As confidentially submitted to the Securities and Exchange Commission on March 17, 2016, as Amendment No. 3 to the confidential submission. This draft registration statement has not been publicly filed with the Securities and Exchange Commission and all information herein remains confidential.

Registration No. 333-

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

FORM S-1 **REGISTRATION STATEMENT**

Under The Securities Act of 1933

INTELLIA THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)

2836 (Primary Standard Industrial Classification Code Number)

36-4785571 (I.R.S. Employer **Identification Number**)

Cambridge, MA 02139 (857) 285-6200 (Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

130 Brookline Street, Suite 201

Nessan Bermingham, Ph.D. Founder, President and Chief Executive Officer 130 Brookline Street, Suite 201 Cambridge, Massachusetts 02139 (857) 285-6200

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

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Peter N. Handrinos, Esq. Brandon J. Bortner, Esq. Latham & Watkins LLP John Hancock Tower 200 Clarendon Street Boston, Massachusetts 02116 (617) 948-6000

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

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, as amended, check the following box. \Box

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please 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, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting 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)	\boxtimes	Smaller Reporting Company	

CALCULATION OF REGISTRATION FEE

	Proposed	
	Maximum Aggregate	Amount of
Title of each Class of Securities to be Registered	Offering Price(1)(2)	Registration Fee
Common Stock, par value \$0.0001 per share	\$	\$

(1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.

(2) Includes the offering price of shares that the underwriters may purchase pursuant to an option to purchase additional shares.

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 that specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until this registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED MARCH 17, 2016



THERAPEUTICS

Common Stock

This is the initial public offering of shares of our common stock. Prior to this offering, there has been no public market for our common stock. We are selling shares of our common stock. The initial public offering price of our common stock is expected to be between \$ and \$ per share.

We have applied to list our common stock on The NASDAQ Global Market under the symbol "ITTX."

The underwriters have an option to purchase a maximum of additional shares of common stock from us.

We are an "emerging growth company" as that term is used in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, and, as such, we have elected to comply with certain reduced public company reporting requirements for this prospectus and future filings.

Investing in our common stock involves risks. See "Risk Factors" on page 12.

		Underwriting	Proceeds to
		Discounts and	Intellia
	Price to Public	Commissions	Therapeutics, Inc.
Per Share	\$	\$	\$
Total	\$	\$	\$

(1) See "Underwriting" beginning on page 137 of this prospectus for additional information regarding underwriting compensation.

Delivery of the shares of common stock will be made on or about , 2016.

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.

Credit Suisse

Jefferies

Leerink Partners

Wedbush PacGrow

The date of this prospectus is

, 2016

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Through and including , 2016 (25 days after the commencement of this offering), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This delivery requirement is in addition to the obligation of dealers to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

You should rely only on the information contained in this prospectus or in any free writing prospectus we file with the Securities and Exchange Commission. Neither we nor the underwriters have authorized anyone to provide you with information other than that contained in this prospectus or any free writing prospectus prepared by or on behalf of us or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We and the underwriters are offering to sell, and seeking offers to buy, 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 page of this prospectus, or other earlier date stated in this prospectus, regardless of the time of delivery of this prospectus or of any sale of our common stock.

The market data and certain other statistical information used throughout this prospectus are based on independent industry publications, governmental publications, reports by market research firms or other independent sources that we believe to be reliable sources. 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. While we are not aware of any misstatements regarding any third-party information presented in this prospectus, their estimates, in particular, as they relate to projections, involve numerous assumptions, are subject to risks and uncertainties, and are subject to change based on various factors, including those discussed under the section entitled "Risk Factors" and elsewhere in this prospectus. Some data are also based on our good faith estimates.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus and does not contain all of the information that you should consider in making your investment decision. Before investing in our common stock, you should carefully read this entire prospectus, including our consolidated financial statements and the related notes included elsewhere in this prospectus. You should also consider, among other things, the matters described under "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations," in each case appearing elsewhere in this prospectus.

On August 20, 2015, Intellia Therapeutics, LLC, a Delaware limited liability company, merged with and into Intellia Therapeutics, Inc., a Delaware corporation and the issuer of the shares of common stock offered by this prospectus, which we refer to as the Reorganization. As used in this prospectus, unless the context otherwise requires, references to the "Company," "Intellia," "we," "us" and "our" refer to (i) prior to the date of the Reorganization, Intellia Therapeutics, LLC and its wholly owned, consolidated subsidiary, or either or both of them as the context may require, and (ii) following the date of the Reorganization, Intellia Therapeutics, Inc.

Overview

We are a leading gene editing company focused on the development of proprietary, potentially curative therapeutics utilizing a recently developed biological tool known as the CRISPR/Cas9 system. We believe that the CRISPR/Cas9 technology has the potential to transform medicine by permanently editing disease-associated genes in the human body with a single treatment course. We intend to leverage our leading scientific expertise, clinical development experience and intellectual property position to unlock broad therapeutic applications of CRISPR/Cas9 gene editing and develop a potential new class of therapeutic products.

In 2012, one of our co-founders and current scientific advisors, Dr. Jennifer Doudna, and her colleagues published a paper in the journal *Science* describing the use of CRISPR/Cas9 as a gene editing tool. Gene editing is the precise and targeted modification of the genetic material of cells. Since the publication of Dr. Doudna's landmark paper, more than 2,600 research papers have been published on the CRISPR/Cas9 technology. The CRISPR/Cas9 system offers a revolutionary approach for therapeutic development due to its broad potential to precisely edit genes. This system can be used to make three general types of edits: knockouts, repairs and insertions. Each of these editing strategies takes advantage of naturally occurring biological mechanisms to effect the desired genetic alteration. This approach has the potential to provide curative therapeutic options for patients with chronic diseases by addressing the underlying cause of the disease.

Unlike earlier-generation gene editing technologies, the CRISPR/Cas9 system is simpler and involves a single protein, Cas9, that can be directed to precisely cleave a target DNA sequence by using pieces of RNA, called guide RNAs, that specifically recognize the target DNA. Therefore, CRISPR/Cas9-based therapeutics have the potential to be highly efficient, selective and scalable.

We believe that CRISPR/Cas9 offers significant technical advantages and broader potential to edit genes over other gene editing methods. Such advantages include:

- higher selectivity and cleavage efficiency;
- simpler tools allowing for rapid scaling and optimization;
- more efficient path to achieve preclinical proof-of-concept;
- broader applicability to *in vivo* and *ex vivo* therapies;
- greater potential for single curative treatment;
- greater ability to address almost any site in the genome; and
- · ability to target multiple DNA sites simultaneously.

We believe we are well positioned to maximize the potential of the CRISPR/Cas9 system to develop therapeutics based on the following.

- *Strong Product Focus*. We are focused on the development of potentially curative therapeutic products through the application of the CRISPR/Cas9 system for the treatment of patient populations with significant unmet needs. We are targeting both *in vivo* and *ex vivo* applications in parallel to build a pipeline across a range of indications and to generate a wealth of data that expands the potential therapeutic applications of the CRISPR/Cas9 technology across a broad range of diseases.
- Deep Management Expertise in Discovering and Developing New Therapeutics. We have assembled a world-class team of executives, founders and advisors who are dedicated to the development of CRISPR/Cas9-based therapeutic products for patients with significant unmet medical need. Led by Nessan Bermingham, Ph.D., our Founder and Chief Executive Officer, John M. Leonard, M.D., our Chief Medical Officer, and José E. Rivera, our Chief Operating Officer and Chief Legal Officer, our team's expertise spans CRISPR/Cas9 and broader gene editing technologies, *in vivo* and *ex vivo* therapeutic delivery technologies, preclinical and clinical development, product scale-up and manufacturing, cell and molecular biology, intellectual property, finance and regulatory affairs.
- Strong Product-Focused Partnerships to Accelerate Path to Clinic. The potential application of CRISPR/Cas9 is extremely broad, and we plan to
 continue to identify partners who can contribute meaningful resources and insights to our programs and allow us to more rapidly expand our impact
 to broader patient populations. Our partnership focusing on chimeric antigen receptor, or CAR, T cells with Novartis Institutes for Biomedical
 Research, Inc., or Novartis, exemplifies this strategy.
- Risk-Mitigated Approach to Accelerate Product Development Path for CRISPR/Cas9 Technology. Our selection criteria for our initial indications
 position us to build a risk-diversified pipeline, where we are not reliant on any single delivery technology or editing approach for success. Our
 approach allows us to apply the learnings from each of our lead programs to support multiple value drivers thereby increasing the probabilities of
 success in our initial indications, generating insights that will accelerate the development of subsequent therapeutic products and broadening the
 opportunity for potential strategic alliances.
- **Delivery Expertise.** Our team has expertise with lipid nanoparticle, or LNP, delivery technology, which involves encapsulating therapeutic agents into microscopic lipid droplets. With this expertise, we expect to be able to readily translate the LNPs that we are using for our preclinical development to clinical development in humans.
- *Leading Intellectual Property Position*. Our licensed patent portfolio encompasses foundational filings on the use of CRISPR/Cas9 systems for gene editing, improvements and modifications of these systems and their components, LNP technologies for delivering protein/nucleic acid complexes and RNA into cells and cell expansion technology relevant to stem cell-based therapies.

Our Pipeline

We plan to use the CRISPR/Cas9 system across two broad areas: *in vivo* applications, in which CRISPR/Cas9 therapeutic products are delivered directly to target cells within the body, and *ex vivo* applications, in which cells are removed from a patient's body, modified using CRISPR/Cas9 and then returned to the patient. To maximize our opportunity to rapidly develop clinically successful products, we have applied a risk-mitigated approach to selecting our initial indications, which we refer to as our sentinel indications, that have significant unmet medical need and relatively low technical and development hurdles based on four primary axes:

- the type of edit knockout, repair or insertion;
- the presence of established therapeutic endpoints;
- the delivery modality for in vivo and ex vivo applications; and
- the appropriate CRISPR/Cas9 complex.



We are targeting sentinel indications using *in vivo* and *ex vivo* approaches to demonstrate proof-of-concept of the various facets of our technology, including delivery, type of edit, and selectivity and efficiency. The learnings we gain from each indication will pave the way for rapid expansion of our pipeline by targeting subsequent indications that use the same or analogous delivery vehicles, guide structures and types of edits.

The following table illustrates our current discovery programs and opportunities:

	Intellia Rights	Type of Edit	Upcoming Milestones: Next 12–24 Months
In Vivo			
Delivery			
Lipid Nanoparticle	Proprietary	Knockout, repair	Demonstrate in vivo delivery first with knockout editing, followed by more complex repair editing
Programs			
Hepatitis B Virus	Proprietary	Knockout	Demonstrate in vivo proof-of-concept
Alpha-1 Antitrypsin Deficiency	Proprietary	Knockout, repair	Demonstrate in vivo proof-of-concept
Inborn Errors of Metabolism	Proprietary	Knockout, repair, insertion	Select lead indication based on in vitro data
Ex Vivo			
Programs			
CAR T Cells	Partnered with Novartis	Undisclosed	Advance preclinical development
Hematopoietic Stern Cells	Proprietary and others selectively partnered with Novartis	Undisclosed	Advance preclinical development

In Vivo Pipeline

We have chosen three sentinel *in vivo* programs employing different editing strategies to explore the scope of the gene edits through the CRISPR/Cas9 system:

- Hepatitis B virus, or HBV, program, which utilizes a knockout strategy to target covalently closed circular DNA, or cccDNA;
- · Alpha-1 antitrypsin deficiency, or AATD, program, which utilizes either a gene knockout strategy or a gene repair strategy; and
- Inborn errors of metabolism, or IEM, program, which has the potential to utilize all three editing approaches, including targeted DNA insertion.

Our initial efforts on *in vivo* delivery approaches focus on the use LNPs for delivery of the CRISPR/Cas9 complex to the liver. We see multiple advantages of using LNPs as our initial *in vivo* delivery vehicles, particularly as being optimized by us for delivery of the CRISPR/Cas9 system. Certain LNPs have demonstrated efficacy, safety and favorable tolerability and are currently used as a delivery system for therapeutic small interfering RNA (siRNA) as well as therapeutic messenger RNA (mRNA). mRNA is RNA that encodes proteins, while siRNA is RNA that can interfere with the function of mRNA. With our team's expertise with LNP delivery technology, we expect to be able to readily translate the LNPs that we are using for our preclinical development to clinical development in humans. As we progress our sentinel *in vivo* liver programs with LNP delivery, we are actively investigating multiple viral delivery vectors, which are viruses engineered to carry non-viral nucleic acids to patients' cells. These viral vectors will allow us to explore therapies for indications that require delivery to organs beyond the liver.

Hepatitis B Virus Program (Knockout Strategy)

Hepatitis B is an infection of the liver caused by HBV, which can progress from acute to chronic infection in approximately 5-10% of infected adults. We believe we can use the CRISPR/Cas9 system to help eliminate the reservoirs of cccDNA, the source of chronic infection, which cannot be eradicated by current treatments, in HBV-infected patients. We intend to evaluate different knockout approaches to destroy or render inactive cccDNA *in vivo*, including cleaving the cccDNA at a single site or at combinations of sites. We believe it is also possible that a common treatment solution can be developed for all genotypes, or genetic variants, of HBV because we can target portions of the cccDNA sequences that do not vary across genotypes. In addition, there is potential to reduce viral resistance as the virus itself is eradicated. We have completed a bioinformatics analysis of potential CRISPR/Cas9 target sites in the HBV genome to select a set of guide RNAs, including several that can be effective across all HBV genotypes. We are commencing *in vitro* proof-of-concept studies using our lead guide RNAs in the near term and expect to complete proof-of-concept studies in an HBV mouse model in 2016.

Alpha-1 Antitrypsin Deficiency Program (Knockout and Repair Strategies)

AATD is an inherited genetic disorder that may cause lung or liver disease. The lung disease may result in chronic obstructive pulmonary disease (COPD), a progressive disease that causes substantial morbidity and mortality, while the liver disease is characterized by inflammation of the liver. In the United States, an estimated 60,000 to 100,000 people have AATD, which arises when patients have a mutation in both copies of the SERPINA1 gene. We believe that we can apply the CRISPR/Cas9 technology to cure AATD by addressing the defective SERPINA1 gene. We intend to evaluate two editing approaches – a knockout and a repair – which will address either the liver disease or both the lung and liver diseases, respectively. We expect the progress of our AATD repair program to follow our AATD knockout program. We have begun discovery efforts for both the knockout and repair approaches and expect to complete proof-of-concept studies in mouse models for the knockout approach in 2016.

Inborn Errors of Metabolism Program (Knockout, Repair and Insertion Strategies)

Individual IEMs are rare disorders, many having an incidence of fewer than 1 in 100,000 births, which typically involve defects in single genes that code for enzymes that drive the metabolic machinery of the cell. We are evaluating a large set of candidate IEMs, including argininosuccinic lyase deficiency, ornithine transcarbamylase deficiency and maple syrup urine disease. Our selection criteria for our initial IEM indications include identifying diseases that originate in the liver, have well-defined mutations that can be addressed by a single knockout, repair or insertion approach, have readily measurable therapeutic endpoints with observable clinical responses, and for which there are no effective treatments. We expect to select a lead IEM indication based on *in vitro* data in 2016.

Ex Vivo Pipeline

Our sentinel *ex vivo* programs are in CAR T cell and hematopoietic stem cell, or HSC, applications. Our sentinel *ex vivo* programs will help inform the broader applicability of CRISPR/Cas9 in an *ex vivo* setting, which we plan to explore in eXtellia, a division of our company focused on the application of CRISPR/Cas9 gene editing in the fields of immuno-oncology and autoimmune and inflammatory diseases. We expect eXtellia to focus on other relevant types of immune cells, such as natural killer (NK) cells and tumor infiltrating lymphocytes (TILs) for immuno-oncology applications, T regulatory cells (Tregs) for autoimmune disorders and other cell types, including induced pluripotent stem cells, mesenchymal stem cells and muscle satellite stem cells for tissue-targeted treatments. For our *ex vivo* programs requiring delivery to extracted cells such as HSCs, which are the stem cells from which all of the various types of blood cells originate, or T cells, we initially plan to deliver the CRISPR/Cas9 complex by electroporation, an electrical charge-based technique for delivering molecules into cells. In parallel with electroporation, we are exploring several newer technologies for delivery to cells *ex vivo*, which may provide advantages in delivery efficiency or cell viability.



CAR T Cell Program

In CAR T cell therapy, naturally occurring immune cells, specifically T cells, are modified *ex vivo* by inserting a chimeric antigen receptor, or CAR, to selectively target cancer cells and activate an immune response against them. The CAR is an engineered fusion protein expressed on a cell's surface that has an antibody-based portion capable of recognizing certain markers on other cells, such as cancer cells, and a signaling portion inside the cell capable of delivering the desired signals when the antibody portion binds its markers. We believe CRISPR/Cas9 can further enhance CAR T cells by, for example, generating a universal donor CAR T cell or modifying immune checkpoint pathways.

HSC Program

For our HSC programs, we intend to apply CRISPR/Cas9 to correct defective proteins in HSCs of a given patient for the potential treatment of blood disorders or primary immune deficiencies. Challenges of developing stem cell products include the relatively low quantity of available cells for treatment and a limited ability to expand HSCs *ex vivo*. We expect to counter these challenges by employing a proprietary small molecule for HSC expansion to which Novartis has granted us rights. This compound could allow us to generate large numbers of HSCs for re-implantation in patients after editing. We are also pursuing a number of potential gene targets and therapeutic indications in collaboration with Novartis. Our selection criteria for development programs include, among others, disease severity, existing treatment options, delivery efficiency, the nature of the genetic edit required and the expected performance of cells modified by the procedure.

Under our strategic collaboration with Novartis, our CAR T cell program is exclusive to Novartis. We retain the right to develop and commercialize certain of the HSC programs that we discover with Novartis, while others will be proprietary to Novartis. Under this collaboration agreement, we received an upfront technology access payment of \$10.0 million and are entitled to an additional \$40.0 million, in aggregate, in additional technology access fees and research payments during the five-year collaboration term. In addition, we are eligible to earn up to \$230.3 million in development, regulatory and sales-based milestone payments and mid single-digit royalties, in each case, on a per-product basis for the products developed by Novartis.

Strategy

Our goal is to build a fully integrated, product-driven biotechnology company, focused on developing and commercializing potentially curative CRISPR/Cas9-based therapeutics. Our approach to advancing the broad potential of gene editing includes our plans to:

- focus on sentinel indications that enable us to fully develop the potential of the CRISPR/Cas9 system;
- aggressively pursue in vivo liver indications to develop therapeutics rapidly with existing delivery technology;
- continue to develop and expand our ex vivo therapeutic programs through our eXtellia division;
- continue to leverage strategic partnerships to accelerate clinical development; and
- · grow our leadership position in the field of gene editing.

Series B Financing

To enable further development of our technology and *in vivo* and *ex vivo* programs, we completed a private placement for gross proceeds of \$70.0 million of our Series B preferred stock in August 2015 led by OrbiMed HealthCare Fund Management. Additional investors in this financing included Fidelity Management & Research, Janus Capital Management, Foresite Capital, Sectoral Asset Management, EcoR1 Capital LLC, our existing investors, Atlas Venture Fund IX, LP and Novartis, as well as other leading mutual fund and healthcare investors.

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 section entitled "Risk Factors" appearing immediately following this prospectus summary. These risks include the following:

- CRISPR/Cas9 gene editing technology is a novel technology that is not yet proven or clinically validated for human therapeutic use. If we are unable
 to develop viable product candidates, achieve regulatory approval for any such product candidate, or market and sell any product candidates, we may
 never achieve profitability.
- Our ability to generate product revenue is dependent on the success of our application of CRISPR/Cas9 technology for human therapeutic use, which
 is at an early stage of development and will require significant additional discovery efforts, preclinical testing and clinical studies, as well as
 applicable regulatory guidance for preclinical and clinical studies from the U.S. Food and Drug Administration and other regulatory authorities,
 before we can seek regulatory approval and begin commercial sales of any potential product candidates.
- Negative public opinion and increased regulatory scrutiny of gene editing therapies may damage public perception of the safety of any product candidates that we develop and adversely affect our ability to conduct clinical trials or obtain regulatory approvals for such product candidates.
- Third-party claims of intellectual property infringement against us, our licensors or our collaborators may prevent or delay our product discovery and development efforts.
- We license a patent family under our license agreement with Caribou Biosciences, Inc. that covers CRISPR/Cas9 systems and methods to edit genes. The United States patent applications in this patent family are subject to an interference proceeding, the outcome of which may adversely affect our ability to obtain issued patents and to utilize this intellectual property.
- We may not be successful in our efforts to use and enhance our gene editing technology to create a pipeline of product candidates and develop commercially successful products, or we may expend our limited resources on programs that do not yield a successful product candidate.
- We face significant competition in an environment of rapid technological change. We are aware of at least three other CRISPR/Cas companies and five gene editing companies with platforms other than CRISPR/Cas. The possibility that one or more of our competitors may develop therapies that are more effective than ours or achieve regulatory approval before us may harm our business and financial condition.
- We have never generated any revenue from product sales, do not expect to do so in the near term and may never achieve or maintain profitability. We expect to incur losses for the foreseeable future and will need to raise substantial additional funding, even with the net proceeds expected from this offering.
- We have entered into, and may in the future enter into, collaborations with third parties to develop product candidates. If these collaborations are not successful, our business could be adversely affected.

