); (e) the cost of services (which shall be equitably prorated by Landlord between the Building and other buildings or properties to which such services are provided); (f) rental and purchase cost of parts, supplies, tools and equipment (which shall be equitably prorated by Landlord between the Building and other buildings or properties where such parts, supplies, tools and equipment are used); (g) insurance premiums and deductibles paid by Landlord; (h) electricity, gas and other utility costs; and (i) the amortized cost of capital improvements (as distinguished from replacement parts or components installed in the ordinary course of business) that are: (1) intended to effect economies in the operation or maintenance of the Property, reduce current or future Expenses or (2) required under any Law that is enacted or first interpreted to apply to the Property after the Effective Date. The cost of capital improvements shall be amortized by Landlord over the Payback Period (defined below) in the case of items under the preceding clause (i)(1) and over the useful life of the capital improvement in the case of items under the preceding clause (i)(2), in each case as reasonably determined by Landlord. The amortized cost of capital improvements may, at Landlord's option, include actual or imputed interest at the rate that Landlord would reasonably be required to pay to finance the cost of the capital improvement. "Payback Period" means the reasonably estimated period of time that it takes for the cost savings resulting from a capital improvement to equal the total cost of the capital improvement. Landlord, by itself or through an affiliate, shall have the right to directly perform, provide and be compensated for any services under the Lease. If Landlord incurs Expenses for the Common Areas of the Project or for the Building or Property together with one or more other buildings or properties, whether pursuant to a reciprocal easement agreement, common area agreement or otherwise, the shared costs and expenses shall be equitably prorated and apportioned by Landlord between the Building and Property and the other buildings or properties.

2.02 Exclusions. Expenses shall not include: those costs and expenses which are specifically attributable to and separately paid by the tenants of the Retail Section of the Building and not provided to Tenant hereunder; that portion of the costs and expenses relating to the loading dock facilities and other Common Areas that exclusively serve the Retail Section of the Building or is paid by the tenants in the Retail Section of the Building; the cost of capital improvements (except as set forth above); depreciation or amortization (except as provided in Paragraph 2.01(i) above); principal and interest payments of mortgage and other non-operating debts of Landlord; the cost of repairs or other work to the extent Landlord is reimbursed by insurance or condemnation proceeds; costs in connection with leasing space in the Building, including legal fees, brokerage commissions, lease concessions, rental abatements, and construction allowances granted to specific tenants; costs incurred in connection with the sale, financing or refinancing of the Building; fines, interest and penalties incurred due to the late payment of Taxes or Expenses; organizational expenses associated with the creation and operation of the entity which constitutes Landlord; any penalties or damages that Landlord pays to Tenant under this Lease or to other

tenants in the Building under their respective leases; salaries and benefits of personnel above the grade of the Building's general manager; costs of operating, maintaining, repairing, and managing the garage serving the Building; ground lease rent; replacement or contingency reserves; costs of assessment or remediation of specific releases or spills of, and the cost of defending against claims in regard to the existence or release of, hazardous materials in the Building or the Property, except with respect to those costs for which Tenant is otherwise responsible pursuant to the express terms of this Lease; costs of electricity provided to tenants' premises, if and to the extent that Tenant is charged for such electricity services under other provisions of this Lease; costs of special services that are separately chargeable to Tenant and other tenants; and charitable or political contributions.

2.03 Adjustments. If at any time during a calendar year the Building is not fully occupied and receiving Landlord services hereunder (or if a service provided by Landlord to tenants of the Building generally is not provided by Landlord to particular tenant(s) due to self-provided services or other circumstances), Expenses shall, at Landlord's option, be determined as if the Building had been fully occupied (and all services provided by Landlord to tenants of the Building generally had been provided by Landlord to tenants occupying the entire Building) during that calendar year.

2.04 Related Definitions. As used herein, "Tenant's Proportionate Share" shall initially be as specified in Section 1 of the Lease, subject to adjustment from time to time to reflect the ratio in which the Rentable Floor Area of the Premises bears to the greater of (i) ninety-five percent (95%) of the total Rentable Floor Area of the Office Section of the Building, or (ii) the Total Leased Rentable Floor Area. The Rentable Floor Area of the Office Section of the Building shall be deemed to be 684,433 square feet as of the Effective Date. The "Total Leased Rentable Floor Area" shall mean the sum of the Rentable Floor Area leased to all tenants of the Office Section of the Building over the course of a year, determined on the basis of a weighted averaging of the sum of the Rentable Floor Area leased to and occupied by all tenants of the Office Section of the Building receiving standard building services on each day of that year. Landlord reserves the right from time to time to change or recalculate the total Rentable Floor Area of the Office Section as provided in Section 22.01 of the Lease and the Total Leased Rentable Floor Area of the Office Section of the Building based on changes in occupancy from time to time.