Implications of Being an Emerging Growth Company

We qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, as amended, or the JOBS Act. As an emerging growth company, we may take advantage of specified reduced disclosure and other requirements that are otherwise applicable generally to public companies. These provisions 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; and
- exemption from the auditor attestation requirement in the assessment of our internal control over financial reporting.

We may take advantage of these exemptions for up to five years or such earlier time that we are no longer an emerging growth company. We would cease to be an emerging growth company on the date that is the earliest of (i) the last day of the fiscal year in which we have total annual gross revenues of \$1 billion or more; (ii) the last day of our fiscal year following the fifth anniversary of the date of the completion of this offering; (iii) the date on which we have issued more than \$1 billion in nonconvertible debt during the previous three years; or (iv) the date on which we are deemed to be a large accelerated filer under the rules of the Securities and Exchange Commission, or SEC. We may choose to take advantage of some but not all of these exemptions. We have taken advantage of reduced reporting requirements in this prospectus. Accordingly, the information contained herein may be different from the information you receive from other public companies in which you hold stock. We have irrevocably elected to "opt out" of the exemption for the delayed adoption of certain accounting standards and, therefore, will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

Corporate History

We were incorporated under the laws of the State of Delaware in May 2014. We are the successor in interest to Intellia Therapeutics, LLC, a limited liability company formed under the laws of the State of Delaware in July 2014 and the former holder of all of our outstanding shares of stock. Our principal executive office is located at 130 Brookline Street, Suite 201, Cambridge, MA 02139, and our telephone number is (857) 285-6200. Our website address is www.intelliatx.com. We do not incorporate the information on or accessible through our website into this prospectus, and you should not consider any information on, or that can be accessed through, our website as part of this prospectus.

We own various U.S. federal trademark applications and unregistered trademarks, including our company name. All other trademarks or trade names referred to 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 symbols [®] and TM, 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.

Reorganization

As more fully described in the section entitled "Reorganization" appearing elsewhere in this prospectus, on August 20, 2015, we completed a series of transactions pursuant to which Intellia Therapeutics, LLC merged with and into Intellia Therapeutics, Inc., with Intellia Therapeutics, Inc. continuing as the surviving corporation. In connection with this Reorganization, all of the outstanding common and preferred unitholders of Intellia Therapeutics, LLC received shares of preferred stock of Intellia Therapeutics, Inc., and holders of incentive units in Intellia Therapeutics, LLC received shares of restricted common stock in Intellia Therapeutics, Inc.

THE OFFERING					
Common stock offered	shares				
Common stock to be outstanding immediately after this offering	shares (shares if the underwriters exercise their option to purchase additional shares in full)				
Underwriters' option to purchase additional shares	We have granted a 30-day option to the underwriters to purchase up to an aggregate of additional shares of common stock from us at the public offering price, less underwriting discounts and commissions on the same terms as set forth in this prospectus.				
Use of proceeds	We estimate that we will receive net proceeds from the sale of shares of our common stock in this offering of approximately \$ million, or \$ million if the underwriters exercise their option to purchase additional shares in full, assuming an initial public offering price of \$ per share, 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. We intend to use the net proceeds from this offering to advance the research and development of our sentinel indications, progress additional <i>in vivo</i> and <i>ex vivo</i> pipeline product candidates, further develop our delivery technologies and CRISPR/Cas9 gene editing platform and for working capital and other general corporate purposes. For a more complete description of our intended use of the proceeds from this offering, see "Use of Proceeds."				
Risk factors	You should carefully read the "Risk Factors" section of this prospectus for a discussion of factors that you should consider before deciding to invest in our common stock.				
Proposed NASDAQ Global Market symbol	"ITTX"				

The number of shares of our common stock to be outstanding after this offering is based on 44,269,269 shares of our common stock outstanding as of December 31, 2015, including 39,919,350 shares of our common stock issuable upon the automatic conversion of all outstanding shares of our preferred stock upon the closing of this offering, and excludes:

- 4,518,819 shares of common stock reserved for future issuance under our 2015 Stock Option and Incentive Plan, or the 2015 Plan, which will be amended and restated as our 2015 Amended and Restated Stock Option and Incentive Plan, or the 2015 Restated Plan, effective upon the effectiveness of the registration statement of which this prospectus is a part;
- 775,853 shares of common stock issuable upon the exercise of stock options outstanding as of December 31, 2015, at a weighted average exercise price of \$3.55 per share; and
- an additional 3,105,409 shares of common stock that will be made available for future issuance under our equity compensation plans upon the closing of this offering.

Unless otherwise indicated, all information in this prospectus gives effect to the Reorganization described in the section entitled "Reorganization" and reflects or assumes the following:

- the filing of our amended and restated certificate of incorporation upon the closing of this offering and the effectiveness of our amended and restated by-laws upon the effectiveness of the registration statement of which this prospectus is a part;
- the conversion of all of our outstanding shares of preferred stock into an aggregate of 39,919,350 shares of common stock upon the completion of this offering; and
- no exercise by the underwriters of their option to purchase up to

additional shares of common stock in this offering.

SUMMARY CONSOLIDATED FINANCIAL DATA

The summary consolidated financial data set forth below should be read together with the consolidated financial statements and the related notes to those statements, as well as the sections entitled "Selected Consolidated Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations." We have derived the summary consolidated statement of operations data for the period from May 7, 2014 (inception) to December 31, 2014 and for the year ended December 31, 2015 and the summary consolidated balance sheet data as of December 31, 2015 from our audited consolidated financial statements included elsewhere in this prospectus. Our historical results are not necessarily indicative of results that may be expected in the future.

	Ma (inc	December 31, December		ar Ended cember 31, 2015 d per
Collaboration revenue	\$	—	\$	6,044
Operating expenses:				
Research and development		1,105		11,170
In-process research and development		6,055		
General and administrative		2,379		8,283
Total operating expenses		9,539		19,453
Loss before income taxes		(9,539)		(13,409)
Benefit from income taxes				1,012
Net loss	\$	(9,539)	\$	(12,397)
Net loss per common unit, basic and diluted	\$	(11.55)	\$	_
Net loss per share attributable to common stockholders, basic and diluted	\$	<u> </u>	\$	(30.09)
Weighted average common units outstanding, basic and diluted		826		
Weighted average shares outstanding, basic and diluted				412
Pro forma net loss per share, basic and diluted (unaudited)(1)	\$	(0.82)	\$	(0.41)
Pro forma weighted average shares outstanding, basic and diluted (unaudited)(1)		11,589		30,030

	As of December 31, 2015		
Actual	Pro Forma(2) (in thousands)		Pro Forma As Adjusted(3)
	,	,	
\$ 75,816	\$	75,816	
66,931		66,931	
82,139		82,139	
10,312		10,312	
88,557			
(21,201)		67,356	
	\$ 75,816 66,931 82,139 10,312 88,557	Actual Pro (ir \$ 75,816 \$ 66,931 82,139 10,312 88,557	Actual Pro Forma(2) (in thousands) \$ 75,816 \$ 75,816 66,931 66,931 82,139 10,312 88,557

(1) Basic and diluted pro forma net loss per share give effect to the conversion of all shares of preferred stock issued in connection with the Reorganization into shares of common stock immediately prior to the completion of this offering, assuming such conversion occurred on the later of May 7, 2014 (inception) or the issuance date of the corresponding unit that converted to preferred stock in the Reorganization.

- (2) Pro forma amounts give effect to the automatic conversion of all of our outstanding shares of preferred stock into an aggregate of 39,919,350 shares of common stock upon the completion of this offering.
- (3) Pro forma as adjusted amounts reflect pro forma adjustments described in footnote (2) as well as the sale of shares of our common stock in this offering at the assumed initial public offering price of \$ per share, the midpoint of the price range set forth on the cover page of this prospectus, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. A \$1.00 increase (decrease) in the assumed initial public offering price of \$ 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 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 1.0 million shares offered by us would increase (decrease) the net proceeds to us from this offering by approximately \$ 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.
- (4) We define working capital as current assets less current liabilities.

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 consolidated 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 the money you paid to buy our common stock. Additional risks 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 "Cautionary Note Regarding Forward-Looking Statements" in this prospectus.

Risks Related to Our Business, Technology and Industry

CRISPR/Cas9 gene editing technology is a novel technology that is not yet clinically validated for human therapeutic use. The approaches we are taking to discover and develop novel therapeutics using CRISPR/Cas9 systems are unproven and may never lead to marketable products. If we are unable to develop viable product candidates, achieve regulatory approval for any such product candidate or market and sell any product candidates, we may never achieve profitability.

We are focused on developing potentially curative medicines utilizing the CRISPR/Cas9 gene editing technology. Although there have been significant advances in the field of gene therapy, which typically involves introducing a copy of a gene into a patient's cell, and gene editing in recent years, CRISPR-based gene editing technologies are new and largely unproven. The CRISPR/Cas9 technologies that we have licensed and that we intend to develop have not yet been clinically tested by us, nor are we aware of any clinical trials for safety or efficacy having been completed by third parties involving these technologies. The scientific evidence to support the feasibility of developing products based on these technologies is both preliminary and limited. Successful development of products by us will require solving a number of issues, including safely delivering a therapeutic into target cells safely within the human body or in an *ex vivo* setting, optimizing the efficiency and specificity of such products, and ensuring the therapeutic selectivity of such products. There can be no assurance we will be successful in solving any or all of these issues.

We have concentrated our research efforts to date on bringing CRISPR/Cas9 therapeutics to the clinic for our initial indications, which we call our sentinel indications, and our future success is highly dependent on the successful development of CRISPR-based gene editing technologies, cellular delivery methods and therapeutic applications. Our sentinel indications are the focus of our initial development efforts, and we may decide to alter or abandon these programs as new data become available and we gain experience in developing CRISPR/Cas9-based therapeutics. We cannot be sure that our CRISPR/Cas9 technologies will yield satisfactory products that are safe and effective, scalable or profitable in our sentinel indications or any other indication we pursue.

Public perception and related media coverage of potential therapy-related safety issues, including adoption of new therapeutics or novel approaches to treatment, as well as ethical concerns related specifically to gene editing and CRISPR/Cas9, may adversely influence the willingness of subjects to participate in clinical trials, or if any therapeutic is approved, of physicians to subscribe to the novel treatment mechanics. Physicians, hospitals and third-party payors often are slow to adopt new products, technologies and treatment practices that require additional upfront costs and training. Physicians may not be willing to undergo training to adopt this novel and personalized therapy, may decide the therapy is too complex to adopt without appropriate training and may choose not to administer the therapy. In addition, responses by the U.S., state or foreign governments to negative public perception or ethical concerns may result in new legislation or regulations that could limit our ability to develop or commercialize any product candidates, obtain or maintain regulatory approval or otherwise achieve profitability. Based on these and other factors, hospitals and payors may decide that the benefits of this new therapy do not or will not outweigh its costs.

Development activities in the field of CRISPR/Cas9 are currently subject to a number of risks related to the ownership and use of certain intellectual property rights that are subject to patent interference proceedings. For

additional information regarding the risks that may apply to our and our licensors' intellectual property rights, see the section entitled "—Risks Related to Our Intellectual Property" appearing elsewhere in this prospectus for more information.

Our ability to generate product revenue is dependent on the success of our application of CRISPR/Cas9 technology for human therapeutic use, which is at an early stage of development and will require significant additional discovery efforts, preclinical testing and clinical studies, as well as applicable regulatory guidance for preclinical testing and clinical studies from the FDA and other regulatory authorities, before we can seek regulatory approval and begin commercial sales of any potential product candidates.

Our ability to generate product revenue is highly dependent on our ability to obtain regulatory approval of and successfully commercialize one or more of our product candidates. Any product candidates we discover will require preclinical, clinical and regulatory review and approval in each jurisdiction in which we intend to market the products, substantial investment, access to sufficient commercial manufacturing capacity and significant marketing efforts before we can generate any revenue from product sales. Before obtaining marketing approval from regulatory authorities for the sale of a product candidate, we must conduct extensive clinical trials to demonstrate the safety, purity and potency, as well as the effectiveness of the product candidates in humans. We cannot be certain that any of our product candidates will be successful in clinical trials and even if successful, they may not receive regulatory approval.

Our approach to developing therapies for genetic-based and viral diseases centers on using the CRISPR/Cas9 technology to introduce or remove genetic information in order to treat various disorders. Because this is a new therapeutic approach, discovering, developing and commercializing our product candidates subject us to a number of challenges, including:

- obtaining regulatory approval from the U.S. Food and Drug Administration, or FDA, and other regulatory authorities that have very limited or no
 experience with the clinical development of CRISPR/Cas9 therapeutics;
- seeking and obtaining regulatory approval from the FDA and other regulatory authorities in light of no guidance regarding potential regulatory pathways
 for this category of therapeutics, including preclinical and clinical requirements for approval of an investigational new drug application, or IND;
- educating medical personnel regarding the potential benefits and side effect profile of each of our product candidates;
- developing processes for the safe administration of these products, including long-term follow-up for all patients who receive treatment with any of our product candidates;
- sourcing clinical and, if approved, commercial supplies for the materials used to manufacture and process our product candidates;
- developing a manufacturing process and distribution network with a cost of goods that allows for an attractive return on investment; and
- establishing sales and marketing capabilities after obtaining any regulatory approval to gain market acceptance.

Additionally, because our technology involves gene editing across multiple cell and tissue types, we are subject to many of the challenges and risks that gene therapies face, including:

- regulatory requirements governing gene and cell therapy products have changed frequently and may continue to change in the future. To date, no products that involve the genetic modification of patient cells have been approved in the United States and only one has been approved in the European Union, or EU;
- improper insertion of a gene sequence into a patient's chromosome could lead to lymphoma, leukemia or other cancers, or other aberrantly functioning cells;

- the FDA recommends a follow-up observation period of 15 years or longer for all patients who receive treatment using gene therapies, and we may need to adopt such an observation period for our product candidates; and
- clinical trials using genetically modified cells conducted at institutions that receive funding for recombinant DNA research from the U.S. National Institutes of Health, or the NIH, are subject to review by the NIH Office of Biotechnology Activities' Recombinant DNA Advisory Committee, or the RAC. Although the FDA decides whether individual protocols may proceed, the RAC review process can impede the initiation of a clinical trial, even if the FDA has reviewed the study and it has become effective under an IND.

To date, neither we nor any other company has received regulatory approval to commence human clinical trials or to market therapeutics utilizing CRISPR/Cas9. The regulatory pathway for therapeutics such as those we are developing is unclear and the FDA and other regulatory authorities have not yet provided written guidance regarding preclinical or clinical studies or regulatory approval pathways for gene editing therapeutics.

In addition, if any product candidates encounter safety or efficacy problems, developmental delays, regulatory issues or other problems, our development plans and business could be significantly harmed. Further, competitors that are developing products with similar technology may experience problems with their product candidates or programs that could in turn cause us to identify problems with our product candidates and programs that would potentially harm our business.

Even if we obtain regulatory approval of any product candidates, such candidates may not gain market acceptance among physicians, patients, hospitals, third-party payors and others in the medical community.

The use of the CRISPR/Cas9 system as a framework for developing gene editing therapies is a recent development and may not become broadly accepted by physicians, patients, hospitals, third-party payors and others in the medical community. A variety of factors will influence whether our product candidates are accepted in the market, including, for example:

- the clinical indications for which our product candidates are approved;
- the potential and perceived advantages of our product candidates over alternative treatments;
- the prevalence and severity of any side effects;
- · product labeling or product insert requirements of the FDA or other regulatory authorities;
- limitations or warnings contained in the labeling approved by the FDA or other regulatory authorities;
- · the timing of market introduction of our product candidates as well as competitive products;
- the cost of treatment in relation to alternative treatments;
- the amount of upfront costs or training required for physicians to administer our product candidates;
- the availability of adequate coverage, reimbursement and pricing by third-party payors and government authorities;
- patients' ability to access physicians and medical centers capable of delivering any therapies that we develop;
- the willingness of patients to pay out of pocket in the absence of coverage and reimbursement by third-party payors and government authorities;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;
- · relative convenience and ease of administration, including as compared to alternative treatments and competitive therapies;

- any restrictions on the use of our product candidates together with other medications;
- interactions of our product candidates with other medicines patients are taking;
- potential adverse events for any products developed, or negative interactions with regulatory agencies, by us or in others the gene therapy and gene editing fields; and
- the effectiveness of our sales and marketing efforts and distribution support.

Even if our products achieve market acceptance, we may not be able to maintain that market acceptance over time if new products or technologies are introduced that are more favorably received than our products, are more cost effective or render our products obsolete. In addition, adverse publicity due to the ethical and social controversies surrounding the therapeutic use of CRISPR/Cas9 or other therapeutics mediums such as viral vectors that we anticipate using in our clinical trials may limit market acceptance of our product candidates. If our product candidates are approved but fail to achieve market acceptance among physicians, patients, hospitals, third-party payors or others in the medical community, we will not be able to generate significant revenue.

Negative public opinion and increased regulatory scrutiny of CRISPR/Cas9, gene editing or gene therapy generally may damage public perception of the safety of any product candidates that we develop and adversely affect our ability to conduct our business or obtain regulatory approvals for such product candidates.

Gene therapy in general, and gene editing in particular, remain novel technologies, with no gene therapy product approved to date in the United States and only one gene therapy product approved to date in the EU. Public perception may be influenced by claims that gene therapy or gene editing, including through the use of CRISPR/Cas9, is unsafe or unethical, and gene therapy or gene editing may not gain the acceptance of the public or the medical community. In particular, our success will depend upon physicians who specialize in the treatment of diseases targeted by our product candidates prescribing treatments that involve the use of our product candidates in lieu of, or in addition to, existing treatments with which they are more familiar and for which greater clinical data may be available. In addition, responses by the U.S., state or foreign governments to negative public perception or ethical concerns may result in new legislation or regulations that could limit our ability to develop or commercialize any product candidates, obtain or maintain regulatory approval or otherwise achieve profitability. More restrictive statutory regimes, government regulations or negative public opinion would have an adverse effect on our business, financial condition, results of operations and prospects and may delay or impair the development and commercialization of our product candidates or demand for any products we may develop. For example, earlier gene therapy trials led to several well-publicized adverse events, including cases of leukemia and death. Serious adverse events in our clinical trials, or other clinical trials involving gene therapy or gene editing products or our competitors' products, even if not ultimately attributable to the relevant product candidates, and the resulting publicity could result in increased government regulation, unfavorable public perception, potential regulatory delays in the testing or approval of our product candidates, stricter labeling requirements for those product candidates that ar

Coverage and reimbursement may be limited or unavailable in certain market segments for our product candidates, if approved, which could make it difficult for us to sell any product candidates or therapies profitably.

The success of our product candidates, if approved, depends on the availability of adequate coverage and reimbursement from third-party payors. In addition, because our product candidates represent new approaches to the treatment of genetic-based diseases, we cannot be sure that coverage and reimbursement will be available for, or accurately estimate the potential revenue from, our product candidates or assure that coverage and reimbursement will be available for any product that we may develop.

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. Adequate coverage and reimbursement from governmental healthcare programs, such as Medicare and Medicaid, and commercial payors are critical to new product acceptance.

Government authorities and third-party payors, such as private health insurers and health maintenance organizations, decide which drugs and treatments they will cover and the amount of reimbursement. Coverage and reimbursement by a third-party payor may depend upon a number of factors, including the third-party payor's determination that use of a product is:

- a covered benefit under its health plan;
- safe, effective and medically necessary;
- appropriate for the specific patient;
- cost-effective; and
- neither experimental nor investigational.

In the United States, no uniform policy of coverage and reimbursement for products exists among third-party payors. As a result, obtaining coverage and reimbursement approval of a product from a government or other third-party payor is a time-consuming and costly process that could require us to provide to each payor supporting scientific, clinical and cost-effectiveness data for the use of our products on a payor-by-payor basis, with no assurance that coverage and adequate reimbursement will be obtained. Even if we obtain coverage for a given product, the resulting reimbursement payment rates might not be adequate for us to achieve or sustain profitability or may require co-payments that patients find unacceptably high. Additionally, third-party payors may not cover, or provide adequate reimbursement for, long-term follow-up evaluations required following the use of our gene-modifying products. Patients are unlikely to use our product candidates unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of our product candidates. Because our product candidates may have a higher cost of goods than conventional therapies, and may require long-term follow up evaluations, the risk that coverage and reimbursement of newly approved products. It is difficult to predict at this time what third-party payors will decide with respect to the coverage and reimbursement for our product candidates.

Moreover, increasing efforts by governmental and third-party payors in the United States and abroad to cap or reduce healthcare costs may cause such organizations to limit both coverage and the level of reimbursement for newly approved products and, as a result, they may not cover or provide adequate payment for our product candidates. We expect to experience pricing pressures in connection with the sale of any of our product candidates due to the trend toward managed healthcare, the increasing influence of health maintenance organizations, cost containment initiatives and additional legislative changes.

We intend to seek approval to market our product candidates in both the United States and in selected foreign jurisdictions. If we obtain approval in one or more foreign jurisdictions for our product candidates, we will be subject to rules and regulations in those jurisdictions. In some foreign countries, particularly those in the EU, the pricing of biologics is subject to governmental control and other market regulations which could put pressure on the pricing and usage of our product candidates. In these countries, pricing negotiations with governmental authorities can take considerable time after obtaining marketing approval of a product candidate. In addition, market acceptance and sales of our product candidates will depend significantly on the availability of adequate coverage and reimbursement from third-party payors for our product candidates and may be affected by existing and future health care reform measures.

Research and development of biopharmaceutical products is inherently risky. We may not be successful in our efforts to use and enhance our gene editing technology to create a pipeline of product candidates, obtain regulatory approval and develop commercially successful products, or we may expend our limited resources on programs that do not yield a successful product candidate and fail to capitalize on potential product candidates or diseases that may be more profitable or for which there is a greater likelihood of success. If we fail to develop product candidates, our commercial opportunity, if any, will be limited.

We do not currently have any product candidates. We are at an early stage of development and our technology and approach has not yet led, and may never lead, to any product candidate or any approved or

commercially successful products. Even if we are successful in building our pipeline of product candidates, completing clinical development, obtaining regulatory approvals and commercializing product candidates will require substantial additional funding beyond the net proceeds of this offering and are prone to the risks of failure inherent in therapeutic product development. Investment in biopharmaceutical product development involves significant risk that any potential product candidate will fail to demonstrate adequate efficacy or an acceptable safety profile, gain regulatory approval, or become commercially viable.

We cannot provide any assurance that we will be able to successfully advance any product candidates that we discover through the research process. Our research programs may initially show promise, yet fail to yield product candidates for clinical development or commercialization for many reasons, including the following:

- our technology and approach may not be successful in identifying product candidates;
- · we may not be able or willing to assemble sufficient resources to acquire or discover product candidates;
- our product candidates may not succeed in preclinical or clinical testing;
- our planned risk mitigation strategy for selecting our sentinel indications may fail or we may not be able to efficiently apply learnings from our initial development programs to future development programs;
- we may be unable to optimize the therapeutic efficiency, specificity, or selectivity of our future products candidates;
- our therapeutic delivery systems may fail so that even a product candidate with therapeutic activity does not demonstrate a clinically meaningful therapeutic effect;
- a product candidate may not demonstrate in patients the biological, chemical and pharmacological properties identified in laboratory studies, or they may
 interact with human biological systems in unforeseen, ineffective or even harmful ways;
- 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;
- the therapeutic effect of a product candidate may not be permanent and may diminish over time;
- a single treatment course may not be sufficient for a cure or therapeutic benefit; it may take several treatment courses for the product to be effective;
- a well-defined and achievable pathway to regulatory approval may never materialize for a specific product candidate;
- · competitors may develop alternatives that render our product candidates obsolete or less attractive;
- product candidates we develop may be covered by third-party or other exclusive rights or may not receive desired regulatory exclusivity, and we may be unable to protect our intellectual property rights;
- the market for a product candidate may change during our program so that the continued development of that product candidate is no longer reasonable;
- a product candidate may not be capable of being produced in commercial quantities at an acceptable cost, or at all;
- we may be unable to successfully maintain existing collaborations or licensing arrangements or enter into new ones throughout the development process as appropriate; and
- a product candidate may not be accepted as safe and effective by physicians, patients, hospitals, third-party payors and others in the medical community.

If any of these events occur, we may be forced to abandon our development efforts for a program or programs, or we may not be able to identify, discover, develop or commercialize product candidates, which would have a material adverse effect on our business and could potentially cause us to cease operations.

Because we have limited financial and managerial resources, we focus on research programs that we identify as our sentinel indications. As a result, we may fail to capitalize on viable commercial products or profitable market opportunities, be required to forego or delay pursuit of opportunities with other product candidates or other diseases that may later prove to have greater commercial potential, or relinquish valuable rights to such product candidates through collaboration, licensing or other royalty arrangements in cases in which it would have been advantageous for us to retain sole development and commercialization rights. For additional information regarding the factors that will affect our ability to achieve revenue from product sales, see the risk factor entitled "-We have never generated any revenue from product sales and our ability to generate revenue from product sales and become profitable depends significantly on our success in a number of factors."

If we do not successfully develop and commercialize product candidates based upon our approach, we will not be able to obtain product revenue in future periods, which likely would result in significant harm to our financial position and adversely affect our stock price. Further, our current exclusive focus on CRISPR/Cas9 technology for developing products as opposed to multiple, more proven technologies for product development increases the risk associated with our business. If we are not successful in developing a product candidate using CRISPR/Cas9 technology, we may not be able to successfully implement an alternative product development strategy.

Clinical development involves a lengthy and expensive process, with an uncertain outcome. We may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of any product candidates.

All of our lead programs are still in the discovery stage, and their risk of failure is high. It is impossible to predict when or if any of our programs will prove effective and safe in humans or will receive regulatory approval. Before obtaining marketing approval from regulatory authorities for the sale of any product candidate, we must complete preclinical development and then conduct extensive clinical trials to demonstrate the safety and efficacy of any of our future product candidates in humans. Preclinical and clinical testing is expensive, difficult to design and implement, can take many years to complete and is uncertain as to outcome. A clinical trial can fail at any stage of testing. The outcome of preclinical testing and early clinical trials may not be predictive of the success of later clinical trials, and interim results of a clinical trial do not necessarily predict final results. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that have believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval of their products.

Successful completion of clinical trials is a prerequisite to submitting a biologics license application, or BLA, to the FDA, a Marketing Authorization Application, or MAA, to the European Medicines Agency, or EMA and similar approval filings to comparable foreign regulatory authorities, for each product candidate and, consequently, the ultimate approval and commercial marketing of any product candidates. We do not know whether any of our clinical trials will begin or be completed on schedule, if at all.

We may experience delays in completing our preclinical studies and initiating or completing clinical trials. We also may experience numerous unforeseen events during, or as a result of, any future clinical trials that we could conduct that could delay or prevent our ability to receive marketing approval or commercialize our product candidates, including:

- regulators or institutional review boards, or IRBs, or ethics committees may not authorize us or our investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- we may experience delays in reaching, or fail to reach, agreement on acceptable terms with prospective trial sites and prospective contract research
 organizations, or CROs, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- clinical trials of any product candidates may fail to show safety or efficacy, produce negative or inconclusive results and we may decide, or regulators
 may require us, to conduct additional preclinical studies or clinical trials or we may decide to abandon product development programs;

- the number of patients required for clinical trials of any product candidates may be larger than we anticipate, enrollment in these clinical trials may be slower than we anticipate or participants may drop out of these clinical trials or fail to return for post-treatment follow-up at a higher rate than we anticipate;
- our third-party contractors may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all, or may deviate from the clinical trial protocol or drop out of the trial, which may require that we add new clinical trial sites or investigators;
- we may elect to, or regulators, IRBs or ethics committees may require that we or our investigators, suspend or terminate clinical research or trials for
 various reasons, including noncompliance with regulatory requirements or a finding that the participants are being exposed to unacceptable health risks;
- the cost of preclinical studies and clinical trials of any product candidates may be greater than we anticipate;
- the supply or quality of our product candidates or other materials necessary to conduct clinical trials of our product candidates may be insufficient or inadequate;
- our product candidates may have undesirable side effects or other unexpected characteristics, causing us or our investigators, regulators, IRBs or ethics
 committees to suspend or terminate the trials, or reports may arise from preclinical or clinical testing of other gene therapies or gene editing based
 therapies that raise safety or efficacy concerns about our product candidates; and
- the FDA or other regulatory authorities may require us to submit additional data such as long-term toxicology studies, or impose other requirements before permitting us to initiate a clinical trial.

We could also encounter delays if a clinical trial is suspended or terminated by us, the IRBs of the institutions in which such trials are being conducted, the Data Safety Monitoring Board, or DSMB, for such trial or FDA or other regulatory authorities. Such authorities may impose such a suspension or termination 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 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 product or treatment, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial. Many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our product candidates. Further, the FDA or other regulatory authorities may disagree with our clinical trial design and our interpretation of data from clinical trials, or may change the requirements for approval even after they have reviewed and commented on the design for our clinical trials.

Our product development costs will increase if we experience delays in clinical testing or marketing approvals. We do not know whether any of our 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 or clinical trial delays also could shorten any periods during which we may have the exclusive right to commercialize our product candidates and may allow our competitors to bring products to market before we do, potentially impairing our ability to successfully commercialize our product candidates and harming our business and results of operations. Any delays in our preclinical or future clinical development programs may harm our business, financial condition and prospects significantly.

Inconclusive results, lack of efficacy, adverse events or additional safety concerns in clinical trials that we or others conduct may impede the regulatory approval process or overall market acceptance of our future product candidates.

Therapeutic applications of gene editing technologies, and CRISPR/Cas9 in particular, are unproven and must undergo rigorous clinical trials and regulatory review before receiving marketing authorization. If the results of our clinical studies or those of any other third parties, including with respect to gene editing

technology, are inconclusive, fail to show efficacy or if such clinical trials give rise to safety concerns or adverse events, we may:

- be delayed in obtaining marketing approval for our future product candidates, if 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 safety warnings;
- be subject to the addition of labeling statements, such as warnings or contraindications, or other types of regulatory restrictions or scrutiny;
- be subject to changes in the way the product is administered;
- be required to perform additional clinical studies to support approval or be subject to additional post-marketing testing requirements;
- have regulatory authorities withdraw their written guidance, if any, regarding the applicable regulatory approval pathway or any approval of the product in question, or impose restrictions on its distribution in the form of a modified risk evaluation and mitigation strategy, or REMS;
- be sued; or
- experience damage to our reputation.

Additionally, our future product candidates could potentially cause other adverse events that have not yet been predicted and the potentially permanent nature of gene editing effects, including CRISPR/Cas9's effects, on genes may make these adverse events irreversible. The inclusion of critically ill patients in our clinical studies or those of our competitors may result in deaths or other adverse medical events, including those due to other therapies or medications that such patients may be using. Any of these events could prevent us from achieving or maintaining regulatory approval or market acceptance of our future product candidates and impair our ability to achieve profitability.

We have never generated any revenue from product sales and our ability to generate revenue from product sales and become profitable depends significantly on our success in a number of factors.

We have no products approved for commercial sale, have not generated any revenue from product sales, and do not anticipate generating any revenue from product sales until some time after we have received regulatory approval for the commercial sale of a product candidate that we discover. Our ability to generate revenue and achieve and retain profitability depends significantly on our success in many factors, including:

- selecting commercially viable product candidates and effective delivery methods;
- · completing research and nonclinical and clinical development of product candidates;
- · obtaining regulatory approvals and marketing authorizations for product candidates for which we complete clinical trials;
- developing a sustainable and scalable manufacturing process for product candidates, including establishing and maintaining commercially viable supply relationships with third parties and potentially establishing our own manufacturing capabilities and infrastructure;
- launching and commercializing product candidates for which we obtain regulatory approvals and marketing authorizations, either directly or with a collaborator or distributor;
- obtaining market acceptance of our product candidates as viable treatment options;
- · addressing any competing technological and market developments;
- negotiating favorable terms in any collaboration, licensing or other arrangements into which we may enter;

- maintaining good relationships with our collaborators and licensors;
- maintaining, protecting and expanding our portfolio of intellectual property rights, including patents, trade secrets and know-how; and
- attracting, hiring and retaining qualified personnel.

Even if one or more product candidates that we discover and develop are approved for commercial sale, we anticipate incurring significant costs associated with commercializing any approved product candidate and the timing of such costs may be out of our control. Our expenses could increase beyond expectations if we are required by the FDA or other regulatory agencies, domestic or foreign, to change our manufacturing processes or assays, or to perform clinical, nonclinical or other types of additional studies. If we are successful in obtaining regulatory approvals to market one or more product candidates, our revenue will be dependent, in part, upon the size of the markets in the territories for which we gain regulatory approval, the accepted price for the product, the ability to get reimbursement at any price and whether we own the commercial rights for that territory. If the number of our addressable disease patients is not as significant as we estimate, the indication approved by regulatory authorities is narrower than we expect or the reasonably accepted population for treatment is narrowed by competition, physician choice or treatment guidelines, we may not generate significant revenue from sales of such products, even if approved. If we are not able to generate revenue from the sale of any approved products, we may never become profitable.

We face significant competition in an environment of rapid technological change. The possibility that our competitors may achieve regulatory approval before we do or develop therapies that are more advanced or effective than ours may harm our business and financial condition or our ability to successfully market or commercialize our product candidates.

The biotechnology and pharmaceutical industries, including the gene editing field, are characterized by rapidly changing technologies, significant competition and a strong emphasis on intellectual property. We face substantial competition from many different sources, including large and specialty pharmaceutical and biotechnology companies, academic research institutions, government agencies and public and private research institutions.

Competitors in our efforts to provide genetic therapies to patients can be grouped into at least three sets based on their product discovery platforms:

- gene editing companies focused on CRISPR/Cas9 including: CRISPR Therapeutics, Inc., Editas Medicine, Inc. and Tracr Hematology Limited;
- other gene editing companies including: bluebird bio, Inc., Cellectis S.A., Poseida, Inc., Precision BioSciences, Inc. and Sangamo BioSciences; and
- gene therapy companies developing *ex vivo* therapies including: bluebird bio, Inc., Cellectis S.A., and Juno Therapeutics, Inc.

Our competitors will also include companies that are or will be developing other gene editing methods as well as small molecules, biologics and nucleic acid-based therapies for the same indications that we are targeting with our CRISPR/Cas9-based therapeutics.

In addition, certain of our founders previously have had, and may in the future have, affiliations with other gene editing companies.

Any advances in gene therapy or gene editing technology made by a competitor may be used to develop therapies that could compete against any of our product candidates. Many of these competitors have substantially greater research and development capabilities and financial, scientific, technical, manufacturing, marketing, distribution and other resources than we do, and we may not be able to successfully compete with them.

To become and remain profitable, we must discover, develop and eventually commercialize product candidates with significant market potential, which will require us to be successful in a range of challenging



activities. These activities can include completing preclinical studies and clinical trials of product candidates, obtaining marketing approval for product candidates, manufacturing, marketing and selling products that are approved and satisfying any post-marketing requirements. Even if we are successful in selecting and developing any product candidates, in order to compete successfully we may need to be first-to-market or demonstrate that our CRISPR/Cas9-based products are superior to therapies based on different treatment methods. If we are not first-to-market or are unable to demonstrate such superiority, any products for which we are able to obtain approval may not be successful. Furthermore in certain jurisdictions, if a competitor has orphan drug status for a product and if our product candidate is determined to be contained within the scope of a competitor's orphan drug exclusivity, then approval of our product for that indication or disease could potentially be blocked, for example, for up to seven years in the United States.

We may never succeed in any or all of these activities and, even if we do, we may never generate revenues that are significant or large enough to achieve profitability. If we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would decrease the value of our company and could impair our ability to raise capital, maintain our research and development efforts, expand our business or continue our operations. A decline in the value of our company also could cause you to lose all or part of your investment.

We have a very limited operating history, which may make it difficult to evaluate our current business and predict our future performance.

We are very early in our development efforts and all of our lead programs are still in the discovery stage. We were formed in May 2014, have no products approved for commercial sale and have not generated any revenue from product sales. Our ability to generate product revenue or profits, which we do not expect will occur for many years, if ever, will depend heavily on the successful development and eventual commercialization of our product candidates, which may never occur. We may never be able to develop or commercialize a marketable product.

Each of our programs will require additional discovery research and then preclinical and clinical development, regulatory approval in multiple jurisdictions, obtaining manufacturing supply, capacity and expertise, building of a commercial organization, substantial investment and significant marketing efforts before we generate any revenue from product sales. In addition, our product candidates must be approved for marketing by the FDA or certain other foreign regulatory agencies, including the EMA, before we may commercialize any product.

Our limited operating history, particularly in light of the rapidly evolving gene editing field, may make it difficult to evaluate our current business and predict our future performance. Our very short history as an operating company makes any assessment of our future success or viability subject to significant uncertainty. We will encounter risks and difficulties frequently experienced by very early stage companies in rapidly evolving fields. If we do not address these risks successfully, our business will suffer.

We have incurred net losses in each period since our inception, anticipate that we will continue to incur net losses in the future and may never achieve profitability.

We are not profitable and have incurred losses in each period since our inception. For the period from May 7, 2014 (inception) to December 31, 2014, we reported a net loss of \$9.5 million. For the year ended December 31, 2015, we reported a net loss of \$12.4 million. We expect these losses to increase as we continue to incur significant research and development and other expenses related to our ongoing operations, seek regulatory approvals for our future product candidates, scale-up manufacturing capabilities, maintain, expand and protect our intellectual property portfolio and hire additional personnel to support the development of our product candidates and to enhance our operational, financial and information management systems.

A critical aspect of our strategy is to invest significantly in our technology to improve the efficacy and safety of potential product candidates that we discover. Even if we succeed in discovering, developing and ultimately commercializing one or more of these product candidates, we will continue to incur losses for the

foreseeable future relating to our substantial research and development expenditures to develop our technologies. We may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our business. The size of our future net losses will depend, in part, on the rate of future growth of our expenses and our ability to generate revenue. Our prior losses and expected future losses have had and will continue to have an adverse effect on our stockholders' equity and working capital. Further, the net losses we incur may fluctuate significantly from quarter to quarter and year to year, such that a period to period comparison of our results of operations may not be a good indication of our future performance.

We will need to raise substantial additional funding, even with the net proceeds expected from this offering. If we fail to obtain additional financing, we may be unable to complete the development and commercialization of any product candidates.

Our operations have required substantial amounts of cash since inception. We expect to spend substantial amounts of our financial resources on our discovery programs going forward. If we are able to identity product candidates that are eventually approved, we will require significant additional amounts in order to launch and commercialize our product candidates. For the foreseeable future, we expect to continue to rely on additional financing to achieve our business objectives.

As of December 31, 2015, we had \$75.8 million in cash and cash equivalents. We estimate that our net proceeds from this offering will be approximately million, based on the initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover of this prospectus, after deducting the underwriting discounts and commissions, and estimated offering expenses payable by us. We expect to use the net proceeds from this offering to advance the research and development of our sentinel indications, to progress additional pipeline product candidates, further develop our delivery technologies and CRISPR/Cas9 gene editing platform and for working capital and other general corporate purposes. We believe that such proceeds, together with our existing cash and expected revenue under our collaboration with Novartis Institutes for BioMedical Research, Inc., or Novartis, will be sufficient to fund our operations for at least the next months. However, changing circumstances may cause us to increase our spending significantly faster than we currently anticipate, and we may need to spend more money than currently expected. In this regard, we will require additional capital for the further development and commercialization of any product candidates and may need to raise additional funds sooner if we choose to expand more rapidly than we presently anticipate or due to other unanticipated factors.

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. Our collaboration and 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.

Any of the above events could significantly harm our business, prospects, financial condition and results of operations and cause the price of our common stock to decline.

Raising additional capital may cause dilution to our stockholders, including purchasers of common stock in this offering, and restrict our operations.

We will need additional capital in the future to continue our planned operations. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest may be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a common stockholder. Debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends.

If we experience delays or difficulties in the enrollment of patients in clinical trials, our ability to complete clinical trials or our receipt of necessary regulatory approvals could be delayed or prevented.

We may not be able to initiate or continue clinical trials for any future product candidates if we are unable to locate and enroll a sufficient number of eligible patients to participate in these trials as required by the FDA or similar regulatory authorities outside the United States. If patients are unwilling to participate in our clinical studies because of negative publicity from adverse events in the gene editing field, the novel nature of the CRISPR/Cas9 gene editing technology, the irreversibility of the effects of CRISPR/Cas9 or for other reasons, including competitive clinical studies for similar patient populations, then the timeline for recruiting patients, conducting studies and obtaining regulatory approval of potential products may be delayed. These delays could result in increased costs, delays in advancing our product development, delays in testing the effectiveness of our technology or termination of the clinical studies altogether. In addition, any patients who would otherwise be eligible for clinical trials that we may hold may instead enroll in clinical trials of product candidates of our competitors.

Patient enrollment is affected by other factors including:

- the size and nature of the patient population;
- the severity of the disease under investigation;
- the patient eligibility criteria for the study in question;
- the perceived risks and benefits of the product candidate under study;
- the design of the clinical trial;
- our payments for conducting clinical trials;
- the patient referral practices of physicians;
- the ability to monitor patients adequately during and after treatment; and
- · the proximity and availability of clinical trial sites for prospective patients.

Our inability to enroll a sufficient number of patients for clinical trials would result in significant delays and could require us to abandon one or more clinical trials altogether. Enrollment delays in clinical trials may result in increased development costs for any of our potential future product candidates, which would cause the value of our company to decline and limit our ability to obtain additional financing. Furthermore, we expect to rely on CROs and clinical trial sites to ensure the proper and timely conduct of our clinical trials and while we expect to enter into agreements governing their committed activities, we will have limited influence over their actual performance.

We expect to expand our development and regulatory capabilities, and as a result, we may encounter difficulties in hiring capable personnel and otherwise 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 product development, regulatory affairs and, if any product candidates receive marketing approval, sales, marketing and distribution. To manage our anticipated future growth, 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. 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 recruit and train additional qualified personnel or to otherwise effectively manage the expansion of our operations. The expansion of our operations may lead to significant costs and may divert our management and business development resources. Any inability to manage growth could delay the execution of our business and development plans or disrupt our operations.