3. Property Taxes.

"Taxes" shall mean, subject to the following provisions hereof: (a) all real property taxes and other assessments on the Building and/or Property, including, but not limited to, gross receipts taxes, assessments for special improvement districts and business improvement districts, governmental charges, fees and assessments for police, fire, traffic mitigation or other governmental service of purported benefit to the Property, taxes and assessments levied in substitution or supplementation in whole or in part of any such taxes and assessments and the Property's share of any real estate taxes and assessments under any reciprocal easement agreement, common area agreement, or similar agreement as to the Property; (b) all personal property taxes for property that is owned by Landlord and used in connection with the operation, maintenance and repair of the Property; and (c) all costs and fees incurred in connection with seeking reductions in any tax liabilities described in (a) and (b), including, without limitation, any costs incurred by Landlord for compliance, review, and appeal of tax liabilities. Without limitation, Taxes shall be determined without regard to any "green building" credit and shall not include any income, capital levy, transfer, capital stock, gift, estate, or inheritance tax or any penalties, interest, or late payment charges due to Landlord's failure to timely pay Taxes. Taxes shall further exclude that portion of the items enumerated in this Section which is allocated by Landlord to the Retail Section and the garage serving the Building. If a change in Taxes is obtained for any year of the Term during which Tenant paid Tenant's Proportionate Share of Taxes, then Taxes for that year will be retroactively adjusted and Landlord shall provide Tenant with a credit, if any, based on the adjustment. Tenant shall pay Landlord the amount of Tenant's Proportionate Share of any such increase in Taxes within thirty (30) days after Tenant's receipt

of a statement from Landlord. For the purpose of determining Taxes for any given calendar year, the amount to be included in Taxes for such year shall be as follows: (1) with respect to any special assessment that is payable in installments, Taxes for such year shall include the amount of the installment (and any interest) due and payable during such calendar year; and (2) with respect to all other real estate taxes, Taxes for such year shall, at Landlord's election, include either the amount accrued, assessed, or otherwise imposed for such calendar year, provided that Landlord's election shall be applied consistently throughout the Term of the Lease.

Schedule B-1

Cleaning Specifications

[*see attached list*]

The current cleaning specifications for the Building are set forth on the attached schedule. Any particular elements of such cleaning specifications are subject to change from time to time by Landlord in a manner consistent with other first-class high-rise office buildings in downtown Boston.

CLEANING SPECIFICATIONS

A. Daily Services - General (after 6:00 p.m. on Business Days)

1. Empty trash cans.
2. Dust all horizontal surfaces, desks, chairs, files, telephones, picture frames, etc. Computers will not be dusted.
3. Damp wash and wipe dry plastic or Formica desktops free of papers.
4. Clean and sanitize drinking fountains.
5. Spot clean all windows glass, including lobby doors for fingerprints and smudges
6. Dust mop and spot clean all tiled areas.
7. Vacuum carpeted traffic areas daily, wall to wall once per week.

B. Daily Services - Restrooms

1. Remove trash and clean receptacles.
2. Clean and sanitize lavatories, commodes, and urinals.
3. Clean out corners and edges.
4. Clean mirrors.
5. Spot clean wall tile and partitions.
6. Replenish supplies.
7. Sweep floor.
8. Mop and disinfect floor as necessary.

C. Daily Services - Elevators

1. Clean light lenses and replace burned out bulbs.
2. Spot clean walls.
3. Clean edges, corners, and tracks.
4. Vacuum carpet.

D. Daily Services - Street Level

1. Sweep all marble and/or granite public areas.
2. Clean all glass entrance ways and side panels.
3. Empty all ash urns.
4. Spot clean marble and/or granite walls.
5. Dust all horizontal edges.

E. Weekly Services - Stairways

1. Sweep from top to bottom.
2. Dust handrails and ledges.
3. Dust lights between floors.

F. Weekly Services - Marble/Granite Floors

1. Mop and/or wash all public areas.

G. Monthly Services - Tile Floors

1. Clean and wash all traffic lanes and other “high wear” areas.

H. Annual Services - General

1. Clean inside of all exterior windows.
2. Clean all fluorescent light fixture lenses.
3. Wash down all restroom walls and partitions.

I. Services as required

1. Spot clean carpeted areas.
2. Shampoo public areas outside tenant space.
3. Damp mop all tile floors.
4. Strip and recoat all tile floors.

J. Services - Building Exterior

1. Daily
   a. Police building perimeter for trash.
   b. Remove trash from tree wells and planters.

K. Services - Day Crew

1. Police and replenish supplies in all restrooms.
2. Vacuum all passenger elevators twice each day.
3. Clean and vacuum garage elevators.
4. Clean all ash urns twice each day.
5. Clean all glass entrance doors in main lobby.
6. Dust mop and/or damp mop all marble and/or granite floors in main lobby once each day.
7. Clean all windows on building perimeter at street level as needed.
8. Clean service area, hallway, and dock area.

EXHIBIT C

WORK LETTER

This Exhibit is attached to and made a part of the Office Lease Agreement (the "Lease") by and between 500 BOYLSTON & 222 BERKELEY OWNER (DE) LLC, a Delaware limited liability company ("Landlord"), and resTORbio, Inc. ("Tenant"), for space in the Building located at 500 Boylston Street, Boston, Massachusetts 02116. Capitalized terms used but not defined herein shall have the meanings given in the Lease.

(Initial Tenant Work - "spec build out" - to be Performed by Landlord)

C.1 Landlord's Work. Landlord shall, at its sole expense (except for Tenant's Contribution Amount, as set forth below), construct the spec build-out for the Premises as described on the attached Schedule C-1 (the "Initial Tenant Work"), in accordance with, and subject to, the provisions of this Exhibit C. All Initial Tenant Work shall be performed by Landlord in a good and workmanlike manner in compliance with applicable Laws. Concurrently with the execution of this Lease, Tenant shall pay to Landlord the agreed amount of $4,500.00 (the "Tenant's Contribution Amount"), which represents Tenant's share of the costs of the Initial Tenant Work to be performed by Landlord hereunder.

C.2 Substantial Completion Date. The "Substantial Completion Date" (for purposes of Section 3.01(b) of the Lease) shall mean the date on which the Landlord has "substantially completed" the Initial Tenant Work. Landlord shall use reasonable efforts to substantially complete the Initial Tenant Work on or before January 10, 2018. In the event that the Substantial Completion Date is delayed beyond January 15, 2018 (other than due to a Tenant Delay, as defined below), then the "Rent Commencement Date" set forth in Section 1.04 of the Lease shall be delayed by one day for each day of such delay by Landlord in achieving the Substantial Completion Date after January 15, 2018.