Our future success depends on our ability to retain key executives and to attract, retain and motivate qualified personnel.

We are highly dependent on the research and development, clinical, legal and business development expertise of Nessan Bermingham, Ph.D., our President and Chief Executive Officer, John M. Leonard, M.D., our Chief Medical Officer and José E. Rivera, our Chief Operating Officer and Chief Legal Officer as well as the other principal members of our management, scientific and clinical teams. Although we have entered into employment arrangements with our executive officers, each of them may terminate their employment with us at any time. We do not maintain "key person" insurance for any of our executives or other employees.

Recruiting and retaining qualified scientific, clinical, manufacturing and sales and marketing personnel will also be important for our success. The loss of the services of our executive officers or other key employees could impede the achievement of our research, development and commercialization objectives and seriously harm our ability to successfully implement our business strategy. Furthermore, replacing executive officers and 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 successfully develop, gain regulatory approval of and commercialize products using our technology. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these key personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies, universities and research institutions for similar personnel. The market for qualified personnel in the biotechnology space generally, and gene editing and gene therapy fields in particular, in and around the Cambridge, Massachusetts area is especially competitive. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategies. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us. If we are unable to continue to attract and retain high quality personnel, our ability to pursue our growth strategy will be limited.

If, in the future, we are unable to establish sales and marketing capabilities or enter into agreements with third parties to sell and market products based on our technologies, we may not be successful in commercializing our products if and when any products candidates or therapies are approved and we may not be able to generate any revenue.

We do not currently have a sales or marketing infrastructure and, as a company, have no experience in the sale, marketing or distribution of therapeutic products. To achieve commercial success for any approved product candidate for which we retain sales and marketing responsibilities, we must build our sales, marketing, managerial and other non-technical capabilities or make arrangements with third parties to perform these services. In the future, we may choose to build a focused sales and marketing infrastructure to sell, or participate in sales activities with our collaborators for, some of our product candidates if and when they are approved.

There are risks involved with both establishing our own sales and marketing capabilities and entering into arrangements with third parties to perform these services. For example, recruiting and training a sales force is expensive and time consuming and could delay any product launch. If the commercial launch of a product candidate for which we recruit a sales force and establish marketing capabilities is delayed or does not occur for any reason, we would have prematurely or unnecessarily incurred these commercialization expenses. This may be costly and our investment would be lost if we cannot retain or reposition our sales and marketing personnel.

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

- our inability to recruit, train and retain adequate numbers of effective sales and marketing personnel;
- the inability of sales personnel to obtain access to physicians or persuade adequate numbers of physicians to prescribe any future product candidates that we may develop;
- the lack of complementary treatments 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.

If we enter into arrangements with third parties to perform sales, marketing and distribution services, our product revenue or the profitability to us from these revenue streams is likely to be lower than if we were to market and sell any product candidates that we develop ourselves. In addition, we may not be successful in entering into arrangements with third parties to sell and market our product candidates or may be unable to do so on terms that are favorable to us. We likely will have little control over such third parties and any of them may fail to devote the necessary resources and attention to sell and market our product candidates effectively. If we do not establish sales and marketing capabilities successfully, either on our own or in collaboration with third parties, we may not be successful in commercializing our product candidates. Further, our business, results of operations, financial condition and prospects will be materially adversely affected.

Our technological advancements and any potential for revenue may be derived in part from our collaboration with Novartis, and if this collaboration agreement were to be terminated, our business, financial condition, results of operations and prospects would be harmed.

In December 2014, we entered into a collaboration agreement with Novartis regarding the discovery of new CRISPR/Cas9-based therapies principally using chimeric antigen receptor T cells, or CAR T cells, and hematopoietic stem cells, or HSCs. Under the collaboration agreement, we received an upfront commitment to advance multiple programs. Pursuant to the agreement, we granted Novartis exclusive rights to further develop any products arising out of the CAR T cell program. Regarding HSCs, we plan to jointly advance multiple programs with Novartis and have agreed to a process for assigning development and ownership rights, which will enable us to develop our own proprietary HSC pipeline. Novartis may change its strategic focus or pursue alternative technologies in a manner that results in reduced, delayed or no revenue to us. Novartis has a variety of marketed products and product candidates under collaboration with other companies, including some of our competitors, and its own corporate objectives may not be consistent with our best interests. If Novartis fails to develop, obtain regulatory approval for or ultimately commercialize any product candidate from the CAR T cell and HSC programs in the applicable territories, or if Novartis terminates our collaboration, our business, financial condition, results of operations and prospects would be harmed. In addition, any dispute or litigation proceedings we may have with Novartis in the future could delay development programs, create uncertainty as to ownership of or access to intellectual property rights, distract management from other business activities and generate substantial expense.

Our existing and future collaborations will be important to our business. If we are unable to maintain any of these collaborations, or if these collaborations are not successful, our business could be adversely affected.

We have limited capabilities for product development and do not yet have any capability for sales, marketing or distribution. Accordingly, we have entered, and plan to enter, into collaborations with other companies, including our therapeutic-focused collaboration agreement with Novartis, that we believe can provide such capabilities. This collaboration has provided us with important technologies and funding for our programs and technology and we expect to receive additional technologies and funding under this and other collaborations in the future. Our existing therapeutic collaboration, and any future collaborations we enter into, may pose a number of risks, including the following:

- collaborators have significant discretion in determining the efforts and resources that they will apply;
- collaborators may not perform their obligations as expected;
- collaborators may not pursue development and commercialization of any product candidates that achieve regulatory approval or may elect not to continue
 or renew development or commercialization programs or license arrangements based on clinical trial results, changes in the collaborators' strategic focus
 or available funding, or external factors, such as a strategic transaction that may 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 products and product candidates if the collaborators believe that the competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours;
- product candidates discovered in collaboration with us may be viewed by our collaborators as competitive with their own product candidates or products, which may cause collaborators to cease to devote resources to the commercialization of our product candidates;
- collaborators may fail to comply with applicable regulatory requirements regarding the development, manufacture, distribution or marketing of a product candidate or product;
- collaborators with marketing and distribution rights to one or more of our product candidates that achieve regulatory approval may not commit sufficient
 resources to the marketing and distribution of such product or products;
- disagreements with collaborators, including disagreements over proprietary rights, contract interpretation or the preferred course of development, might
 cause delays or terminations 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;
- if a collaborator of ours is involved in a business combination, the collaborator might deemphasize or terminate the development or commercialization of any product candidate licensed to it by us; and
- collaborations may be terminated by the collaborator, and, if terminated, we could be required to raise additional capital to pursue further development or commercialization of the applicable product candidates.

If our therapeutic collaborations do not result in the successful discovery, development and commercialization of products or if one of our collaborators terminates its agreement with us, we may not receive any future research funding or milestone or royalty payments under the collaboration. If we do not receive the funding we expect under these agreements, our development of our technology and product candidates could be delayed and we may need additional resources to develop product candidates and our technology. All of the risks relating to product development, regulatory approval and commercialization described in this prospectus also apply to the activities of our therapeutic collaborators.

Additionally, if one of our collaborators terminates its agreement with us, we may find it more difficult to attract new collaborators and our perception in the business and financial communities could be adversely affected.

For some of our programs, we may in the future determine to collaborate with pharmaceutical and biotechnology companies for development and potential commercialization of therapeutic products. We face significant competition in seeking appropriate collaborators. Our ability to 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 collaborator's evaluation of a number of factors. 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, bring them to market or continue to develop our technology and our business may be materially and adversely affected.

Gene editing products are novel and may be complex and difficult to manufacture. We could experience manufacturing problems that result in delays in the development or commercialization of our product candidates or otherwise harm our business.

The manufacturing process used to produce CRISPR/Cas9-based product candidates may be complex, as they are novel and have not been validated for clinical and commercial production. Several factors could cause production interruptions, including equipment malfunctions, facility contamination, raw material shortages or contamination, natural disasters, disruption in utility services, human error or disruptions in the operations of our suppliers.

Our product candidates will require processing steps that are more complex than those required for most small molecule drugs. Moreover, unlike small molecules, the physical and chemical properties of a biologic such as ours generally cannot be fully characterized. As a result, assays of the finished product may not be sufficient to ensure that the product will perform in the intended manner. Accordingly, we will employ multiple steps to control the manufacturing process to assure that the process works and the product candidate is made strictly and consistently in compliance with the process. Problems with the manufacturing process, even minor deviations from the normal process, could result in product defects or manufacturing failures that result in lot failures, product recalls, product liability claims or insufficient inventory. We may encounter problems achieving adequate quantities and quality of clinical grade materials that meet FDA, EMA or other applicable standards or specifications with consistent and acceptable production yields and costs.

In addition, the FDA, the EMA and other foreign regulatory authorities may require us to submit samples of any lot of any approved product together with the protocols showing the results of applicable tests at any time. Under some circumstances, the FDA, the EMA or other foreign regulatory authorities may require that we not distribute a lot until the relevant agency authorizes its release. Slight deviations in the manufacturing process, including those affecting quality attributes and stability, may result in unacceptable changes in the product that could result in lot failures or product recalls. Lot failures or product recalls could cause us to delay product launches or clinical trials, which could be costly to us and otherwise harm our business, financial condition, results of operations and prospects. Problems in our manufacturing process could restrict our ability to meet market demand for our products.

We also may encounter problems hiring and retaining the experienced scientific, quality-control and manufacturing personnel needed to operate our manufacturing processes, which could result in delays in production or difficulties in maintaining compliance with applicable regulatory requirements.

Any problems in our manufacturing process or facilities could make us a less attractive collaborator for potential partners, including larger pharmaceutical companies and academic research institutions, which could limit our access to additional attractive development programs.

We expect to rely on third parties to manufacture our clinical product supplies, and we intend to rely on third parties for at least a portion of the manufacturing process of our product candidates, if approved. Our business could be harmed if the third parties fail to provide us with sufficient quantities of product inputs or fail to do so at acceptable quality levels or prices.

We do not currently own any facility that may be used as our clinical-scale manufacturing and processing facility and must eventually rely on outside vendors to manufacture supplies and process our product candidates. We have not yet caused any product candidates to be manufactured or processed on a commercial scale and may not be able to do so for any of our product candidates. We will make changes as we work to optimize the

manufacturing process, and we cannot be sure that even minor changes in the process will result in therapies that are safe and effective.

The facilities used by our contract manufacturers to manufacture our product candidates must be approved by the FDA or other foreign regulatory agencies pursuant to inspections that will be conducted after we submit an application to the FDA or other foreign regulatory agencies. We do not control the manufacturing process of, and will be completely dependent on, our contract manufacturing partners for compliance with regulatory requirements, known as good manufacturing practice, or cGMP, requirements for manufacture of our product candidates. If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA or other regulatory authorities, they will not be able to secure and/or maintain regulatory approval for their manufacturing 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 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.

We will rely on third parties to conduct our clinical trials. If these third parties do not successfully carry out their contractual duties or meet expected deadlines or comply with regulatory requirements, we may not be able to obtain regulatory approval of or commercialize any potential product candidates.

We will depend upon third parties, including independent investigators, to conduct our clinical trials under agreements with universities, medical institutions, CROs, strategic partners and others. We expect to have to negotiate budgets and contracts with CROs and trial sites, which may result in delays to our development timelines and increased costs.

We will rely heavily on third parties over the course of our clinical trials, and, as a result, will have limited control over the clinical investigators and limited visibility into their day-to-day activities, including with respect to their compliance with the approved clinical protocol. Nevertheless, we are responsible for ensuring that each of our studies is conducted in accordance with the applicable protocol and legal, regulatory and scientific standards, and our reliance on third parties does not relieve us of our regulatory responsibilities. We and these third parties are required to comply with good clinical practice, or GCP, requirements, which are regulations and guidelines enforced by the FDA and comparable foreign regulatory authorities for product candidates in clinical development. Regulatory authorities enforce these GCP requirements through periodic inspections of trial sponsors, clinical investigators and trial sites. If we or any of these third parties fail to comply with applicable GCP requirements, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to suspend or terminate these trials or perform additional preclinical studies or clinical trials before approving our marketing applications. We cannot be certain that, upon inspection, such regulatory authorities will determine that any of our clinical trials comply with the GCP requirements. In addition, our clinical trials must be conducted with biologic product produced under current good manufacturing practice, or cGMP, requirements and may require a large number of test patients. Our failure or any failure by these third parties to comply with these regulations or to recruit a sufficient number of patients may require us to repeat clinical trials, which would delay the regulatory approval process. Moreover, our business may be implicated if any of these third parties violates federal or state fraud and abuse or false claims laws and regulations

Any third parties conducting our future clinical trials will not be our employees and, except for remedies that may be available to us under our agreements with such third parties, we cannot control whether or not they devote sufficient time and resources to our ongoing preclinical, clinical, and nonclinical programs. These third parties may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical trials or other product development activities, which could affect their performance on our behalf. If these third parties do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols or regulatory requirements

or for other reasons, our clinical trials may be extended, delayed or terminated and we may not be able to complete development of, obtain regulatory approval of or successfully commercialize our product candidates. As a result, our financial results and the commercial prospects for our product candidates would be harmed, our costs could increase and our ability to generate revenue could be delayed.

If any of our relationships with these third-party CROs or others terminate, we may not be able to enter into arrangements with alternative CROs or other third parties or to do so on commercially reasonable terms. Switching or adding additional CROs involves additional cost and requires management time and focus. In addition, there is a natural transition period when a new CRO begins work. As a result, delays may occur, which can materially impact our ability to meet our desired clinical development timelines. Though we carefully manage our relationships with our CROs, there can be no assurance that we will not encounter similar challenges or delays in the future or that these delays or challenges will not have a material adverse impact on our business, financial condition and prospects.

Unfavorable global economic conditions could adversely affect our business, financial condition or results of operations.

Our results of operations could be adversely affected by general conditions in the global economy and in the global financial markets. For example, recent global financial crises caused extreme volatility and disruptions in the capital and credit markets. A severe or prolonged economic downturn, or additional global financial crises, could result in a variety of risks to our business, including weakened demand for our products, if approved, or our ability to raise additional capital when needed on acceptable terms, if at all. A weak or declining economy could also strain our suppliers, possibly resulting in supply disruption. Any of the foregoing could harm our business and we cannot anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact our business.

Our internal computer systems, or those of our collaborators or other contractors or consultants, may fail or suffer security breaches, which could result in a material disruption of our product development programs.

Our internal computer systems and those of our current and any future collaborators and other contractors or consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. While we have not experienced any such material system failure, accident or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a disruption of our development programs and our business operations, whether due to a loss of our trade secrets or other proprietary information or other similar disruptions. For example, the loss of clinical trial data from completed or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability, our competitive position could be harmed and the further development and commercialization of our product candidates could be delayed.

Risks Related to Government Regulation

The regulatory approval process for our potential product candidates in the United States, EU and other jurisdictions is currently uncertain and will be lengthy, time-consuming and inherently unpredictable and we may experience significant delays in the clinical development and regulatory approval, if any, of our product candidates.

The research, testing, manufacturing, labeling, approval, selling, import, export, marketing and distribution of drug products, including biologics, are subject to extensive regulation by the FDA in the United States and other regulatory authorities. We are not permitted to market any biological product in the United States until we receive a biologics license from the FDA. We have not previously submitted a BLA to the FDA, or similar approval filings to comparable foreign authorities. A BLA must include extensive preclinical and clinical data and supporting information to establish that the product candidate is safe, pure and potent for each desired indication. The BLA must also include significant information regarding the chemistry, manufacturing and

controls for the product, and the manufacturing facilities must complete a successful pre-license inspection. We expect the novel nature of our product candidates to create further challenges in obtaining regulatory approval. For example, the FDA has no experience with commercial development of CRISPR/Cas9-based therapies for human therapeutic use. The FDA may also require a panel of experts, referred to as an Advisory Committee, to deliberate on the adequacy of the safety and efficacy data to support approval. The opinion of the Advisory Committee, although not binding, may have a significant impact on our ability to obtain approval of any product candidates that we develop based on the completed clinical trials. Moreover, while we are not aware of any specific genetic or biomarker diagnostic tests for which regulatory approval would be necessary in order to advance any of our product candidates to clinical trials or potential commercialization, in the future regulatory agencies may require the development and approval of such tests. Accordingly, the regulatory approval pathway for such product candidates may be uncertain, complex, expensive and lengthy, and approval may not be obtained.

In addition, clinical trials can be delayed or terminated for a variety of reasons, including delays or failures related to:

- obtaining regulatory authorization to begin a trial, if applicable;
- the availability of financial resources to begin and complete the planned trials;
- reaching agreement on acceptable terms with prospective 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;
- obtaining approval at each clinical trial site by an independent IRB;
- recruiting suitable patients to participate in a trial in a timely manner;
- having patients complete a trial or return for post-treatment follow-up;
- · clinical trial sites deviating from trial protocol, not complying with GCP requirements or dropping out of a trial;
- addressing any patient safety concerns that arise during the course of a trial;
- addressing any conflicts with new or existing laws or regulations;
- adding new clinical trial sites; or
- manufacturing qualified materials under cGMP regulations for use in clinical trials.

Patient enrollment is a significant factor in the timing of clinical trials and is affected by many factors. Further, a clinical trial may be suspended or terminated by us, the IRBs for the institutions in which such trials are being conducted, the DSMB for such trial or the FDA or other regulatory authorities 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 product candidate, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial. If we experience termination of, or delays in the completion of, any clinical trial of product candidates, the commercial prospects for our product candidates will be harmed, and our ability to generate product revenue will be delayed. In addition, any delays in completing any clinical trials will increase our costs, slow down our product development and approval process and jeopardize our ability to commence product sales and generate revenue.

Obtaining and maintaining regulatory approval of our product candidates in one jurisdiction does not mean that we will be successful in obtaining regulatory approval of product candidates in other jurisdictions.

Obtaining and maintaining regulatory approval of our product candidates in one jurisdiction does not guarantee that we will be able to obtain or maintain regulatory approval in any other jurisdiction, but a failure or delay in obtaining regulatory approval in one jurisdiction may have a negative effect on the regulatory approval approval

process in others. For example, even if the FDA grants marketing approval of a product candidate, comparable regulatory authorities in foreign jurisdictions must also approve the manufacturing, marketing and sale of the product candidate in those countries. Approval procedures vary among jurisdictions and can involve requirements and administrative review periods different from those in the United States, including additional preclinical studies or clinical trials as clinical studies conducted in one jurisdiction may not be accepted by regulatory authorities in other jurisdictions. In many jurisdictions outside the United States, a product candidate must be approved for reimbursement before it can be approved for sale in that jurisdiction. In some cases, the price that we are allowed to charge for our products is also subject to approval.

Obtaining foreign regulatory approvals and compliance with foreign regulatory requirements could result in significant delays, difficulties and costs for us and could delay or prevent the introduction of our products in certain countries. If we fail to comply with the regulatory requirements in international markets or to receive applicable marketing approvals, our target market will be reduced and our ability to realize the full market potential of our product candidates will be harmed.

Even if we receive regulatory approval of any product candidates or therapies, we will be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our product candidates.

If any of our product candidates are approved, they will be subject to ongoing regulatory requirements for manufacturing, labeling, packaging, storage, advertising, promotion, sampling, record-keeping, conduct of post-marketing studies and submission of safety, efficacy and other post-market information, including both federal and state requirements in the United States and requirements of comparable foreign regulatory authorities. In addition, we will be subject to continued compliance with cGMP and GCP requirements for any clinical trials that we conduct post-approval.

Manufacturers and manufacturers' facilities are required to comply with extensive FDA, and comparable foreign regulatory authority requirements, including ensuring that quality control and manufacturing procedures conform to cGMP, and in certain cases, current Good Tissue Practices, or cGTP, regulations. As such, we and our contract manufacturers will be subject to continual review and inspections to assess compliance with cGMP and adherence to commitments made in any BLA, other marketing application, and previous responses to inspection observations. Accordingly, we and others with whom we work must continue to expend time, money, and effort in all areas of regulatory compliance, including manufacturing, production and quality control.

Any regulatory approvals that we receive for our product candidates may be subject to limitations on the approved indicated uses for which the product may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase IV clinical trials and surveillance to monitor the safety and efficacy of the product candidate. The FDA may also require a REMS program as a condition of approval of our product candidates, which could entail requirements for long-term patient follow-up, a medication guide, physician communication plans or additional elements to ensure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. In addition, if the FDA or a comparable foreign regulatory authority approves our product candidates, we will have to comply with requirements including submissions of safety and other post-marketing information and reports and registration.

The FDA may impose consent decrees or withdraw 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 our product candidates, including adverse events of unanticipated severity or frequency, or with our third-party manufacturers or 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 studies to assess new safety risks; or imposition of distribution restrictions or other restrictions under a REMS program. Other potential consequences include, among other things:

• restrictions on the marketing or manufacturing of our products, withdrawal of the product from the market or voluntary or mandatory product recalls;

- fines, warning letters or holds on clinical trials;
- refusal by the FDA to approve pending applications or supplements to approved applications filed by us or suspension or revocation of license approvals;
- product seizure or detention or refusal to permit the import or export of our product candidates; and
- · 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. Products 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. 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 action, either in the United States or abroad. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained and we may not achieve or sustain profitability.

Healthcare cost control initiatives, including healthcare legislative reform measures, may have a material adverse effect on our business and results of operations.

Third-party payors, whether domestic or foreign, or governmental or commercial, are developing increasingly sophisticated methods of controlling healthcare costs. In both the United States and certain foreign jurisdictions, there have been a number of legislative and regulatory changes to the health care system that could impact our ability to sell our products profitably. In particular, there have been and continue to be a number of legislative initiatives at the United States federal and state levels that seek to reduce healthcare costs and improve the quality of healthcare. For example, in March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or collectively the Affordable Care Act, was enacted, which substantially changes the way health care is financed by both governmental and private insurers, and significantly impacts the U.S. pharmaceutical and biotechnology industry. The Affordable Care Act, among other things, subjects biologic products to potential competition by lower-cost biosimilars, addresses 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, increases the minimum Medicaid rebates owed by most manufacturers under the Medicaid Drug Rebate Program, extends the Medicaid Drug Rebate program to utilization of prescriptions of individuals enrolled in Medicaid managed care organizations, subjects manufacturers to new annual fees and taxes for certain branded prescription drugs and biologic agents and provides incentives to programs that increase the federal government's comparative effectiveness research. At this time, the full effect that the Affordable Care Act would have on our business remains unclear.

In addition, 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 2024 unless additional Congressional action is taken. In January 2013, the American Taxpayer Relief Act of 2012, was signed into law, which, among other things, further reduced Medicare payments to several providers, including hospitals and other treatment centers, 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, Medicaid and other healthcare funding, which could have a material adverse effect on our customers and, accordingly, our financial operations.

There have been, and likely will continue to be, legislative and regulatory proposals at the foreign, federal and state levels directed at broadening the availability of healthcare and containing or lowering the cost of healthcare. We cannot predict the initiatives that may be adopted in the future, any of which could limit the amounts that foreign, federal and state governments will pay for healthcare products and services, which could result in reduced demand for our product candidates or additional pricing pressures.

The continuing efforts of governments, insurance companies, managed care organizations and other payors of healthcare services to contain or reduce costs of healthcare and/or impose price controls could harm our business, financial conditions and prospects and may adversely affect:

- the demand for or utilization of our product candidates, if we obtain regulatory approval;
- our ability to set a price that we believe is fair for our products;
- our ability to generate revenue and achieve or maintain profitability;
- the level of taxes, fees and rebates that we are required to pay; and
- the availability of capital.

Any denial in coverage or reduction in reimbursement from Medicare or other government programs may result in a similar denial or reduction in payments from private payors, which may adversely affect our future profitability.

Our employees, independent contractors, clinical investigators, CROs, consultants, commercial partners and vendors may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements, which could have a material adverse effect on our business.

We are exposed to the risk of fraud, misconduct or other illegal activity by our employees, independent contractors, clinical investigators, CROs, consultants, commercial partners and vendors. Misconduct by these parties could include intentional, reckless and/or negligent conduct that fails to: comply with federal and state laws and those of other applicable jurisdictions; provide true, complete and accurate information to the FDA and other similar foreign regulatory bodies; comply with manufacturing standards; comply with federal and state data privacy, security, fraud and abuse and other healthcare laws and regulations in the United States and similar foreign fraudulent misconduct laws; or report financial information or data accurately or to disclose unauthorized activities to us. If we obtain FDA approval of any of our product candidates and begin commercializing those products in the United States, our potential exposure under such laws will increase significantly, and our costs associated with compliance with such laws are also likely to increase. These laws may impact, among other things, our current activities with clinical investigators and research patients, as well as proposed and future sales, marketing and education programs. In particular, the promotion, sales and marketing of healthcare products and services, as well as certain business arrangements in the healthcare industry, are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, including off-label uses of our products, structuring and commission(s), certain customer incentive programs and other business arrangements generally. Activities subject to these laws also involve the improper use of information obtained in the course of clinical trials or creating fraudulent data in our preclinical studies or clinical trials, which could result in regulatory sanctions and cause serious harm to our reputation. It is not always possible to identify and deter misconduct by employees and other third parties, 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 comply with these laws 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, including the imposition of significant fines or other sanctions.

We may be subject, directly or indirectly, to federal and state healthcare fraud and abuse laws, false claims laws, physician payment transparency laws and health information privacy and security laws. If we are unable to comply, or have not fully complied, with such laws, we could face substantial penalties.

If we obtain FDA approval for any of our product candidates and begin commercializing those products in the United States, our operations may be directly, or indirectly through our customers and third-party payors, subject to various federal and state fraud and abuse laws, including, without limitation, the federal Anti-Kickback Statute, the federal False Claims Act, and physician sunshine laws and regulations. These laws may impact, among other things, our proposed sales, marketing, and education programs and our relationships with healthcare providers, physicians and other parties through which we market, sell and distribute our products for which we obtain marketing approval. In addition, we may be subject to patient privacy regulation by the federal government and the states in the United States as well as other jurisdictions. The laws that may affect our ability to operate include:

- the federal Anti-Kickback Statute, which prohibits, among other things, knowingly and willfully soliciting, receiving, offering or paying any
 remuneration (including any kickback, bribe, or rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce, or in return for, either the
 referral of an individual, or the purchase, lease, order or recommendation of any good, facility, item or service, for which payment may be made, in whole
 or in part, under a federal healthcare program, such as the Medicare and Medicaid programs. 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;
- federal civil and criminal false claims laws and civil monetary penalties laws, including the civil False Claims Act, which impose criminal and civil penalties, through civil whistleblower or *qui tam* actions, on individuals or entities for, among other things, knowingly presenting, or causing to be presented to the U.S. federal government, claims for payment or approval that are false or fraudulent or knowingly making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government. In addition, the government may assert that a claim including items and services resulting from a violation of the U.S. federal Anti-Kickback Statute constitutes a false of fraudulent claim for purposes of the False Claims Act;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which imposes criminal and civil liability for knowingly and
 willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses,
 representations, or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of the
 payor (e.g., public or private) and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any
 materially false statements 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 of 2009, and their respective implementing regulations, which impose requirements on certain covered healthcare providers, health plans, and healthcare clearinghouses as well as their respective business associates that perform services for them that involve the use, or disclosure of, individually identifiable health information, relating to the privacy, security and transmission of individually identifiable health information without appropriate authorization;
- the U.S. federal physician payment transparency requirements, sometimes referred to as the "Physician Payments Sunshine Act," created under the Affordable Care Act, and their implementing regulations, which require manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program to report annually to the Centers for Medicare and Medicaid Services, information related to payments or other transfers of value made to physicians, other healthcare providers, and teaching hospitals, as well as ownership and investment interests held by physicians, other healthcare providers, and their immediate family members; and

• the Federal Food, Drug and Cosmetic Act, which prohibits, among other things, the adulteration or misbranding of drugs and medical devices.

Additionally, we are subject to state and foreign equivalents of each of the healthcare laws described above, among others, some of which may be broader in scope and may apply regardless of the payor.

Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbors available, it is possible that some of our business activities could be subject to challenge under one or more of such laws. In addition, recent health care reform legislation has strengthened these laws. For example, the Affordable Care Act, among other things, amends the intent requirement of the federal Anti-Kickback Statute and criminal healthcare fraud statutes. As a result of such amendment, a person or entity no longer needs to have actual knowledge of these statutes or specific intent to violate them in order to have committed a violation. Moreover, the Affordable Care Act provides that the government may assert that a claim including 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.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental and enforcement authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law interpreting applicable fraud and abuse or other healthcare laws and regulations. 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, including the imposition of civil, criminal and administrative penalties, damages, disgorgement, monetary fines, possible exclusion from participation in Medicare, Medicaid and other U.S. federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, and curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations. In addition, the approval and commercialization of any of our product candidates outside the United States will also likely subject us to foreign equivalents of the healthcare laws mentioned above, among other foreign laws.

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 will become 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. Our operations will involve the use of hazardous and flammable materials, including chemicals and biological materials. Our operations also may produce hazardous waste products. We generally anticipate contracting with third parties for the disposal of these materials and wastes. We will not be able to eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from any use by us of 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.

Although we maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us in connection with our storage or disposal of biological, hazardous or radioactive materials.

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

Risks Related to Our Intellectual Property

Third-party claims of intellectual property infringement against us, our licensors or our collaborators may prevent or delay our product discovery and development efforts.

Our commercial success depends in part on our avoiding infringement of the patents and proprietary rights of third parties. There is a substantial amount of litigation, as well as administrative proceedings for challenging patents, including interference, derivation, and reexamination proceedings before the United States Patent and Trademark Office, or USPTO, or oppositions and other comparable proceedings in foreign jurisdictions, involving patents and other intellectual property rights in the biotechnology and pharmaceutical industries, and we expect this to be true for the CRISPR/Cas9 space as well. Recently, due to changes in U.S. law referred to as patent reform, new procedures including *inter partes* review and post-grant review have been implemented. This reform adds uncertainty to the possibility of challenge to our developed or licensed patents in the future.

Numerous U.S. and foreign issued patents and pending patent applications owned by third parties exist in the fields in which we are developing our product candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that our product candidates may give rise to claims of infringement of the patent rights of others. We cannot guarantee that our technology, future product candidates or the use of such product candidates do not infringe third-party patents. It is also possible that we have failed to identify relevant third-party patents or applications.

Third parties may assert that we infringe their patents or that we are otherwise employing their proprietary technology without authorization, and may sue us. These third parties could include the co-owners of patent families that we license and from whom we have not yet obtained consent to practice the intellectual property in countries outside the United States, such as the co-owners of the intellectual property owned by The Regents of the University of California and the University of Vienna, which we refer to collectively as UC/Vienna, and Dr. Emmanuelle Charpentier from whom we do not yet have a license. There may be third-party patents of which we are currently unaware with claims to compositions, formulations, methods of manufacture or methods of use or treatment that cover product candidates we discover and develop. Because patent applications can take many years to issue, there may be currently pending patent applications that may later result in issued patents that our product candidates may infringe. In addition, third parties may obtain patents in the future and claim that use of our technologies or the manufacture, use or sale of our product candidates infringes upon these patents. If any such third-party patents were held by a court of competent jurisdiction to cover our technologies or product candidates, the holders of any such patents may be able to block our ability to commercialize the applicable product candidate unless we obtain a license under the applicable patents, or until such patents expire or are finally determined to be held invalid or unenforceable. Such a license may not be available on commercially reasonable terms or at all. If we are unable to obtain a necessary license to a third-party patent on commercially reasonable terms, our ability to commercialize our product candidates may be impaired or delayed, which could in turn significantly harm our business.

Third parties asserting their patent rights against us may seek and obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize our product candidates. For example, the Broad Institute, Inc., or the Broad Institute, the Massachusetts Institute of Technology, or MIT, and the President and Fellows of Harvard College, or Harvard, own a patent portfolio, collectively, the Broad Institute patent family, that includes issued patents in the U.S. and Europe, that purports to cover certain aspects of the CRISPR/Cas9 gene editing platform for use on gene sequences from eukaryotic cells, including human cells. An interference proceeding has been declared between the Broad Institute patent family and the UC/Vienna and Dr. Charpentier patent family we license through Caribou Biosciences Inc., or Caribou, which means that the USPTO will determine whether the contested inventions belong either to UC/Vienna and Dr. Charpentier or to the Broad Institute. While the UC/Vienna/Charpentier group has been named the senior party in the interference, meaning that they are presumed to be the earlier inventor, it is possible that the Broad Institute patent family will be upheld by the USPTO and could be asserted against us during development or commercialization of one of our CRISPR/Cas9-based products. Defense of these claims, regardless of their merit, would involve substantial litigation expense, would be a substantial diversion of management and other employee resources from our

business and may impact our reputation. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, obtain one or more licenses from third parties, pay royalties or redesign our infringing products, which may be impossible or require substantial time and monetary expenditure. In that event, we would be unable to further develop and commercialize our product candidates, which could harm our business significantly.

If we are found to infringe a third party's intellectual property rights, we could be required to obtain a license from such third party to continue developing and marketing our products and technology. However, 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. We could be forced, including by court order, to cease commercializing the infringing technology or product. 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, force us to redesign our infringing products or force us to cease some or all of our business operations, any of which could materially harm our business and, with respect to the matter involving the Broad Institute patent family mentioned above, could prevent us from further developing and commercializing our proposed future product candidates thereby causing us significant harm. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business.

Under our license agreement with Caribou, we sublicense a patent family from The Regents of the University of California and the University of Vienna that is co-owned by Dr. Emmanuel Charpentier. The United States patent applications in this patent family are subject to interference proceedings with the Broad Institute patent family. The outcome of these proceedings may affect our ability to obtain issued patents and to utilize the intellectual property sublicensed under our license agreement with Caribou.

The Broad Institute patent family includes issued patents in the U.S. and Europe that purport to cover certain aspects of the CRISPR/Cas9 gene editing platform for use on gene sequences from eukaryotic cells, including human cells. On January 11, 2016, the Patent Trial and Appeal Board of the USPTO, or PTAB, declared an interference proceeding between the Broad Institute patent family and the UC/Vienna and Dr. Charpentier patent family to determine, based on priority of invention, whether the contested inventions belong either to UC/Vienna and Dr. Charpentier or to the Broad Institute. The UC/Vienna/Charpentier group has been named the senior party in the interference and is therefore presumed to be the earlier inventor. As the junior party in the proceeding, the Broad Institute bears the burden of proof to support its claim that it was the first to invent the claimed patents. If the Broad Institute is able to ultimately prevail in the proceedings, its patents could be asserted against us during development or commercialization of one of our CRISPR/Cas9-based products. Defense of these claims, regardless of their merit, would involve substantial litigation expense, would be a substantial diversion of management and other employee resources from our business and may impact our reputation. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, obtain one or more licenses from third parties, pay royalties or redesign our infringing products, which may be impossible or require substantial time and monetary expenditure. In that event, we could be unable to further develop and commercialize our product candidates, which could harm our business significantly.

We may be subject to claims challenging the inventorship of our patents and other intellectual property.

We may in the future be subject to claims that former employees, collaborators or other third parties have an interest in our patents or other intellectual property as an inventor or co-inventor or other claims challenging the inventorship of our patents or ownership of our intellectual property (including patents and intellectual property that we in-license). For example, the University of California, Berkeley, patent family that is covered by our license agreement with Caribou is co-owned by UC/Vienna and Dr. Charpentier, and our sublicense rights are derived from the first two co-owners and not from Dr. Charpentier. Therefore, our rights to these patents are not exclusive and third parties, including competitors, may have access to intellectual property which is important to

our business. In addition, co-owners from whom we do not yet have a license may raise claims surrounding inventorship or ownership of patents that ultimately issue from this patent family, potentially resulting in issued patents to which we would not have rights under our existing license. Further, in jurisdictions outside the United States, a license may not be enforceable unless all the owners of the intellectual property agree or consent to the license. Accordingly, the owner(s) of Dr. Charpentier's interests in the intellectual property co-owned by UC/Vienna and Dr. Charpentier that we license through Caribou could seek monetary or equitable relief requiring us to pay them compensation for, or refrain from, exploiting these patents. In addition, we may have inventorship disputes arise from conflicting obligations of consultants or others who are involved in developing our product candidates. Litigation may be necessary to defend against these and other claims challenging inventorship. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, valuable intellectual property. Such an outcome could have a material adverse effect on our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

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.

We are dependent on patents, know-how and proprietary technology, both our own and licensed from others, including Caribou and Novartis. Any termination of these licenses, or a finding that they lack 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 licensors, our licensors and their licensors, or us and third parties that co-own intellectual property with our licensors or their 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.

We depend, in part, on our licensors to file, prosecute, maintain, defend and enforce patents and patent applications that are material to our business.

Patents relating to our product candidates are controlled by certain of our licensors. Each of our licensors or their licensors generally has rights to file, prosecute, maintain and defend the patents we have licensed from such licensor. If these licensors or any future licensees and in some cases, co-owners from which we do not yet have licenses, having rights to file, prosecute, maintain, and defend our patent rights fail to conduct these activities for patents or patent applications covering any of our product candidates, our ability to develop and commercialize those product candidates may be adversely affected and we may not be able to prevent competitors from making, using or selling competing products. We cannot be certain that such 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 or other intellectual property rights. Pursuant to the terms of the license agreements with our licensors, the licensors may have the right to control enforcement of our licensed patents or defense of any claims asserting the invalidity of these patents and, even if we are permitted to pursue such enforcement or defense, we cannot ensure the cooperation of our licensors or, in some cases, other necessary parties, such as the co-owners of the intellectual property from which we have not yet obtained a license. We cannot be certain that our licensors, and in some cases, their co-owners, will allocate sufficient resources or prioritize their or our enforcement of such patents or defense of such claims to protect our interests in the licensed patents. Even if we are not a party to these legal actions, an adverse outcome could harm our business because it might prevent us from continuing to license intellectual property that we may need to operate our business. In addition, even when we have the right to control patent prosecution of licensed patents, we may still be adversely affected or prejudiced by actions or inactions of

We may not be successful in obtaining or maintaining necessary rights to product components and processes for our product development pipeline.

The growth of our business will likely depend in part on our ability to acquire or in-license additional proprietary rights. For example, our programs may involve additional product candidates or delivery systems that may require the use of additional proprietary rights held by third parties. Our ultimate product candidates may also require specific formulations to work effectively and efficiently. These formulations may be covered by intellectual property rights held by others. We may be unable to acquire or in-license any relevant third-party intellectual property rights that we identify as necessary or important to our business operations.

Additionally, we sometimes collaborate with academic institutions to accelerate our preclinical research or development under written agreements with these institutions. Typically, these institutions provide us with an option to negotiate a license to any of the institution's rights in technology resulting from the collaboration. Regardless of such option, we may be unable to negotiate a license within the specified timeframe or under terms that are acceptable to us. If we are unable to do so, the institution may offer the intellectual property rights to other parties, potentially blocking our ability to pursue our program. If we are unable to successfully obtain rights to required third-party intellectual property or to maintain the existing intellectual property rights we have, we may have to abandon development of such program and our business and financial condition could suffer.

The licensing and acquisition of third-party intellectual property rights is a competitive practice and companies that may be more established, or have greater resources than we do, may also be pursuing strategies to license or acquire third-party intellectual property rights that we may consider necessary or attractive in order to commercialize our product candidates. More established companies may have a competitive advantage over us due to their larger size and cash resources or greater clinical development and commercialization capabilities. There can be no assurance that we will be able to successfully complete such negotiations and ultimately acquire the rights to the intellectual property surrounding the additional product candidates that we may seek to acquire.

We could be unsuccessful in obtaining or maintaining adequate patent protection for one or more of our products or product candidates.

We anticipate that we will file additional patent applications both in the United States and in other countries, as appropriate. However, we cannot predict:

- if and when any patents will issue;
- the degree and range of protection any issued patents will afford us against competitors, including whether third parties will find ways to invalidate or otherwise circumvent our patents;
- whether others will apply for or obtain patents claiming aspects similar to those covered by our patents and patent applications; or
- whether we will need to initiate litigation or administrative proceedings to defend our patent rights, which may be costly whether we win or lose.

Composition of matter patents for biological and pharmaceutical products are generally considered to be the strongest form of intellectual property protection for those types of products, as such patents provide protection without regard to any method of use. We cannot be certain, however, that any claims in our pending or future patent applications covering the composition of matter of our product candidates will be considered patentable by the USPTO or by patent offices in foreign countries, or that the claims in any of our ultimately issued patents will be considered valid and enforceable by courts in the United States or foreign countries. Method of use patents protect the use of a product for the specified method. This type of patent does not prevent a competitor from making and marketing a product that is identical to our product for an indication that is outside the scope of the patented method. Moreover, even if competitors do not actively promote their product for our targeted indications, physicians may prescribe these products "off-label" for those uses that are covered by our method of use patents. Although off-label prescriptions may infringe or contribute to the infringement of method of use patents, the practice is common and such infringement is difficult to prevent or prosecute.

The strength of patents in the biotechnology and pharmaceutical field can be uncertain, and evaluating the scope of such patents involves complex legal and scientific analyses. The patent applications that we own or in-license may fail to result in issued patents with claims that cover any product candidates or uses thereof in the United States or in other foreign countries. Even if the patents do successfully issue, third parties may challenge the validity, enforceability, or scope thereof, which may result in such patents being narrowed, invalidated, or held unenforceable. Furthermore, even if they are unchallenged, our patents and patent applications may not adequately protect our intellectual property or prevent others from designing their products to avoid being covered by our claims. If the breadth or strength of protection provided by the patent applications we hold is threatened, this could dissuade companies from collaborating with us to develop, and could threaten our ability to commercialize, product candidates. Further, if we encounter delays in our clinical trials, the period of time during which we could market product candidates under patent protection would be reduced. Because patent applications in the United States and most other countries are confidential for a period of time after filing, we cannot be certain that we were the first to file any patent application related to our product candidates. Furthermore, for U.S. applications in which all claims are entitled to a priority date before March 16, 2013, an interference proceeding can be provoked by a third party or instituted by the USPTO to determine who was the first to invent any of the subject matter covered by the patent law in view of the passage of the America Invents Act, which brought into effect significant changes to the U.S. patent laws, including new procedures for challenging pending patent applications and issued patents.