For purposes hereof, "substantially complete" and "substantial completion" shall mean that (i) the Initial Tenant Work by Landlord under this Paragraph C.2 has been completed, other than minor punchlist-type items the completion of which will not unreasonably delay or interfere with Tenant's occupancy of the Premises for the regular conduct of business ("Punch-List Items"), (ii) a temporary certificate of occupancy (as evidenced by obtaining all governmental sign-offs on the building permit for the Initial Tenant Work sufficient to permit occupancy of the Premises) or a permanent certificate of occupancy shall have been obtained for the Premises (which temporary or permanent certificate of occupancy shall not have any conditions that would restrict or prohibit the use of the Premises for the Permitted Uses), (iii) the HVAC and other mechanical, electrical, plumbing, and life safety systems serving the Premises are in good working order (subject to any Punch-List Items), and (iv) the Premises are free of Landlord's construction-related materials, debris, and trash (other than due to Tenant's entry under Paragraph C.3 below). The foregoing provisions shall be self-operative, but in confirmation thereof at Landlord's request Tenant shall execute and deliver an instrument confirming the date on which substantial completion of such work occurred, provided that any failure by Tenant to execute and return such confirmatory instrument (or to provide written objection identifying the elements of the work that Tenant claims must be completed in order to achieve substantial completion of such work) within three (3) Business Days after its delivery to Tenant shall be deemed Tenant's acknowledgement that the applicable work was substantially complete on the date set forth in such instrument.

C.3 Tenant's Furniture and Equipment. The Initial Tenant Work to be performed by Landlord under this Exhibit C shall include only the construction of the Leasehold Improvements described on Schedule C-1 and shall not include the purchase, installation, or testing of any personal property, furniture, computers or telecommunications equipment, or any other specialized business fixtures and

equipment or wiring therefor (even if the same may be generally depicted for illustration or space planning purposes on the preliminary plans on Schedule C-1), all of which shall be Tenant's responsibility under this Paragraph C.3. Prior to the Substantial Completion Date, any entry by Tenant into the Premises for the purposes of installing Tenant's wiring, furniture, equipment, and personal property shall be subject in each case to (i) Landlord's approval of the schedule and scope of such work (which shall not delay the performance by Landlord of the Initial Tenant Work), (ii) Landlord's approval of Tenant's contractors or vendors for such work in accordance with Section 8 of the Lease, (iii) Landlord's receipt from Tenant of copies of all necessary permits for the applicable work by Tenant, if any, and (iv) customary insurance certificates from Tenant's contractors, subcontractors, and other parties acting under Tenant with respect to the applicable work in accordance with Section 8 of the Lease. Tenant shall be responsible for any damage to the Initial Tenant Work or the Premises caused by Tenant or its employees, agents, contractors, subcontractors, material suppliers and laborers in connection with such entry. Any entry into the Premises by Tenant (or its contractors, subcontractors, or other parties acting under Tenant) prior to the Substantial Completion Date shall be subject to all of the provisions of the Lease that are applicable to the Premises during the Term, except for the obligation to pay Base Rent and the Expense Excess and Tax Excess charges.

C.4 Close-Out of Initial Tenant Work. On a date reasonably specified by Landlord, Landlord and Tenant shall inspect the Initial Tenant Work for the purpose of preparing a list of Punch-List Items then remaining to be completed (the "Final Punchlist"). Landlord shall submit the Final Punchlist to Tenant, and Tenant shall sign and return the Final Punchlist to Landlord within three (3) Business Days after its receipt (or, if earlier, by the day before Tenant takes occupancy of the Premises), noting any items that Tenant reasonably believes should be added thereto. Items shall not be added to the Final Punchlist by Tenant after it is delivered to Landlord. If the Final Punchlist is not timely delivered by Tenant, then the Initial Tenant Work shall be deemed final and complete, and Landlord shall have no further obligation to cause any other Initial Tenant Work to be completed, other than (i) the Punch-List Items specified by Landlord in Landlord's Final Punchlist and (ii) the correction of latent defects as provided below. With respect to items on the Final Punchlist not in dispute, Landlord shall cause such Punch-List Items to be completed in a diligent manner during regular business hours, but in a manner that will seek to minimize interruption of Tenant's use and occupancy. Landlord shall use commercially reasonable efforts to complete such Punch-List Items within sixty (60) days after the Substantial Completion Date.

Except for latent defects and uncompleted items of Initial Tenant Work specified in the Final Punchlist, Tenant shall be deemed to have accepted all elements of the Initial Tenant Work on the Term Commencement Date. In the case of a dispute concerning the completion of items of the Initial Tenant Work specified in the Final Punchlist, such items shall be deemed completed and accepted by Tenant upon the delivery to Tenant of a certificate of Landlord's architect or contractor that such items have been completed. In the case of latent defects in the Initial Tenant Work appearing after the Term Commencement Date, Tenant shall be deemed to have waived any claim for correction or cure thereof on the earlier of (a) the date thirty (30) days after the date such defect was discovered if Tenant has not then given notice thereof to Landlord or (b) the date fifty one (51) weeks following the Substantial Completion Date if Tenant has not then given notice of such defect to Landlord. With respect to items as to which Tenant has given adequate and timely notice hereunder, and if the period during which Landlord's contractor is responsible to remedy or replace faulty materials or workmanship has not expired, Landlord shall use reasonable efforts to cause Landlord's contractor so to remedy, repair, or replace any incomplete, defective or malfunctioning aspects of the Initial Tenant Work that adversely affect Tenant's occupancy of the Premises, such action to occur as soon as practicable during normal working hours and so as to avoid any unreasonable interruption of Tenant's use of the Premises. If timely and adequate notice has been given and if Landlord has other guarantees, contract rights, or other claims against contractors, materialmen or architects, Landlord shall, with regard to any incomplete, defective or

malfunctioning aspects of the Initial Tenant Work that materially affect Tenant's occupancy of the Premises, use reasonable efforts to enforce such guarantees or contract rights. The foregoing shall constitute Landlord's entire obligation with respect to all incomplete, defective, or malfunctioning aspects of the Initial Tenant Work.