The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our owned and licensed patents may be challenged in the courts or patent offices in the United States and abroad. Such challenges may result in loss of exclusivity or freedom to operate or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, 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. 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 owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

The patent prosecution process is expensive and time-consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost, in a timely manner, or in all jurisdictions. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. Moreover, in some circumstances, we do not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the patents, covering technology that we license from third parties. We may also require the cooperation of our licensors or other necessary parties, such as the co-owners of the intellectual property from which we have not yet obtained a license, in order to enforce the licensed patent rights, and such cooperation may not be provided. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business.

The laws of foreign countries may not protect our rights to the same extent as the laws of the United States and we may fail to seek or obtain patent protection in all major markets. For example, European patent law restricts the patentability of methods of treatment of the human body more than United States law does. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, we will be unable to know with certainty whether we were the first to make any inventions claimed in any patents or patent applications, or that we were the first to file for patent protection of such inventions, nor can we know whether those from whom we license patents were the first to make the inventions claimed or were the first to file.

As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights are highly uncertain. Our pending and future patent applications or the patent applications that we obtain rights to through in-licensing arrangements may not result in patents being issued which protect our technology or future product candidates, in whole or in part, or which effectively prevent others from commercializing competitive technologies and products. 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.

Confidentiality agreements with employees and third parties may not prevent unauthorized disclosure of trade secrets and other proprietary information.

In addition to the protection afforded by patents, we seek to rely on trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable or that we elect not to patent. We also utilize processes for which patents are difficult to enforce. In addition, other elements of our product discovery and development processes involve proprietary know-how, information, or technology that is not covered by patents. Trade secrets, however, may be difficult to protect. We seek to protect our proprietary processes, in part, by entering into confidentiality agreements with our employees, consultants, outside scientific advisors, contractors, and collaborators. Although we use reasonable efforts to protect our trade secrets, our employees, consultants, outside scientific advisors, contractors, and collaborators might intentionally or inadvertently disclose our trade secret information to competitors. In addition, competitors may otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. Furthermore, the laws of some foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws of the United States. As a result, we may encounter significant problems in protecting and defending our intellectual property both in the United States and abroad. If we are unable to prevent unauthorized material disclosure of our intellectual property to third parties, or misappropriation of our intellectual property by third parties, we may not be able to establish or maintain a competitive advantage in our market, which could materially adversely affect our business, operating results, and financial condition.

We have limited foreign intellectual property rights and may not be able to protect our intellectual property rights throughout the world.

We have limited intellectual property rights outside the United States. Filing, prosecuting, maintaining and defending patents on 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 have a different scope and strength than do those in the United States. In addition, the laws of some foreign countries, such as China, Brazil, Russia, India, and South Africa, do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using 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 their own products and further, may export otherwise infringing products to territories where we have patent protection, but enforcement rights are not as strong as those in the United States. These products may compete with our products and our patents or other intellectual property rights may not be effective or adequate to prevent them from competing. Further, in jurisdictions outside the United States, a license may not be enforceable unless all the owners of the intellectual property agree or consent to the license.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, such as China, Brazil, Russia, India, and South Africa, do not favor the enforcement of patents, trade secrets and other intellectual property, particularly those relating to biopharmaceutical products, which could make it difficult in those jurisdictions for us to stop the infringement or misappropriation of our patents or other intellectual property rights, or the marketing of competing products in violation of our proprietary rights. Proceedings to enforce our patent and other intellectual property rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business. Furthermore such proceedings could put our patents at risk of being invalidated, held unenforceable, or interpreted narrowly, could put our patent applications at risk of not issuing, and could provoke third parties to assert claims of infringement or misappropriation 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. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

We may be involved in lawsuits to protect or enforce our patents or the patents of our licensors, which could be expensive, time-consuming, and unsuccessful.

Competitors may infringe our patents or the patents of our licensors. To cease such infringement or unauthorized use, we may be required to file patent infringement claims, which can be expensive and time-consuming. In addition, in an infringement proceeding or a declaratory judgment action against us, a court may decide that one or more of our patents is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation or defense proceeding could put one or more of our patents at risk of being invalidated, held unenforceable or interpreted narrowly and could put our patent applications at risk of not issuing. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business.

Interference or derivation proceedings provoked by third parties or brought by the USPTO may be necessary to determine the priority of inventions with respect to, or the correct inventorship of, our patents or patent applications or those of our licensors. An unfavorable outcome could result in a loss of our current patent rights and could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms. Litigation, interference or derivation proceedings may result in a decision adverse to our interests and, even if we are successful, may result in substantial costs and distract our management and other employees.

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 this type of litigation. In addition, there could 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 have a substantial adverse effect on the price of our common stock.

Issued patents covering our product candidates could be found invalid or unenforceable if challenged in court or before the USPTO or comparable foreign authority.

If we or one of our licensing partners initiate legal proceedings against a third party to enforce a patent covering one of our product candidates, the defendant could counterclaim that the patent covering our product candidate is invalid or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace, and there are numerous grounds upon which a third party can assert invalidity or unenforceability of a patent. Third parties may also raise similar claims before administrative bodies in the United States or other jurisdictions, even outside the context of litigation. Such mechanisms include re-examination, *inter partes* review, post-grant review and equivalent proceedings in foreign jurisdictions, such as opposition or derivation proceedings. Such proceedings could result in revocation or amendment to our patents in such a way that they no longer cover and protect our product candidates. The outcome following legal assertions of invalidity and unenforceability is unpredictable. With respect to the validity of our patents, for example, we cannot be certain that there is no invalidating prior art of which we, our patent counsel, and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity, unpatentability and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our product candidates. Such a loss of patent protection could have a material adverse impact on our business.

We may be subject to claims that our employees, consultants, or independent contractors have wrongfully used or disclosed confidential information of third parties.

We have received confidential and proprietary information from third parties. In addition, we employ individuals who were previously employed at other biotechnology or pharmaceutical companies as well as academic research institutions. We may be subject to claims that we or our employees, consultants, or independent contractors have inadvertently or otherwise used or disclosed confidential information of these third parties or our employees' former employers. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial cost and be a distraction to our management and employees.

Obtaining and maintaining our 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 on any issued patent are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of the patent. The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. Although an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance 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. Noncompliance events that could result in abandonment or lapse of a patent or patent application include failure to respond to official actions within prescribed time limits, non-payment of fees, and failure to properly legalize and submit formal documents. In any such event, our competitors might be able to enter the market, which would have a material adverse effect on our business.

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 Caribou and Novartis 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 these license agreements, we will 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 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. We will need to outsource and rely on third parties for many aspects of the clinical development, sales and marketing of our products covered under our license agreements. Delay or failure by these third parties could adversely affect the continuation of our license agreements with their third-party licensors.

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

If our trademarks and trade names are not adequately protected, than we may not be able to build name recognition in our markets of interest and our business may be adversely affected. Our unregistered trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. We may not be able to protect our rights to these trademarks and trade names, which we need to build name recognition among potential partners or customers in our markets of interest. At times, competitors may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks or trademarks that incorporate variations of our unregistered trademarks or trade names. Over the long term, if we are unable to successfully register our trademarks and trade names and establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected. Our efforts to enforce or protect our proprietary rights related to trademarks, trade secrets, domain names, copyrights or other intellectual property may be ineffective and could result in substantial costs and diversion of resources and could adversely impact our financial condition or results of operations.

Risks Related to Our Common Stock and this Offering

We expect that our stock price will fluctuate significantly and investors may not be able to resell their shares at or above the initial public offering price.

The trading price of our common stock following this offering may be highly volatile and could be subject to wide fluctuations in response to various factors, many of which are beyond our control. The stock market in general and the market for biopharmaceutical 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. The market price for our common stock may be influenced by many factors, including those discussed in this "Risk Factors" section and elsewhere in this prospectus and the following:

- the results of our efforts to discover, develop, acquire or in-license product candidates;
- · success of competitive products or technologies;
- results or delays in clinical trials or changes in the development status of our future product candidates;
- any delay in our regulatory filings for any product candidates and any adverse development or perceived adverse development with respect to the applicable regulatory authority's review of such filings;
- regulatory or legal developments in the United States and other countries, especially changes in laws or regulations applicable to our products, including clinical trial requirements for approvals;

- our inability to obtain or delays in obtaining adequate product supply for any approved product or inability to do so at acceptable prices;
- any failure to commercialize any product candidates or if the size and growth of the markets we intend to target fail to meet expectations;
- additions or departures of key scientific or management personnel;
- unanticipated serious safety concerns related to CRISPR/Cas9-based therapy or the use of our and competitors' product candidates;
- introductions or announcements of new products offered by us or significant acquisitions, strategic partnerships, joint ventures or capital commitments by
 us, our collaborators or our competitors and the timing of such introductions or announcements;
- our ability to effectively manage our growth;
- our ability to successfully treat additional types of genetic-based diseases;
- changes in the structure of healthcare payment systems;
- actual or anticipated changes in estimates to or projections of financial results, development timelines or recommendations by securities analysts;
- publication of research reports about us or our industry, or gene editing in particular, or positive or negative recommendations or withdrawal of research coverage by securities analysts;
- · market conditions in the pharmaceutical and biotechnology sectors or the economy generally;
- our ability or inability to raise additional capital through the issuance of equity or debt or collaboration arrangements and the terms on which we raise it;
- trading volume of our common stock;
- disputes or other developments relating to proprietary rights, including patents, litigation or interference matters and our ability to obtain patent protection for our technologies;
- significant lawsuits, including patent or stockholder litigation; and
- general economic, industry and market conditions.

The stock market in general, and market prices for the securities of biopharmaceutical companies like ours in particular, have from time to time experienced volatility that often has been unrelated to the operating performance of the underlying companies. These broad market and industry fluctuations may adversely affect the market price of our common stock, regardless of our operating performance. In several recent situations when the market price of a stock has been volatile, holders of that stock have instituted securities class action litigation against the company that issued the stock. If any of our stockholders were to bring a lawsuit against us, the defense and disposition of the lawsuit could be costly and divert the time and attention of our management and harm our operating results.

An active trading market for our common stock may not develop.

Prior to this offering, there has been no public market for our common stock and an active trading market for our shares may never develop or be sustained following this offering. The initial price to the public for our common stock was determined through negotiations with the underwriters, and the negotiated price may not be indicative of the market price of the common stock after the offering. The lack of an active market may impair investors' ability to sell their shares at the time they wish to sell them or at a price that they consider reasonable, may reduce the market value of their shares and may impair our ability to raise capital.

If securities or industry analysts do not publish research reports about our business, or if they issue an adverse opinion about our business, our stock 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.

Future sales of our common stock in the public market could cause our stock price to fall.

Our stock price could decline as a result of sales of a large number of shares of our common stock after this offering or the perception that these sales could occur. These sales, or the possibility that these sales may occur, also might make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate.

Upon completion of this offering, shares of our common stock will be outstanding (or shares of common stock will be outstanding assuming exercise in full of the underwriters' option to purchase additional shares), based on our shares outstanding as of , 2016, including shares of restricted stock that have been awarded to certain of our employees and consultants. All shares of common stock expected to be sold in this offering will be freely tradable without restriction or further registration under the Securities Act of 1933, as amended, or Securities Act, unless held by our "affiliates," as that term is defined in Rule 144 under the Securities Act. The resale of the remaining shares, or % of our outstanding shares after this offering, is currently prohibited or otherwise restricted as a result of securities law provisions, market standoff agreements entered into by our stockholders with us or lock-up agreements entered into by our stockholders with the underwriters. However, subject to applicable securities law restrictions and excluding shares of restricted stock that will remain unvested, these shares will be able to be sold in the public market beginning 180 days after the date of this prospectus. Shares of , 2016 will become available for sale immediately upon the vesting of such shares, as unvested restricted stock that were issued and outstanding as of applicable, and the expiration of any applicable market stand-off or lock-up agreements. Shares issued upon the exercise of stock options pursuant to future awards that may be granted under our equity incentive plans or pursuant to future awards granted under those plans will become available for sale in the public market to the extent permitted by the provisions of applicable vesting schedules, any applicable market stand-off and lock-up agreements, and Rule 144 and Rule 701 under the Securities Act. For more information see the section entitled "Shares Eligible for Future Sale" appearing elsewhere in this prospectus.

Upon completion of this offering, the holders of approximately shares, or %, of our common stock, will have rights, subject to some conditions, to require us to file registration statements covering the sale of their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. We also intend to register the offer and sale of all shares of common stock that we may issue under our equity compensation plans. Once we register the offer and sale of shares for the holders of registration rights and shares to be issued under our equity incentive plans, they can be freely sold in the public market upon issuance, subject to the lock-up agreements described in the section entitled "Underwriting" appearing elsewhere in this prospectus.

In addition, in the future, we may issue additional shares of common stock or other equity or debt securities convertible into common stock in connection with a financing, acquisition, litigation settlement, employee arrangements or otherwise. Any such issuance could result in substantial dilution to our existing stockholders and could cause our stock price to decline.

Our principal stockholders and management own a significant percentage of our stock and, if they choose to act together, will be able to control or exercise significant influence over matters subject to stockholder approval.

Our executive officers, directors and principal stockholders, together with their respective affiliates, beneficially owned approximately 83.2% of our capital stock as of February 29, 2016. Upon completion of this offering, that same group will beneficially own % of our capital stock, of which % will be beneficially owned by our executive officers (assuming no exercise of the underwriters' option to purchase additional shares). Accordingly, after this offering, our executive officers, directors and principal stockholders, if they choose to act together, will be able to determine the composition of the board of directors, retain the voting power to approve all matters requiring stockholder approval, including mergers and other business combinations, and continue to have significant influence over our operations. This concentration of ownership could have the effect of delaying or preventing a change in our control or otherwise discouraging a potential acquirer from attempting to obtain control of us that you may believe are in your best interests as one of our stockholders. This in turn could have a material adverse effect on our stock price and may prevent attempts by our stockholders to replace or remove the board of directors or management.

If you purchase shares of common stock in this offering, you will suffer immediate dilution 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. To the extent shares subsequently are issued under outstanding options or warrants, you will incur further dilution. Based on the initial public offering price of \$ per share, the midpoint of the price range set forth on the cover page of this prospectus, you will experience immediate dilution of \$ per share, representing the difference between our pro forma as adjusted net tangible book value per share, which gives effect to this offering, and the initial public offering price. In addition, purchasers of common stock in this offering will have contributed approximately % of the aggregate price paid by all purchasers of our stock but will own only approximately % of our common stock outstanding after this offering.

Our management team has broad discretion to use the net proceeds from this offering and its investment of these proceeds may not yield a favorable return. They may invest the proceeds of this offering in ways with which investors disagree.

We expect to use the net proceeds from this offering to advance the research and development of our sentinel indications, to progress additional therapeutic candidates and for working capital and other general corporate purposes. We may also use a portion of the net proceeds to acquire, license and invest in complementary products, technologies or businesses; however, we currently have no agreements or commitments to complete any such transaction. However, within the scope of our plan, and in light of the various risks to our business that are set forth in this section, our management will have broad discretion over the use of proceeds from this offering, and we could spend the proceeds from this offering in ways our stockholders may not agree with or that do not yield a favorable return, if at all. If we do not invest or apply the proceeds of this offering in ways that improve our operating results, we may fail to achieve expected financial results, which could cause our stock price to decline.

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of us difficult, limit attempts by our stockholders to replace or remove our current management and adversely affect our stock price.

Provisions of our certificate of incorporation and bylaws to be effective upon consummation of this offering may delay or discourage transactions involving an actual or potential change in our control or change in our management, including transactions in which stockholders might otherwise receive a premium for their shares, or transactions that our stockholders might otherwise deem to be in their best interests. Therefore, these provisions could adversely affect the price of our stock. Among other things, the certificate of incorporation and bylaws will:

- permit the board of directors to issue up to shares of preferred stock, with any rights, preferences and privileges as they may designate;
- provide that the authorized number of directors may be changed only by resolution of the board of directors;
- provide that all vacancies, including newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum;
- divide the board of directors into three classes;
- provide that a director may only be removed from the board of directors by the stockholders for cause;
- require that any action to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders, and may not be taken by written consent;
- provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of
 stockholders must provide notice in writing in a timely manner, and meet specific requirements as to the form and content of a stockholder's notice;
- prevent cumulative voting rights (therefore allowing the holders of a plurality of the shares of common stock entitled to vote in any election of directors to elect all of the directors standing for election, if they should so choose);
- require that, to the fullest extent permitted by law, a stockholder reimburse us for all fees, costs and expenses incurred by us in connection with a proceeding initiated by such stockholder in which such stockholder does not obtain a judgment on the merits that substantially achieves the full remedy sought;
- provide that special meetings of our stockholders may be called only by the chairman of the board, our chief executive officer (or president, in the absence of a chief executive officer) or by the board of directors; and
- provide that stockholders will be permitted to amend the bylaws only upon receiving at least two-thirds of the total votes entitled to be cast by holders of
 all outstanding shares then entitled to vote generally in the election of directors, voting together as a single class.

In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which generally prohibits a Delaware corporation from engaging in any of a broad range of business combinations with any "interested" stockholder for a period of three years following the date on which the stockholder became an "interested" stockholder.

Our certificate of incorporation will provide that the Court of Chancery of the State of Delaware will be the exclusive forum for substantially all disputes 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 or employees.

Our certificate of incorporation will provide that the Court of Chancery of the State of Delaware is the exclusive forum for any derivative action or proceeding brought on our behalf, any action asserting a breach of

fiduciary duty, any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our certificate of incorporation or our bylaws, any action to interpret, apply, enforce, or determine the validity of our certificate of incorporation or bylaws, or any action asserting a claim against us that is governed by the internal affairs doctrine. The choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and other employees. Alternatively, if a court were to find the choice of forum provision contained in our 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 and financial condition.

We will incur increased costs as a result of operating as a public company.

As a public 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.

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 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 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 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, 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.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the sections entitled "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business," contains express or implied forward-looking statements that are based on our management's belief and assumptions and on information currently available to our management. Although we believe that the expectations reflected in these forward-looking statements are reasonable, these statements relate to future events or our future operational or financial performance, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. Forward-looking statements in this prospectus include, but are not limited to, statements about:

- the initiation, timing, progress and results of our research and development programs and future preclinical and clinical studies;
- our ability to apply a risk-mitigated strategy to efficiently discover and develop product candidates, including by applying learnings from one program to
 other programs;
- our ability to create a pipeline of product candidates;
- · our ability to advance any product candidates into, and successfully complete, clinical studies;
- our ability to advance our therapeutic delivery capabilities;
- the issuance of regulatory guidance regarding preclinical and clinical studies for gene editing products;
- the timing or likelihood of regulatory filings and approvals;
- the commercialization of our product candidates, if approved;
- the pricing and reimbursement of our product candidates, if approved;
- the implementation of our business model, strategic plans for our business, product candidates and technology;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates and technology;
- · estimates of our expenses, future revenues, capital requirements and our needs for additional financing;
- · the potential benefits of strategic collaboration agreements and our ability to enter into strategic arrangements;
- our ability to maintain and establish collaborations or obtain additional grant funding;
- our financial performance;
- · developments relating to our competitors and our industry; and
- other risks and uncertainties, including those listed under the caption "Risk Factors."

In some cases, forward-looking statements can be identified by terminology such as "may," "should," "expects," "intends," "plans," "anticipates," "believes," "estimates," "predicts," "potential," "continue" or the negative of these terms or other comparable terminology. These statements are only predictions. You should not place undue reliance on forward-looking statements because they involve known and unknown risks, uncertainties and other factors, which are, in some cases, beyond our control and which could materially affect results. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under the section entitled "Risk Factors" and elsewhere in this prospectus. If one or more of these risks or uncertainties occur, or if our underlying assumptions prove to be incorrect, actual events or results may vary significantly from those implied or projected by the forward-looking statements. No forward-looking statement is a guarantee of future performance. You should read this prospectus and the documents that we

reference in this prospectus and have filed with the Securities and Exchange Commission 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 any future results expressed or implied by these forward-looking statements.

The forward-looking statements in this prospectus represent our views as of the date of this prospectus. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we have no current intention of doing so except to the extent required by applicable law. You should therefore not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this prospectus.

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 our net proceeds from the sale of shares of our common stock in this offering will be approximately \$ million, or \$ million if the underwriters exercise in full their option to purchase additional shares, assuming an initial public offering price of \$ per share, 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.

A \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share, the midpoint of the price range set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. A 1.0 million share increase (decrease) in 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 and estimated offering expenses (decrease) our net proceeds from this offering by \$ million, assuming no change in the assumed initial public offering price per share and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

We currently intend to use the net proceeds from this offering as follows:

- \$ million to advance the research and development of our product candidates for our sentinel indications through to the submission of at least one IND;
- \$ million to progress additional *in vivo* and *ex vivo* pipeline product candidates;
- \$ million to further develop our delivery technologies and CRISPR/Cas9 gene editing platform; and
- the remainder for working capital and other general corporate purposes.

This expected use of the net proceeds from this offering represents our intentions based upon our current plans and business conditions. For example, we may use a portion of the net proceeds for the acquisition of businesses or technologies to continue to build our therapeutic delivery, research and development capabilities and our intellectual property position, although we currently have no agreements, commitments or understandings with respect to any such transaction. As of the date of this prospectus, we cannot predict with certainty all of the particular uses for the net proceeds to be received upon the completion of this offering or the amounts that we will actually spend on the uses set forth above. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our research and development, the status of and results from non-clinical studies or clinical trials we may commence in the future, as well as any collaborations that we may enter into with third parties for our product candidates or strategic opportunities that become available to us, and any unforeseen cash needs. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering.

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

DIVIDEND POLICY

We have never declared or paid cash dividends on our capital stock. We intend to retain all available funds and any future earnings to fund the growth and development of our business. We do not intend to pay cash dividends to our stockholders in the foreseeable future.

REORGANIZATION

On August 20, 2015, we completed a series of transactions pursuant to which Intellia Therapeutics, LLC, our former sole stockholder and holding company parent, merged with and into us, and we continued to exist as the surviving corporation. Throughout this prospectus, we refer to these transactions and the related transactions enumerated below collectively as the "Reorganization." To consummate the Reorganization, we filed a certificate of merger with the Secretary of State of the State of Delaware. In connection with the Reorganization:

- holders of Intellia Therapeutics, LLC's outstanding Class A-2 preferred units received one share of our Series A-2 preferred stock for each Class A-2 preferred unit held immediately prior to the Reorganization, with an aggregate of 3,999,999 shares of our Series A-2 preferred stock issued in the Reorganization;
- holders of Intellia Therapeutics, LLC's outstanding Class A-1 preferred units received one share of our Series A-1 preferred stock for each Class A-1 preferred unit held immediately prior to the Reorganization, with an aggregate of 8,571,429 shares of our Series A-1 preferred stock issued in the Reorganization;
- holders of Intellia Therapeutics, LLC's outstanding Junior preferred units received one share of our Junior preferred stock for each Junior Preferred Unit held immediately prior to the Reorganization, with an aggregate of 8,110,599 shares of our Junior preferred stock issued in the Reorganization;
- holders of Intellia Therapeutics, LLC's outstanding common units received one share of our founder stock for each common unit held immediately prior to the Reorganization, with an aggregate of 2,298,000 shares of our founder stock issued in the Reorganization; and
- holders of Intellia Therapeutics, LLC's outstanding incentive units received shares of our restricted common stock in an amount equal in value to the value of such incentive units as determined by the applicable provisions of the Intellia Therapeutics, LLC operating agreement in effect immediately prior to the Reorganization, with an aggregate of 4,349,919 shares of our restricted common stock issued in the Reorganization.

Our Series A-2 preferred stock, Series A-1 preferred stock, Junior preferred stock and founder stock are designated as preferred stock under our amended and restated certificate of incorporation. All outstanding shares of our preferred stock convert to shares of common stock on a one-for-1.0992035 basis.

In connection with the Reorganization, by operation of law, we acquired all assets of Intellia Therapeutics, LLC and assumed all of its liabilities and obligations. The purpose of the Reorganization was to reorganize our corporate structure so that our company would continue as a corporation and so that our existing investors would own our capital stock rather than equity interests in a limited liability company. For the convenience of the reader, except as context otherwise requires, all information included in this prospectus is presented giving effect to the Reorganization.

CAPITALIZATION

The following table sets forth our cash and cash equivalents and our capitalization as of December 31, 2015:

- on an actual basis;
- on a pro forma basis to give effect to (i) the conversion of all outstanding shares of our preferred stock into an aggregate of 39,919,350 shares of common stock immediately prior to the completion of this offering and (ii) 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 sale in this offering of price of \$ 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 below is illustrative only, and our capitalization following the completion of this offering will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing.

The following table should be read together with "Management's Discussion and Analysis of Financial Condition and Results of Operations," "Description of Capital Stock," and the consolidated financial statements and related notes appearing elsewhere in this prospectus.

	As of December 31, 2015			
	Actual (in thousa	Pro Forma nds, except share and p	Pro Forma As Adjusted	
Cash and cash equivalents	\$ 75,816	\$ 75,816	\$	
Convertible preferred stock (Series B, Series A-2, Series A-1, Junior and Founder), \$0.0001 par value; 36,500,000 shares authorized, 36,316,628 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	\$ 88,557	\$	\$ —	
Stockholders' (deficit) equity:				
Preferred stock, \$0.0001 par value; no shares authorized, issued or outstanding, actual; shares authorized, no shares issued or outstanding, pro forma and pro forma as adjusted	_	_		
Common stock, \$0.0001 par value; 50,000,000 shares authorized, 4,349,919 shares issued and outstanding, actual; shares authorized, 44,269,269 shares issued and outstanding, pro forma; shares authorized, shares issued and outstanding, pro forma as		4		
adjusted Additional paid-in capital	735	4 89,288		
Accumulated deficit	(21,936)	(21,936)		
Total stockholders' (deficit) equity	(21,201)	67,356		
Total capitalization	\$ 67,356	\$ 67,356	\$	

A \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share, the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted amount of cash, additional paid-in capital, total stockholders' equity and total capitalization by approximately \$ million, assuming 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 and estimated offering expenses payable by us. Similarly, each increase (decrease) of 1.0 million shares in the number of shares offered by us would increase (decrease) the pro forma as adjusted amount of cash, additional

paid-in capital, total stockholders' equity and total capitalization by approximately \$ million, assuming the assumed initial public offering price of \$ per share, the midpoint of the price range set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. The proforma as adjusted information is illustrative only, and our capitalization following the completion of this offering will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing.

The actual, pro forma and pro forma as adjusted information set forth in the table excludes:

- 4,518,819 shares of common stock reserved for future issuance under our 2015 Plan, which will be amended and restated as our 2015 Restated Plan, effective upon the effectiveness of the registration statement of which this prospectus is a part;
- 775,853 shares of common stock issuable upon the exercise of stock options outstanding as of December 31, 2015, at a weighted average exercise price of \$3.55 per share; and
- an additional 3,105,409 shares of common stock that will be made available for future issuance under our equity compensation plans upon the closing 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 initial 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 immediately after this offering.

Our historical net tangible book value as of December 31, 2015 was \$67.4 million, or \$15.48 per share of our common stock. Our historical net tangible book value is the amount of our total tangible assets less our total liabilities. Historical net tangible book value per share represents historical net tangible book value divided by the 4,349,919 shares of our common stock outstanding as of December 31, 2015, assuming the Reorganization occurred on such date.

Our pro forma net tangible book value as of December 31, 2015 was \$67.4 million, or \$1.52 per share of our common stock. Pro forma net tangible book value per share represents historical net tangible book value divided by the total number of shares of common stock outstanding as of December 31, 2015, after giving effect to the conversion of all shares of our preferred stock then outstanding into 39,919,350 shares of common stock upon the closing of this offering.

After giving further effect to the sale of shares of common stock that we are offering at the initial public offering price of \$ per share, the midpoint of the price range set forth on the cover page of this prospectus, and after deducting the 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, 2015 would have been approximately \$ million, or approximately \$ per share. This amount represents an immediate increase in pro forma net tangible book value of \$ per share to our existing stockholders and an immediate dilution in pro forma net tangible book value of approximately \$ per share to investors participating in this offering.

Dilution per share to investors participating in this offering is determined by subtracting pro forma as adjusted net tangible book value per share after this offering from the initial public offering price per share paid by investors participating in this offering. The following table illustrates this dilution (without giving effect to any exercise by the underwriters of their over-allotment option):

Assumed initial public offering price per share		\$
Historical net tangible book value per share as of December 31, 2015	\$ 15.48	
Pro forma decrease in historical net tangible book value per share attributable to pro forma adjustments described in preceding		
paragraphs	(13.96)	
Pro forma net tangible book value per share as of December 31, 2015	1.52	
Increase in pro forma net tangible book value per share attributable to investors participating in this offering		
Pro forma as adjusted net tangible book value per share after this offering		
Dilution per share to new investors participating in this offering		\$

If the underwriters exercise their option to purchase additional shares of common stock in this offering in full at the assumed initial public offering price of per share, the midpoint of the price range set forth on the cover of this prospectus and assuming 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 and estimated offering expenses payable by us, the pro forma as adjusted net tangible book value would be \$ per share, and the dilution in pro forma net tangible book value per share to investors in this offering would be \$ per share.

A \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share, the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted net tangible book value by \$ per share and the dilution to investors participating in this offering by \$ per share, assuming 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 and estimated expenses payable by us. Similarly, each increase (decrease) of 1.0 million shares in the number of shares offered by us would increase (decrease) the pro forma as adjusted net tangible book value by

\$ per share and the dilution to investors participating in this offering by \$ per share, assuming the assumed initial public offering price of

\$ per share, the midpoint of the price range set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated expenses payable by us.

The following table summarizes, on a pro forma as adjusted basis, as of December 31, 2015, the difference 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 investors in this offering at an assumed initial public offering price of \$ per share, 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 Consid	Total Consideration		
	Number Percent	Amount	Percent	Per Share	
	(in thousands except per share data)				
Existing stockholders	9	0	%	\$	
Investors in this offering				\$	
Total	100.09	ó	100.0%		

The above discussion and tables are based on shares of common stock issued and outstanding as of December 31, 2015 and (i) includes 39,919,350 additional shares of our common stock issuable upon the conversion of all outstanding shares of our preferred stock into shares of common stock upon the closing of this offering and (ii) excludes:

- 4,518,819 shares of common stock reserved for future issuance under our 2015 Plan, which will be amended and restated as our 2015 Restated Plan, effective upon the effectiveness of the registration statement of which this prospectus is a part;
- 775,853 shares of common stock issuable upon the exercise of stock options outstanding as of December 31, 2015, at a weighted average exercise price of \$3.55 per share; and
- an additional 3,105,409 shares of common stock that will be made available for future issuance under our equity compensation plans upon the closing of this offering.

A \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share, the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) the total consideration paid by investors in this offering by approximately \$ million, assuming 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 and estimated offering expenses payable by us. Similarly, each increase (decrease) of 1.0 million shares in the number of shares offered by us would increase (decrease) of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering paid by investors in this offering by approximately \$ million, assuming the assumed initial public offering price of per share, the midpoint of the price range set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting estimated underwriting discounts and underwriting be assumed initial public offering price of \$ per share, the midpoint of the price range set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting estimated underwriting discounts and ster deducting estimated underwriting discounts and ster deducting estimated initial public offering price of \$ per share, the midpoint of the price range set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting the assumed initial public offering price of \$ per share, the midpoint of the price range set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting the assumed initial public offering price of \$ per share, the midpoint of the price range set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting the assumed initial public offering price of \$ per share, the midpoi

discounts and commissions and estimated offering expenses payable by us.

To the extent that outstanding options are exercised or shares are issued under our 2015 Restated Plan, you will experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities may result in further dilution to our stockholders.

SELECTED CONSOLIDATED FINANCIAL DATA

The following selected historical consolidated financial data should be read together with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements, related notes and other financial information included elsewhere in this prospectus. The selected consolidated financial data in this section are not intended to replace the consolidated financial statements and are qualified in their entirety by the consolidated financial statements and related notes included elsewhere in this prospectus.

We have derived the selected consolidated statement of operations data for the period from May 7, 2014 (inception) to December 31, 2014 and the year ended December 31, 2015 and the selected consolidated balance sheet data as of December 31, 2014 and 2015 from our audited consolidated financial statements included elsewhere in this prospectus. Our historical results are not necessarily indicative of results that may be expected in the future.

	Ma (inc	Period from May 7, 2014 (inception) to December 31, 2014		Year Ended December 31, 2015	
Consolidated Statements of Operations Data:		(in thousands, except per unit and per share data)			
Collaboration revenue	\$	_	\$	6,044	
Operating expenses:	•			-,-	
Research and development		1,105		11,170	
In-process research and development		6,055			
General and administrative		2,379		8,283	
Total operating expenses		9,539		19,453	
Loss before income taxes		(9,539)		(13,409)	
Benefit from income taxes				1,012	
Net loss	\$	(9,539)	\$	(12,397)	
Net loss per common unit, basic and diluted	\$	(11.55)	\$		
Net loss per share attributable to common stockholders, basic and diluted	\$	—	\$	(30.09)	
Weighted average common units outstanding, basic and diluted		826			
Weighted average shares outstanding, basic and diluted				412	
Pro forma net loss per share, basic and diluted (unaudited)(1)	\$	(0.82)	\$	(0.41)	
Pro forma weighted average shares outstanding, basic and diluted (unaudited)(1)		11,589		30,030	

	Decem	As of <u>December 31, 2014</u> (in thousands)		As of December, 2015	
Consolidated Balance Sheet Data:		`	í		
Cash and cash equivalents	\$	9,845	\$	75,816	
Working capital(2)		7,775		66,931	
Total assets		10,694		82,139	
Deferred revenue				10,312	
Convertible preferred stock		—		88,557	
Total stockholders' equity (deficit)		7,566		(21,201)	

(1) Basic and diluted pro forma net loss per share give effect to the conversion of all shares of preferred stock issued in connection with the Reorganization into shares of common stock immediately prior to the completion of this offering, assuming such conversion occurred on the later of May 7, 2014 (inception) or the issuance date of the corresponding unit that converted to preferred stock in the Reorganization.

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

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

The following discussion and analysis of our financial condition and results of operations should be read together with our consolidated financial statements and related notes and other financial information appearing elsewhere in this prospectus. Some of the information contained in this discussion and analysis or set forth elsewhere in this prospectus, including information with respect to our plans and strategy for our business and related financing, includes forward-looking statements that involve risks and uncertainties. As a result of many factors, including those factors set forth in the "Risk Factors" section of this prospectus, our actual results could differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

As more fully described in the section entitled "Reorganization" appearing elsewhere in this prospectus, on August 20, 2015, we completed transactions pursuant to which Intellia Therapeutics, LLC merged with and into Intellia Therapeutics, Inc., with Intellia Therapeutics, Inc. continuing as the surviving corporation. In connection with the Reorganization, all of the outstanding common and preferred unitholders of Intellia Therapeutics, LLC became holders of preferred stock of Intellia Therapeutics, Inc., and holders of incentive units in Intellia Therapeutics, LLC received restricted common stock in Intellia Therapeutics, Inc., Inc.,

Overview

We are a leading gene editing company focused on the development of proprietary, potentially curative therapeutics utilizing a recently developed biological tool known as CRISPR/Cas9. We believe that the CRISPR/Cas9 technology has the potential to transform medicine by permanently editing disease-associated genes in the human body with a single treatment course. We intend to leverage our leading scientific expertise, clinical development experience and intellectual property position to unlock broad therapeutic applications of CRISPR/Cas9 gene editing and develop a potential new class of therapeutic products.

We believe our strong product focus, therapeutic discovery and development strength, delivery expertise and intellectual property portfolio make us wellpositioned to translate the potential of the CRISPR/Cas9 system into clinically meaningful gene editing-based therapeutics. To maximize our opportunity to rapidly develop clinically successful products, we have applied a risk-mitigated approach to selecting our initial indications, which we refer to as our sentinel indications, that have significant unmet medical need and relatively low technical and development hurdles defined by four primary axes: (i) the type of edit—knockout, repair or insertion; (ii) the presence of established therapeutic endpoints; (iii) the delivery modality for *in vivo* and *ex vivo* applications; and (iv) the appropriate CRISPR/Cas9 complex. Our sentinel indications include *in vivo* programs focused on diseases of the liver – hepatitis B virus, alpha-1 antitrypsin deficiency and inborn errors of metabolism – as well as *ex vivo* applications of the technology in chimeric antigen receptor T cell, or CAR T cell, and hematopoietic stem cell, or HSC, product candidates which are selectively partnered with our collaborator, Novartis Institutes for Biomedical Research Inc., or Novartis.

We commenced active operations in mid-2014, and our operations to date have been limited to organizing and staffing our company, business planning, raising capital, developing our technology, identifying potential product candidates, undertaking preclinical studies and evaluating a clinical path for our pipeline programs. To date, we have financed our operations primarily through private placements of our equity securities and funding received from our collaboration and license agreement with Novartis. All of our revenue to date has been collaboration revenue. Since our inception and through December 31, 2015, we have raised an aggregate of approximately \$104.0 million to fund our operations, of which approximately \$19.0 million was through our collaboration with Novartis and approximately \$85.0 million was from the sale of our equity, principally preferred securities.

Since inception, we have incurred operating losses. Our net loss was \$9.5 million for the period from May 7, 2014 (inception) to December 31, 2014, primarily as a result of the cost of obtaining in-licensed CRISPR/Cas9 intellectual property, and \$12.4 million for the year ended December 31, 2015. As of December 31, 2015, we had an accumulated deficit of \$21.9 million. We expect to continue to incur significant expenses and operating losses

over the next several years. Our net losses may fluctuate significantly from quarter to quarter and year to year. We anticipate that our expenses will increase substantially as we: advance the programs for our sentinel indications toward clinical development; continue the research and development of our other potential product candidates and delivery modalities; seek to discover and develop additional product candidates; seek regulatory approvals for any product candidates that successfully complete clinical trials; ultimately establish a sales, marketing and distribution infrastructure and scale up external and/or internal manufacturing capabilities to commercialize any products for which we may obtain regulatory approval; maintain, expand and protect our intellectual property portfolio; hire additional clinical, regulatory and scientific personnel; and add operational, financial and management information systems and personnel, including personnel to support our product development and planned future commercialization efforts.

Collaboration

In December 2014, we entered into a strategic collaboration and license agreement with Novartis focused on the development of new *ex vivo* CRISPR/Cas9based therapies using CAR T cells and HSCs. Under the terms of our agreement, we received a \$10.0 million upfront technology access payment in January 2015. In addition, we are entitled to receive \$20.0 million in additional technology access fees and up to \$20.0 million in research payments, in the aggregate, over the five-year collaboration term. We are also eligible to earn up to \$130.3 million in development and regulatory milestone payments, up to \$100.0 million in salesbased milestone payments and mid single-digit royalties, in each case, on a per-product basis. We retain exclusive rights to research a limited number of HSC targets for our proprietary pipeline. In addition, prior to our entry into our collaboration with Novartis, we entered into an exclusivity agreement with Novartis pursuant to which we agreed to issue preferred securities to Novartis. We received \$9.0 million from the sale of such securities to Novartis. We also received approximately \$4.0 million from the sale of Series B preferred stock to Novartis in our Series B preferred stock financing. See the section entitled "Certain Relationships and Related Party Transactions" appearing elsewhere in this prospectus for more information.

Financial Overview

Collaboration Revenue

Our revenue consists of collaboration revenue, including amounts recognized related to upfront technology access payments for licenses, technology access fees, research funding and milestone payments earned under collaboration and license agreement with Novartis. In December 2014, we entered into a five-year strategic collaboration and license agreement with Novartis focused on the development of *ex vivo* CRISPR/Cas9-based therapies using CAR T cells and HSCs. Under the terms of the agreement, we received a \$10.0 million upfront technology access payment and \$9.0 million from the sale of preferred securities to Novartis, which were determined to have a fair value of \$11.6 million. In addition, we are entitled to receive an additional \$20.0 million in technology access fees and up to \$20.0 million in research payments. We are also eligible to receive additional milestone payments, option fees and royalties as further described in the section entitled "Business – Collaborations" appearing elsewhere in this prospectus.

Research and Development

Research and development expenses consist of expenses incurred in performing research and development activities, including the cost to obtain licenses to intellectual property, compensation and benefits, including equity-based compensation, for full-time research and development employees, facility-related expenses, overhead expenses, lab supplies and contract research services, including research services provided to us by Caribou Biosciences, Inc., or Caribou, pursuant to a services agreement, or the Caribou services agreement, we entered into with Caribou in July 2014. See the section entitled "Certain Relationships and Related Party Transactions – License Agreement and Services Agreement with Caribou Biosciences, Inc." appearing elsewhere in this prospectus for more information. In the early phases of development, our research and development costs are often devoted to product platform and proof-of-concept studies that are not necessarily allocable to a specific target; therefore, we have not yet begun tracking our expenses on a program-by-program basis.

In-Process Research and Development

In-process research and development expense represents the cost of acquiring in-process research and development rights to our fundamental CRISPR/Cas9 intellectual property from Caribou.

General and Administrative

General and administrative expenses consist primarily of salaries and benefits, including equity-based compensation, for our executive, finance, intellectual property, business development and support functions. Other general and administrative expenses include allocated facility-related costs not otherwise included in research and development expenses, travel expenses and professional fees for auditing, tax and legal services, including intellectual property-related legal services, and other consulting fees and expenses.

Results of Operations for the Period from May 7, 2014 (Inception) to December 31, 2014 and the Year Ended December 31, 2015

Collaboration Revenue

In December 2014, we entered into a five-year strategic collaboration and license agreement with Novartis focused on the development of *ex vivo* CRISPR/Cas9-based therapies using CAR T cells and HSCs. Under the terms of the agreement, we received a \$10.0 million upfront technology access payment and \$9.0 million from the sale of preferred securities to Novartis, which were determined to have a fair value of \$11.6 million. In addition, we are entitled to receive an additional \$20.0 million in technology access fees and up to \$20.0 million in research payments. We are also eligible to receive additional milestone payments, option fees and royalties as further described in the section entitled "Business – Collaborations."