C.5 Tenant's Authorized Representative. Tenant hereby designates John McCabe to serve as Tenant's Authorized Representative, who shall have full power and authority to act on behalf of Tenant on any matters relating to the Initial Tenant Work. Tenant may from time to time change the Tenant's Authorized Representative or designate additional Tenant's Authorized Representative(s) by written notice delivered to Landlord in accordance with the Lease.

C.6 Tenant Delays. Any delay in the commencement or in the performance of the Initial Tenant Work that actually occurs as a result of any of the following events or requests, as the case may be, is referred to herein as a "Tenant Delay":

(i) any failure by Tenant to timely respond to requests for information necessary to carry out the Initial Tenant Work within three (3) Business Days;

(ii) any request made by Tenant for Landlord to delay or suspend the Initial Tenant Work, or to make a change or addition to the Initial Tenant Work, whether or not actually implemented (it being agreed, however, that Landlord shall not be required to comply with any such request and may decline to comply therewith in its sole discretion, and if Landlord elects to comply with such a request, Tenant shall be responsible for all costs arising from such request, including without limitation additional design and construction costs and applicable mark-ups, and shall pay such costs to Landlord, within ten (10) days after invoice); or

(iii) any delay due to any interference or damage caused by Tenant or any Tenant Party (including without limitation any equipment vendors) arising from Tenant's entry into the Premises Paragraph C.3 above.

For each day of Tenant Delay, the "Substantial Completion Date" shall be deemed to be one day earlier than the actual date thereof, and the Term Commencement Date and Tenant's obligation to pay Base Rent and additional charges shall be accelerated accordingly under Section 3.01 of the Lease.

Schedule C-1

Description of Initial Tenant Work

[*see attached plans and specifications*]

The Initial Tenant Work shall consist of Landlord's "spec build-out" of the Premises as follows:

(i) the office lay-out in the locations generally shown on the preliminary plans attached hereto,

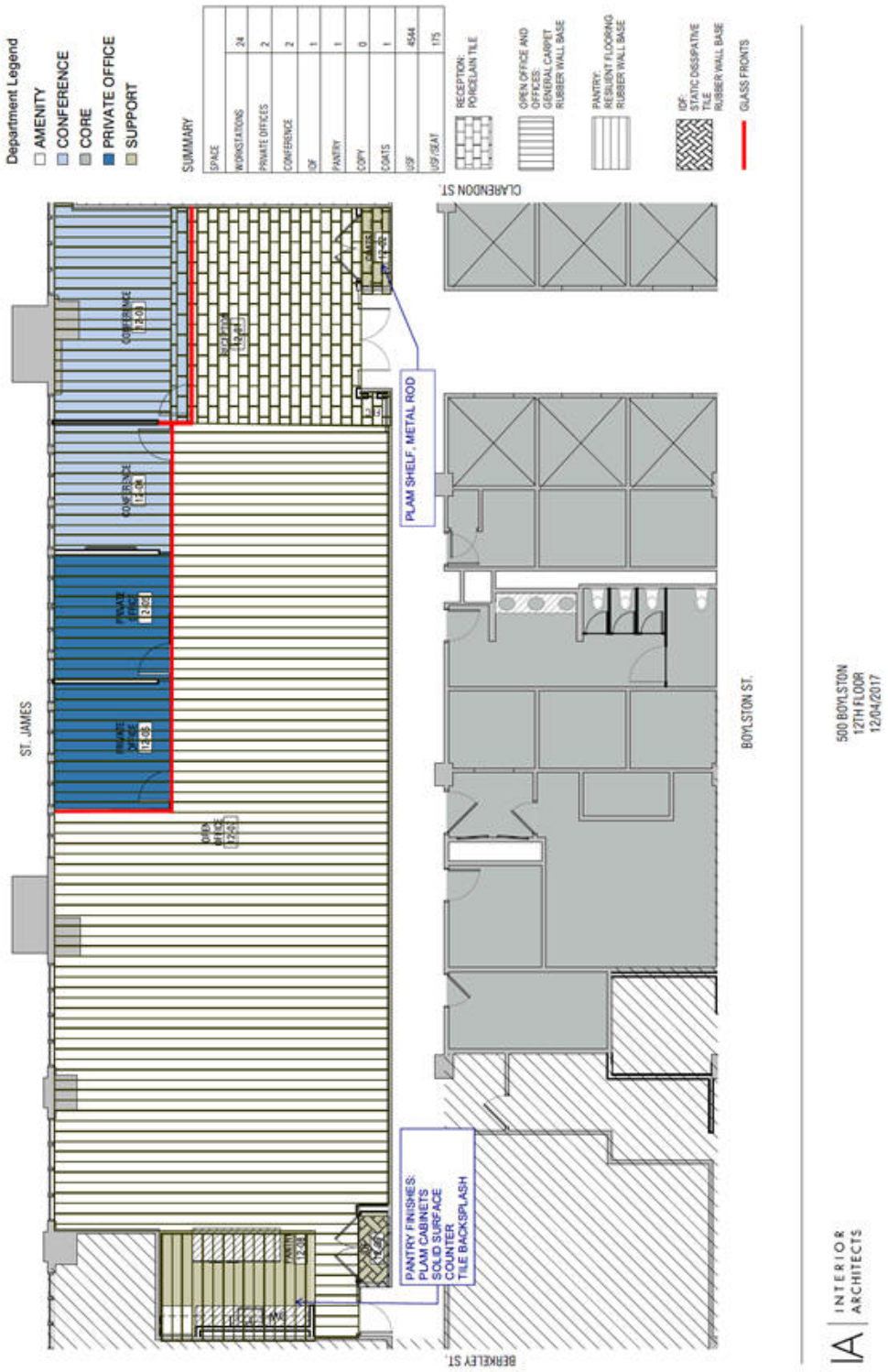
(ii) all Base Building systems furnished to the Premises (including, without limitation, electrical conduits and appurtenances, plumbing, heating, ventilating and air conditioning (HVAC systems), in good working order and condition, and

(iii) finishes consistent with or superior to the finishes in the spec suite space for Polen Capital on the eleventh (11th) floor of the Building.

D-5

IA | INTERIOR ARCHITECTS

500 BOYLSTON
12TH FLOOR
12/04/2017


Department Legend
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CONFERENCE
CORE
PRIVATE OFFICE
SUPPORT
SUMMARY
SPACE
WORKSTATIONS 24
PRIVATE OFFICES 2
CONFERENCE 2
IDF 1
PANTRY 1
COPY 0
COATS 1
USF 4544
USF/SEAT 175
RECEPTION: PORCELAIN TILE
OPEN OFFICE AND OFFICES: GENERAL CARPET, RUBBER WALL BASE
PANTRY: RESILIENT FLOORING RUBBER WALL BASE
IDF: STATIC DISSIPATIVE TILE RUBBER WALL BASE
GLASS FRONTS
CLARENDON ST.
ST. JAMES
BOYLSTON ST.
BERKELEY ST.
CONFERENCE 12-01
RECEPTION 12-02
CONFERENCE 12-03
PRIVATE OFFICE 12-04
PRIVATE OFFICE 12-05
OPEN OFFICE 12-06
PANTRY 12-07
PLAM SHELF, METAL ROD
PANTRY FINISHES:
PLAM CABINETS
SOLID SURFACE COUNTER
TILE BACKSPLASH
500 BOYLSTON
12TH FLOOR
12/04/2017
INTERIOR ARCHITECTS

FINISHES

RECEPTION TILE

ACCENT LIGHT IN PANTRY

ACCENT LIGHT IN RECEPTION

GENERAL CARPET

COVE LIGHTING AT RECEPTION

GENERAL OFFICE LIGHTING

PANTRY BACKSPLASH

FRAMES & HARDWARE

PANTRY COUNTER

PANTRY CABINETS

PANTRY FLOORING

D-7

OXFORD

IA | INTERIOR ARCHITECTS

OXFORD SPEC SUITES

EXHIBIT D

COMMENCEMENT LETTER

(EXAMPLE)

Date _____

Tenant _____
Address _____
_____
_____

Re: Commencement Letter with respect to that certain Lease dated as of _____, 20__, by and between 500 BOYLSTON & 222 BERKELEY OWNER (DE) LLC, a Delaware limited liability company, as Landlord, and _____, as Tenant, for _____ rentable square feet on the ____ floor of the Building located at 500 Boylston Street, Boston, Massachusetts 02116.

Lease Id: _____
Business Unit Number: _____

Dear _____:

In accordance with the terms and conditions of the above referenced Lease, Tenant accepts possession of the Premises and acknowledges:

1. The Term Commencement Date of the Lease is _____. The Rent Commencement Date of the Lease is _____.

2. The Term Expiration Date of the Lease is _____.

Please acknowledge the foregoing and your acceptance of possession by signing all 3 counterparts of this Commencement Letter in the space provided and returning two (2) fully executed counterparts to my attention. Tenant's failure to execute and return this letter, or to provide written objection to the statements contained in this letter, within thirty (30) days after the date of this letter shall be deemed an approval by Tenant of the statements contained herein.

Sincerely,

_____
Authorized Signatory

Acknowledged and Accepted:

Tenant: _____

By: _____
Name: _____
Title: _____
Date: _____

EXHIBIT E

BUILDING RULES AND REGULATIONS

This Exhibit is attached to and made a part of the Office Lease Agreement (the "Lease") by and between 500 BOYLSTON & 222 BERKELEY OWNER (DE) LLC, a Delaware limited liability company ("Landlord"), and resTORbio, Inc. ("Tenant"), for space in the Building located at 500 Boylston Street, Boston, Massachusetts 02116. Capitalized terms used but not defined herein shall have the meanings given in the Lease.

The following rules and regulations shall apply, where applicable, to the Premises, the Building, the parking facilities (if any), the Property and the appurtenances. In the event of a conflict between the following rules and regulations and the remainder of the terms of the Lease [as noted in brackets below], the remainder of the terms of the Lease shall control.

1. Sidewalks, doorways, vestibules, halls, stairways and other similar areas shall not be obstructed by Tenant or used by Tenant for any purpose other than ingress and egress to and from the Premises. No rubbish, litter, trash, or material shall be placed, emptied, or thrown in those areas. At no time shall Tenant permit Tenant's employees to loiter in Common Areas or elsewhere about the Building or Property.

2. Plumbing fixtures and appliances shall be used only for the purposes for which designed and no sweepings, rubbish, rags or other unsuitable material shall be thrown or placed in the fixtures or appliances.

3. No signs, advertisements or notices shall be painted or affixed to windows, doors or other parts of the Building, except those of such color, size, style and in such places as are first approved in writing by Landlord. All tenant identification and suite numbers at the entrance to the Premises shall be installed by Landlord, at Tenant's cost and expense, using the standard graphics for the Building. Except in connection with the hanging of lightweight pictures and wall decorations, no nails, hooks or screws shall be inserted into any part of the Premises or Building except by the Building maintenance personnel without Landlord's prior approval, which approval shall not be unreasonably withheld.

4. Landlord may provide and maintain in the first floor (main lobby) of the Building an alphabetical directory board or other directory device listing tenants and no other directory shall be permitted unless previously consented to by Landlord in writing.

5. Tenant shall not place any lock(s) on any door in the Premises or Building without Landlord's prior written consent, which consent shall not be unreasonably withheld, and Landlord shall have the right at all times to retain and use keys or other access codes or devices to all locks within and into the Premises. A reasonable number of keys and/or access cards to the locks on the entry doors in the Premises shall be furnished by Landlord to Tenant at Tenant's cost and Tenant shall not make any duplicate keys or access cards. All keys and access cards shall be returned to Landlord at the expiration or early termination of the Lease.

6. All contractors, contractor's representatives and installation technicians performing work in the Building shall be subject to Landlord's prior approval, which approval shall not be unreasonably withheld, and shall be required to comply with Landlord's standard rules, regulations, policies and procedures, which may be revised from time to time. Landlord has no obligation to allow any particular telecommunication service provider to have access to the Building or to the Premises. If Landlord permits access, Landlord may condition the access upon the payment to Landlord by the service provider of fees assessed by Landlord in Landlord's sole discretion.

7. Movement in or out of the Building of furniture or office equipment, or dispatch or receipt by Tenant of merchandise or materials requiring the use of elevators, stairways, lobby areas or loading dock areas, shall be performed in a manner and restricted to hours reasonably designated by Landlord. Tenant shall obtain Landlord's prior approval by providing a detailed listing of the activity, including the names of any contractors, vendors or delivery companies, which approval shall not be unreasonably withheld. Tenant shall assume all risk for damage, injury or loss in connection with the activity.

8. Landlord shall have the right to approve the weight, size, or location of heavy equipment or articles in and about the Premises, which approval shall not be unreasonably withheld; provided that approval by Landlord shall not relieve Tenant from liability for any damage in connection with such heavy equipment or articles.

9. Corridor doors, when not in use, shall be kept closed.

10. Tenant shall not: (a) make or permit any improper, objectionable or unpleasant noises, odors, or vibrations in the Building, or otherwise interfere in any way with other tenants or persons having business with them; (b) solicit business or distribute or cause to be distributed, in any portion of the Building, handbills, promotional materials or other advertising; or (c) conduct or permit other activities in the Building that might, in Landlord's sole [good faith] opinion, constitute a nuisance.

11. No animals, except those assisting handicapped persons, shall be brought into the Building or kept in or about the Premises.

12. No inflammable, explosive or dangerous fluids or substances shall be used or kept by Tenant in the Premises, Building or about the Property, except for those substances as are typically found in similar premises used for general office purposes and are being used by Tenant in a safe manner and in accordance with all applicable Laws. Tenant shall not, without Landlord's prior written consent, use, store, install, spill, remove, release or dispose of, within or about the Premises or any other portion of the Property, any asbestos-containing materials or any solid, liquid or gaseous material now or subsequently considered toxic or hazardous under the provisions of 42 U.S.C. Section 9601 et seq., M.G.L. c. 21C, M.G.L. c. 21E or any other applicable environmental Law which may now or later be in effect ("Tenant Caused Items"). Tenant shall comply with all Laws pertaining to and governing the use of such Tenant-Caused Items by Tenant or any Tenant Party and shall remain solely liable for the costs of abatement and removal of any such Tenant-Caused Items by Tenant or any Tenant Party.

13. Tenant shall not use or occupy the Premises in any manner or for any purpose which might injure the reputation or impair the present or future value of the Premises or the Building. Tenant shall not use, or permit any part of the Premises to be used for lodging, sleeping or for any illegal purpose.

14. Tenant shall not take any action which would violate Landlord's labor contracts or which would cause a work stoppage, picketing, labor disruption or dispute or interfere with Landlord's or any other tenant's or occupant's business or with the rights and privileges of any person lawfully in the Building ("Labor Disruption"). Tenant shall take the actions necessary to resolve the Labor Disruption, and shall have pickets removed and, at the request of Landlord, immediately terminate any work in the Premises that gave rise to the Labor Disruption, until Landlord gives its written consent for the work to resume. Tenant shall have no claim for damages against Landlord or any of the Landlord Related Parties nor shall the Term Commencement Date of the Term be extended as a result of the above actions.

15. Tenant shall not install, operate or maintain in the Premises or in any other area of the Building, electrical equipment that would overload the electrical system beyond its capacity for proper, efficient and safe operation as determined solely by Landlord. Tenant shall not furnish cooling or heating to the Premises, including, without limitation, the use of electric or gas heating devices, without Landlord's prior written consent. Tenant shall not use more than its proportionate share of telephone lines and other telecommunication facilities available to service the Building.

16. Tenant shall not operate or permit to be operated a coin or token operated vending machine or similar device (including, without limitation, telephones, lockers, toilets, scales, amusement devices and machines for sale of beverages, foods, candy, cigarettes and other goods), except for machines for the exclusive use of Tenant's employees and invitees.

17. Bicycles and other vehicles are not permitted inside the Building or on the walkways outside the Building, except in areas designated by Landlord.

18. Landlord may from time to time adopt systems and procedures for the security and safety of the Building and Property, their occupants, entry, use and contents. Tenant, its agents, employees, contractors, guests and invitees shall comply with Landlord's systems and procedures.

19. Landlord shall have the right to prohibit the use of the name of the Building or any other publicity by Tenant that in Landlord's sole opinion may impair the reputation of the Building or its desirability. Upon written notice from Landlord, Tenant shall refrain from and discontinue such publicity immediately.

20. The Building is a non-smoking building. Neither Tenant nor its employees, contractors, agents, guests, or invitees shall smoke or permit smoking of (i) any form of tobacco-related products (including, but not limited to pipes, cigars, cigarettes and similar products), (ii) vaporized products via electronic cigarettes (or any similar products and technological evolutions or innovations thereof), or (iii) any other plant-based or synthetic products which emit substances into the air at any time either in the Premises, in any other part of the Building, around the entrances to the Building, or in any other exterior area of the Property. Notwithstanding the foregoing, Landlord may, at its election in its sole discretion from time to time, designate any exterior area of the Property (if any) as a permitted smoking area of tobacco-related products.

21. Landlord shall have the right to designate and approve standard window coverings for the Premises and to establish rules to assure that the Building presents a uniform exterior appearance. Tenant shall ensure, to the extent reasonably practicable, that window coverings are closed on windows in the Premises while they are exposed to the direct rays of the sun.

22. Deliveries to and from the Premises shall be made only at the times in the areas and through the entrances and exits reasonably designated by Landlord. Tenant shall not make deliveries to or from the Premises in a manner that might interfere with the use by any other tenant of its premises or of the Common Areas, any pedestrian use, or any use which is inconsistent with good business practice.

23. The work of cleaning personnel shall not be hindered by Tenant after 6:00 P.M., and cleaning work may be done at any time when the offices are vacant. Windows, doors and fixtures may be cleaned at any time. Tenant shall provide adequate waste and rubbish receptacles to prevent unreasonable hardship to the cleaning service.

EXHIBIT F

ADDITIONAL PROVISIONS

This Exhibit is attached to and made a part of the Office Lease Agreement (the "Lease") by and between 500 BOYLSTON & 222 BERKELEY OWNER (DE) LLC, a Delaware limited liability company ("Landlord"), and resTORbio, Inc. ("Tenant"), for space in the Building located at 500 Boylston Street, Boston, Massachusetts 02116. Capitalized terms used but not defined herein shall have the meanings given in the Lease.

1. Parking.

(a) During the initial Term, Landlord shall lease to Tenant, or cause the operator (the "Operator") of the garage serving the Building (the "Garage") to lease to Tenant, and Tenant shall lease from Landlord or such Operator, two (2) unreserved parking spaces in the Garage (the "Spaces") for the use of Tenant and its employees. The Spaces shall be leased at the rate of $450.00 for unreserved spaces and $675.00 for reserved spaces per Space, per month, plus applicable tax thereon, as such rate may be adjusted from time to time to reflect the then current rate for parking in the Garage.

(b) No deductions or allowances shall be made for days when Tenant or any of its employees does not utilize the parking facilities or for Tenant utilizing less than all of the Spaces. Tenant shall not have the right to lease or otherwise use more than the number of unreserved Spaces set forth above.

(c) Except for particular spaces and areas designated by Landlord or the Operator for reserved parking, all parking in the Garage shall be on an unreserved, first-come, first-served basis.

(d) Neither Landlord nor the Operator shall be responsible for money, jewelry, automobiles or other personal property lost in or stolen from the Garage regardless of whether such loss or theft occurs when the Garage or other areas therein are locked or otherwise secured. Except as caused by the negligence or willful misconduct of Landlord and without limiting the terms of the preceding sentence, Landlord shall not be liable for any loss, injury or damage to persons using the Garage or automobiles or other property therein, it being agreed that, to the fullest extent permitted by law, the use of the Spaces shall be at the sole risk of Tenant and its employees.

(e) Landlord or its Operator shall have the right from time to time to designate the location of the Spaces and to promulgate reasonable rules and regulations regarding the Garage, the Spaces and the use thereof, including, but not limited to, rules and regulations controlling the flow of traffic to and from various parking areas, the angle and direction of parking and the like. Tenant shall comply with and cause its employees to comply with all such rules and regulations and all reasonable additions and amendments thereto.

(f) Tenant shall not store or permit its employees to store any automobiles in the Garage without the prior written consent of Landlord. Except for emergency repairs, Tenant and its employees shall not perform any work on any automobiles while located in the Garage or on the Property. If it is necessary for Tenant or its employees to leave an automobile in the Garage overnight, Tenant shall provide Landlord with prior notice thereof designating the license plate number and model of such automobile.

(g) Landlord or the Operator shall have the right to temporarily close the Garage or certain areas therein in order to perform necessary repairs, maintenance and improvements to the Garage.

(h) Tenant shall not assign or sublease any of the Spaces without the consent of Landlord. Landlord shall have the right to terminate Tenant's parking rights with respect to any Spaces that Tenant desires to sublet or assign.

(i) Landlord may elect to provide parking cards or keys to control access to the Garage. In such event, Landlord shall provide Tenant with one card or key for each Space that Tenant is leasing hereunder, provided that Landlord shall have the right to require Tenant or its employees to place a deposit on such access cards or keys and to pay a fee for any lost or damages cards or keys.

EXHIBIT G

[intentionally omitted]

EXHIBIT H

LETTER OF CREDIT REQUIREMENTS

This Exhibit is attached to and made a part of the Office Lease Agreement (the "Lease") by and between 500 BOYLSTON & 222 BERKELEY OWNER (DE) LLC, a Delaware limited liability company ("Landlord"), and resTORbio, Inc. ("Tenant"), for space in the Building located at 500 Boylston Street, Boston, Massachusetts 02116. Capitalized terms used but not defined herein shall have the meanings given in the Lease.

The Letter of Credit (as defined in the Lease) shall be for the amount set forth in Section 1 of the Lease, subject to the terms of Section 6 of the Lease. The Letter of Credit (i) shall be irrevocable and shall be issued by a commercial bank that has a financial condition reasonably acceptable to Landlord (Landlord hereby approving Silicon Valley Bank or Wells Fargo as the issuer of such Letter of Credit) that either (a) has an office in Boston, Massachusetts or New York City that accepts requests for draws on the Letter of Credit or (b) permits requests for draws on the Letter of Credit to be made by overnight courier service or by facsimile, (ii) shall require only the presentation to the issuer of a certificate of the holder of the Letter of Credit stating that Landlord is entitled to draw on the Letter of Credit pursuant to the terms of the Lease, (iii) shall be payable to Landlord or its successors in interest as the Landlord and shall be freely transferable without cost to any such successor or any lender holding a collateral assignment of Landlord's interest in the Lease, (iv) shall be for an initial term of not less than one year and contain a provision that such term shall be automatically renewed for successive one-year periods unless the issuer shall, at least forty five (45) days prior to the scheduled expiration date, give Landlord notice of such nonrenewal, and (v) shall otherwise be in form and substance reasonably acceptable to Landlord. Notwithstanding the foregoing, the term of the Letter of Credit for the final period shall be for a term ending not earlier than the date forty five (45) days after the last day of the Term. In the event that the issuer ceases to be reasonably acceptable to Landlord, due to a deterioration in its financial condition or change in status that threatens to compromise Landlord's ability to draw on the Letter of Credit as determined in good faith by Landlord, then Tenant shall provide a replacement Letter of Credit from an issuer satisfying the terms of this Exhibit within thirty (30) days after Landlord's notice of such event.

Landlord shall be entitled to draw upon the Letter of Credit for its full amount or any portion thereof if (a) Tenant shall fail to perform any of its obligations under the Lease after the expiration of any applicable notice and cure period, or fail to perform any of its obligations under the Lease and transmittal of a default notice or the running of any cure period is barred or tolled by applicable law, or fail to perform any of its obligations under the Lease and any applicable notice and cure period would expire after the expiration of the Letter of Credit, or (b) not less than thirty (30) days before the scheduled expiration of the Letter of Credit, Tenant has not delivered to Landlord a new Letter of Credit in accordance with this Exhibit. Without limiting the generality of the foregoing, Landlord may, but shall not be obligated to, draw on the Letter of Credit from time to time in the event of a bankruptcy filing by or against Tenant and/or to compensate Landlord, in such order as Landlord may determine, for all or any part of any unpaid rent, any damages arising from any termination of the Lease in accordance with the terms of the Lease, and/or any damages arising from any rejection of the Lease in a bankruptcy proceeding commenced by or against Tenant. Landlord may, but shall not be obligated to, apply the amount so drawn to the extent necessary to cure Tenant's failure.

Any amount of the Letter of Credit drawn in excess of the amount applied by Landlord to cure any such failure shall be held by Landlord as a cash security deposit for the performance by Tenant of its obligations under the Lease. Any cash security deposit may be mingled with other funds of Landlord and no fiduciary relationship shall be created with respect to such deposit, nor shall Landlord be liable to pay Tenant interest thereon. If Tenant shall fail to perform any of its obligations under the Lease, Landlord may, but shall not be obliged to, apply the cash security deposit to the extent necessary to cure Tenant's

failure. After any such application by Landlord of the Letter of Credit or cash security deposit, as the case may be, Tenant shall reinstate the Letter of Credit to the amount originally required to be maintained under the Lease, upon demand. Provided that Tenant is not then in default under the Lease, and no condition exists or event has occurred which after the expiration of any applicable notice or cure period would constitute such a default, within forty five (45) days after the later to occur of (i) the payment of the final Rent due from Tenant or (ii) the later to occur of the Term Expiration Date or the date on which Tenant surrenders the Premises to Landlord in compliance with Section 20 of the Lease, the Letter of Credit and any cash security deposit, to the extent not applied, shall be returned to the Tenant, without interest.

In the event of a sale of the Building or lease, conveyance or transfer of the Building, Landlord shall transfer the Letter of Credit or cash security deposit to the transferee. Upon such transfer, the transferring Landlord shall be released by Tenant from all liability for the return of such security, and Tenant agrees to look to the transferee solely for the return of said security. The provisions hereof shall apply to every transfer or assignment made of the security to such a transferee. Tenant further covenants that it will not assign or encumber or attempt to assign or encumber the Letter of Credit or the monies deposited herein as security, and that neither Landlord nor its successors or assigns shall be bound by any assignment, encumbrance, attempted assignment or attempted encumbrance.

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

The Board of Directors
resTORbio, Inc.:

We consent to the use of our report included herein and to the reference to our firm under the heading “Experts” in the prospectus.

/s/ KPMG LLP

Cambridge, Massachusetts
January 16, 2018