We determined the fixed portion of consideration under the arrangement to be the \$30.0 million of total technology access fees, for which there are no contingent terms. Of the \$30.0 million in fixed consideration, \$2.6 million was allocated to the preferred securities issued to Novartis, representing the difference between the price paid for these securities and their fair values at date of issuance. We are recognizing the net consideration of \$27.4 million as collaboration revenue over the five-year performance period of the arrangement. We recognized collaboration revenue of \$6.0 million in the year ended December 31, 2015, representing the recognition of these amounts from deferred revenue. We did not recognize any collaboration revenue in 2014.

Research and Development

We recorded \$11.2 million in research and development expenses during the year ended December 31, 2015, compared to \$1.1 million in the period from May 7, 2014 (inception) to December 31, 2014. Research and development expenses in the period from May 7, 2014 (inception) to December 31, 2014 consisted primarily of third-party research services under the Caribou services agreement and personnel-related costs for our internal research and development staff and related expenses, including salaries, benefits and equity-based compensation. The \$11.2 million in research and development expenses during the year ended December 31, 2015 was primarily comprised of salaries and related costs for our research and development team, which grew from three employees as of December 31, 2015, third-party research service fees under the Caribou service agreement and laboratory supplies and materials for internal use. We expect research and development expenses to increase as we continue to grow our research and development team and continue to advance our research plans.

In-Process Research and Development

Our \$6.1 million in in-process research and development expenses for the period from May 7, 2014 (inception) to December 31, 2014 represented the cost of acquiring in-process research and development rights to our foundational CRISPR/Cas9 intellectual property from Caribou. We did not record any in-process research and development expense in the year ended December 31, 2015.

General and Administrative

We recorded \$8.3 million in general and administrative expenses during the year ended December 31, 2015, compared to \$2.4 million in the period from May 7, 2014 (inception) to December 31, 2014. Our \$2.4 million in general and administrative expenses for the period from May 7, 2014 (inception) to December 31, 2014 primarily related to our internal general and administrative salaries and related expenses, legal, patent and consulting fees associated with our initial start-up and costs incurred to pay 30.0% of Caribou's patent prosecution filing and maintenance costs for our licensed intellectual property pursuant to the license agreement with Caribou. The \$8.3 million in general and administrative expenses during the year ended December 31, 2015 was primarily comprised of salaries and benefits costs as well as audit, consulting and professional fees, including legal fees and intellectual property costs, such as amounts incurred resulting from our obligation to pay 30.0% of Caribou's patent prosecution filing and maintenance costs for our licensed intellectual property. We expect general and administrative expenses to continue to increase as we grow our organization, including, upon any successful completion of this offering, as we incur additional costs associated with being a publicly traded company, including increased legal, accounting and corporate governance costs.

Benefit from Income Taxes

We did not recognize any benefit from income taxes during the period from May 7, 2014 (inception) to December 31, 2014. During the year ended December 31, 2015, we allocated \$2.6 million from the \$30.0 million total fixed amount of consideration under the collaboration agreement with Novartis to the carrying value of the Class A-1 and A-2 preferred units to record those units based on their fair value at date of issuance. As a result of this allocation, during the year ended December 31, 2015, we recorded an income tax provision of \$1.0 million within members' equity as well as a corresponding income tax benefit of \$1.0 million within continuing operations.

Liquidity and Capital Resources

Since our inception through December 31, 2015, we have raised an aggregate of \$104.0 million to fund our operations, of which \$19.0 million was through our collaboration with Novartis and \$85.0 million was from the sale of equity securities. As of December 31, 2015, we had \$75.8 million in cash and cash equivalents.

We are entitled to receive technology access fees and research payments and are eligible to earn a significant amount of milestone payments and royalties, in each case, on a per-product basis under our collaboration with Novartis. Our ability to earn these milestones and the timing of achieving these milestones is dependent upon the outcome of our research and development activities and is uncertain at this time. Our rights to payments under our collaboration agreement are our only committed external source of funds.

Funding Requirements

Our primary uses of capital are, and we expect will continue to be, research and development services, compensation and related expenses, laboratory and related supplies, legal and other regulatory expenses, patent prosecution filing and maintenance costs for our licensed intellectual property and general overhead costs. We expect our expenses to increase compared to prior periods in connection with our ongoing activities, particularly as we continue research and development and preclinical activities and as we begin to occupy our new office and laboratory facility. In addition, upon the closing of this offering, we expect to increase disting as a public company.

Because our research programs are still in preclinical development and the outcome of these efforts is uncertain, we cannot estimate the actual amounts necessary to successfully complete the development and commercialization of any future product candidates or whether, or when, we may achieve profitability. Until such time, as we can generate substantial product revenues, if ever, we expect to finance our cash needs through a combination of equity or debt financings and collaboration arrangements. We have two sources of funding under our collaboration with Novartis. We are entitled to technology access fees and research payments. Additionally, we are eligible to earn milestone payments and royalties, in each case, on a per-product basis under this collaboration. Except for these sources of funding, upon completion of this offering, we will not have any

committed external source of liquidity. To the extent that we raise additional capital through the future sale of equity or debt securities, the ownership interest of our stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our existing stockholders. If we raise additional funds through collaboration arrangements in the future, 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 through equity or debt financings 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.

Outlook

Based on our research and development plans and our timing expectations related to the progress of our programs, we expect that the net proceeds from this offering, together with our existing cash and cash equivalents as of December 31, 2015 as well as technology access and research funding that we expect to receive from Novartis, will enable us to fund our operating expenses and capital expenditures for at least the next months, without giving effect to any potential milestone payments we may receive under our collaboration agreement with Novartis. We have based this estimate on assumptions that may prove to be wrong, and we could use our capital resources sooner than we expect.

Our ability to generate revenue and achieve profitability depends significantly on our success in many areas, including: developing our delivery technologies and our CRISPR/Cas9 technology platform; selecting appropriate product candidates to develop; completing research and preclinical and clinical development of selected product candidates; obtaining regulatory approvals and marketing authorizations for product candidates for which we complete clinical trials; developing a sustainable and scalable manufacturing process for product candidates; launching and commercializing product candidates for which we obtain regulatory approvals and marketing authorizations, either directly or with a collaborator or distributor; obtaining market acceptance of our product candidates; addressing any competing technological and market developments; negotiating favorable terms in any collaboration, licensing, or other arrangements into which we may enter; maintaining good relationships with our collaborators and licensors; maintaining, protecting, and expanding our portfolio of intellectual property rights, including patents, trade secrets, and know-how; and attracting, hiring, and retaining qualified personnel.

Cash Flows

The following table summarizes our cash flows for the period from May 7, 2014 (inception) to December 31, 2014 and the year ended December 31, 2015:

	Ma (inc	Period from May 7, 2014 (inception) to December 31, 2014		Year Ended December 31, 2015	
		(in thousands)			
Net cash used in operating activities	\$	(2,322)	\$	(1,763)	
Net cash used in investing activities		(575)		(2,554)	
Net cash provided by financing activities		12,742		70,288	

Net Cash Used in Operating Activities

Net cash used in operating activities of \$2.3 million during the period from May 7, 2014 (inception) to December 31, 2014 consisted primarily of compensation and related expenses as well as legal and consulting costs incurred with the initial phases of establishing our company's operations and early research activities performed by Caribou. Net cash used in operating activities of \$1.8 million in the year ended December 31, 2015 primarily reflected compensation, lab and professional service expenses as well as amounts paid by us under the Caribou services agreement during the period, partially offset by the receipt of a \$10.0 million upfront

technology access payment and \$5.0 million annual technology access fee under the Novartis collaboration agreement.

Net Cash Used in Investing Activities

Net cash used in investing activities during the periods from May 7, 2014 (inception) to December 31, 2014 related primarily to the July 2014 acquisition of in-process research and development rights to our foundational CRISPR/Cas9 intellectual property from Caribou, as well as the purchase of property and equipment in connection with our move to our office space in Cambridge, Massachusetts. Purchases of property and equipment increased during the year ended December 31, 2015 as we completed the build-out of this office and laboratory space. We expect purchases of property and equipment to increase in 2016 as we begin the build-out of our new office and laboratory facility.

Net Cash Provided by Financing Activities

Net cash provided by financing activities related to the sale of preferred securities in all periods presented. In June 2014, we sold shares of common stock to Atlas Venture Fund IX, LP, or Atlas Venture Fund IX, for net proceeds of \$0.1 million. In the remainder of 2014, we issued common and preferred securities to Atlas Venture Fund IX and Novartis for aggregate net proceeds of \$12.6 million. In the year ended December 31, 2015, we completed the sale of preferred securities to Atlas Venture Fund IX, for net proceeds of \$2.0 million, received \$2.6 million in consideration from Novartis related to their purchase of preferred securities from us and completed the sale of preferred securities to new and existing investors for aggregate net proceeds of \$67.4 million.

Contractual Obligations and Contingent Liabilities

The following summarizes our contractual obligations as of December 31, 2015:

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· Fixed payments to Caribou. Represents obligations by us to make fixed payments under the Caribou services agreement.

• *Property leases.* Represents future minimum lease payments under non-cancelable operating leases in effect as of December 31, 2015. The minimum lease payments do not include common area maintenance charges or real estate taxes.

The contractual obligations table does not include any potential future pass-through milestone payments of up to \$26.4 million or royalty payments we may be required to make under the Caribou license agreement, through which we have received rights to CRISPR/Cas9 intellectual property for specified human therapeutic applications, due to the uncertainty of the occurrence of the events requiring payment under that agreement. The table also excludes (i) the property lease we entered into subsequent to December 31, 2015 and (ii) our obligation to pay 30.0% of Caribou's patent prosecution filing and maintenance costs for licensed intellectual property as such costs cannot be reliably estimated until incurred.

In January 2016, we entered into a ten-year agreement to lease office and laboratory space in Cambridge, Massachusetts under an operating lease agreement, with an option to terminate the lease at the end of the sixth year and an option to extend the term of the lease for an additional three years. Our contractual commitments

under the committed first six years of this lease total \$28.3 million. Payments under the contract are expected to begin in late 2016 when we are projected to gain access to the space.

Under the Caribou license agreement, we sublicense a patent family that is currently subject to interference proceedings declared by the Patent Trial and Appeal Board of the United States Patent and Trademark Office. If our sublicensed patent family does not prevail in these proceedings, claims could be asserted against us during development or commercialization of a product that relies on this technology. Defense of any such claims would involve substantial litigation expense, and any successful claim of infringement against us could require us to pay substantial damages.

Critical Accounting Policies and Use of Estimates

Our management's discussion and analysis of financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these consolidated financial statements requires us to make estimates, judgments and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities as of the date of the balance sheets and the reported amounts of collaboration revenue and expenses during the reporting periods. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances at the time such estimates are made. Actual results and outcomes may differ materially from our estimates, judgments and assumptions. We periodically review our estimates in light of changes in circumstances, facts and experience. The effects of material revisions in estimates are reflected in the consolidated financial statements prospectively from the date of the change in estimate.

We define our critical accounting policies as those accounting principles generally accepted in the United States of America that require us to make subjective estimates and judgments about matters that are uncertain and are likely to have a material impact on our financial condition and results of operations as well as the specific manner in which we apply those principles. We believe the critical accounting policies used in the preparation of our consolidated financial statements which require significant estimates and judgments are as follows:

Revenue Recognition

We recognize revenue for each unit of accounting when all of the following criteria are met: persuasive evidence of an arrangement exists; delivery has occurred or services have been rendered; the seller's price to the buyer is fixed or determinable; and collectability is reasonably assured.

The terms of our collaboration and license agreement contain multiple deliverables, which include licenses to CRISPR/Cas9-based therapeutic products directed to specific targets, referred to as exclusive licenses, as well as research and development activities to be performed by us on behalf of the collaboration partner related to the licensed targets. Payments that we may receive under these agreements include non-refundable technology access fees, payments for research activities, payments based upon the achievement of specified milestones and royalties on any resulting net product sales.

Multiple-Element Arrangements

Our collaboration and license agreement represents a multiple-element arrangement. We evaluate our collaborative agreements for proper classification in our statements of operations based on the nature of the underlying activity. We generally reflect as revenue amounts due under our collaborative agreements related to reimbursement of development activities as we are generally the principal under the arrangement.

We evaluate multiple-element arrangements to determine (i) the deliverables included in the arrangement and (ii) whether the individual deliverables represent separate units of accounting or whether they must be accounted for as a combined unit of accounting. When deliverables are separable, consideration received is allocated to the separate units of accounting based on the relative selling price method and the appropriate revenue recognition principles are applied to each unit. When we determine that an arrangement should be accounted for as a single unit of accounting, we must determine the period over which the performance obligations will be performed and revenue will be recognized. This evaluation requires us to make judgments about the individual deliverables and whether such deliverables are separable from the other aspects of the contractual relationship. Deliverables are considered separate units of accounting provided that (i) the delivered

item has value to the customer on a standalone basis and (ii) if the arrangement includes a general right of return with respect to the delivered item, delivery or performance of the undelivered item is considered probable and substantially in our control. In assessing whether an item has standalone value, we consider factors such as the research, development, manufacturing and commercialization capabilities of the collaboration partner and the availability of the associated expertise in the general marketplace. In addition, we consider whether the collaboration partner can use any other deliverable for its intended purpose without the receipt of the remaining deliverable, whether the value of the deliverable is dependent on the undelivered item, and whether there are other vendors that can provide the undelivered items.

The consideration received under an arrangement that is fixed or determinable is then allocated among the separate units of accounting based on the relative selling prices of the separate units of accounting. We determine the selling price of a unit of accounting within each arrangement using vendor-specific objective evidence of selling price, if available; third-party evidence of selling price if vendor-specific objective evidence is not available; or best estimate of selling price, if neither vendor-specific objective evidence is available. Determining the best estimate of selling price for a unit of accounting requires significant judgment. In developing the best estimate of selling price for a unit of accounting, we consider applicable market conditions and relevant entity-specific factors, including factors that were contemplated in negotiating the agreement with the customer and estimate of selling price will have a significant effect on the allocation of arrangement consideration between multiple units of accounting.

We recognize arrangement consideration allocated to each unit of accounting when all of the revenue recognition criteria are satisfied for that particular unit of accounting. In the event that a deliverable does not represent a separate unit of accounting, we recognize revenue from the combined unit of accounting over the contractual or estimated performance period for the undelivered items, which is typically the term of our research and development obligations. If there is no discernible pattern of performance or objectively measurable performance measures do not exist, then we recognize revenue under the arrangement on a straightline basis over the period we are expected to complete our performance obligations. Conversely, if the pattern of performance over which the service is provided to the customer can be determined and objectively measurable performance measures exist, then we recognize revenue under the arrangement using the proportional performance method. Revenue recognized is limited to the lesser of the cumulative amount of payments received or the cumulative amount of revenue earned, as determined using the straight-line method or proportional performance method, as applicable, as of the period ending date.

Significant management judgment is required in determining the level of effort required under an arrangement and the period over which we are expected to complete our performance obligations under an arrangement. Steering committee services that are not inconsequential or perfunctory and that are determined to be performance obligations are combined with other research services or performance obligations required under an arrangement, if any, in determining the level of effort required in an arrangement and the period over which we expect to complete our aggregate performance obligations.

Milestone Revenue

Our collaboration and license agreement includes contingent milestone payments related to specific development, regulatory and sales-based milestones. Development and regulatory milestones are typically payable when a product candidate initiates or advances in clinical trial phases, upon submission for marketing approval with regulatory authorities, and upon receipt of actual marketing approvals for a therapeutic or for additional indications. Sales-based milestones are typically payable when annual sales reach specified levels.

We evaluate whether each milestone is substantive and at risk to both parties on the basis of the contingent nature of the milestone. This evaluation includes an assessment of whether: (i) the consideration is commensurate with either our performance to achieve the milestone or the enhancement of the value of the delivered item as a result of a specific outcome resulting from our performance to achieve the milestone, (ii) the consideration relates solely to past performance, and (iii) the consideration is reasonable relative to all of the deliverables and payment terms within the arrangement. We evaluate factors such as the scientific, clinical, regulatory,

commercial and other risks that must be overcome to achieve the particular milestone and the level of effort and investment required to achieve the particular milestone in making this assessment. There is considerable judgment involved in determining whether a milestone satisfies all of the criteria required to conclude that a milestone is substantive. We will recognize revenue in its entirety upon successful accomplishment of any substantive milestones, assuming all other revenue recognition criteria are met. Milestones that are not considered substantive are recognized as earned if there are no remaining performance obligations or over the remaining period of performance, with a cumulative catch-up being recognized for the elapsed portion of the period of performance, assuming all other revenue recognition criteria are met.

Non-refundable research, development and regulatory milestones that are expected to be achieved as a result of our efforts during the period of our performance obligations under the collaboration and license agreements are generally considered to be substantive and are recognized as revenue upon the achievement of the milestone, assuming all other revenue recognition criteria are met. If not considered to be substantive, revenue from achievement of milestones is initially deferred and recognized over the remaining term of our performance obligations. Milestones that are not considered substantive because we do not contribute effort to their achievement are recognized as revenue upon achievement, assuming all other revenue recognition criteria are met, as there are no undelivered elements remaining and no continuing performance obligations on our part.

Amounts received prior to satisfying the revenue recognition criteria listed above are recorded as deferred revenue in the accompanying balance sheets. Although we follow detailed guidelines in measuring revenue, certain judgments affect the application of our revenue policy. For example, in connection with our existing collaboration agreement, we have recorded on the balance sheet short-term and long-term deferred revenue based on our best estimate of when such revenue will be recognized. However, this estimate is based on our current research plan and, if our research plan should change in the future, we may recognize a different amount of deferred revenue over the following 12-month period.

The estimate of deferred revenue also reflects management's estimate of the periods of our involvement in the collaboration. Our primary performance obligations under this collaboration consist of research and development services. In certain instances, the timing of satisfying these obligations can be difficult to estimate. Accordingly, our estimates may change in the future. Such changes to estimates would result in a change in prospective revenue recognition amounts. If these estimates and judgments change over the course of our collaborative agreement, it may affect the timing and amount of revenue that we will recognize and record in future periods.

Equity-Based Compensation

We measure employee equity-based compensation based on the grant date fair value of the equity awards and recognize equity-based compensation expense, net of estimated forfeitures, on a straight-line basis over the requisite service period of the awards, which is generally the vesting period of the respective award. Compensation expense is recognized for only the portion of awards that are expected to vest. In developing a forfeiture rate estimate, we have considered our historical experience to estimate pre-vesting forfeitures for service-based awards. We estimate forfeitures at the time of grant and revise those estimates in subsequent periods if actual forfeitures differ from those estimates.

We measure equity awards granted to consultants and non-employees based on the fair value of the award on the date of grant. Compensation expense is recognized over the period during which services are rendered by such consultants and non-employees until completed. At the end of each financial reporting period prior to completion of the service, the fair value of these awards is remeasured using the then-current fair value of the common or incentive securities.

We classify equity-based compensation expense in our consolidated statement of operations in the same manner in which the award recipient's salary and related costs are classified or in which the award recipient's service payments are classified.

Determination of the Fair Value of Equity Securities

As there has been no public market for our common or incentive units and common stock to date, the estimated fair value of our common and incentive units and common stock has been determined by our board of

directors as of the date of each award grant, with input from management, considering our most recently available third-party valuations of common and incentive units and common stock and our 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 incentive security valuations were prepared using either an option-pricing method, or OPM, or a probability-weighted expected return method, or PWERM, which used 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 incentive units and common stock have value only if the funds available for distribution to members exceeded 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 incentive units and common stock based upon an analysis of future values for the company, assuming various outcomes. The common and incentive units and common stock 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, incentive and preferred securities. The future value of the common and incentive units and common stock 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 incentive units and common stock. These third-party valuations were performed at various dates, which resulted in valuations of our common and incentive units of \$0.37 and \$0.13 per share, respectively, as of July 31, 2014 and \$1.16 and \$0.79 per share, respectively, as of December 31, 2014 and valuations of our common stock of \$3.42, \$3.77 and \$4.02 per share as of July 20, 2015, November 30, 2015 and January 29, 2016, respectively. In addition to considering the results of these third-party valuations, our board of directors considered various objective and subjective factors to determine the fair value of our common and incentive units and common stock as of each grant date, which may be a date later than the most recent third-party valuation date, including:

- the prices of our preferred securities sold to or exchanged between outside investors in arm's length transactions, and the rights, preferences and
 privileges of our preferred securities as compared to those of our common and incentive units and common stock, including the liquidation preferences of
 our preferred securities;
- the progress of our research and development efforts, including the status of preclinical studies and planned clinical trials for our product candidates;
- the lack of liquidity of our equity as a private company;
- our stage of development and business strategy and the material risks related to our business and industry;
- the achievement of enterprise milestones, including entering into collaboration and license agreements;
- the valuation of publicly traded companies in the life sciences and biotechnology sectors, as well as recently completed mergers and acquisitions of peer companies;
- any external market conditions affecting the biotechnology industry, and trends within the biotechnology industry;
- the likelihood of achieving a liquidity event for the holders of our common and incentive units and common stock, such as an initial public offering, or IPO, or a sale of our company, given prevailing market conditions; and
- the analysis of IPOs and the market performance of similar companies in the biopharmaceutical industry.

The assumptions underlying these valuations represent management's best estimates, which involve inherent uncertainties and the application of management judgment. As a result, if factors or expected outcomes

change and we use significantly different assumptions or estimates, our equity-based compensation expense could be materially different.

Following the closing of this offering, the fair value of our common stock will be determined based on the quoted market price of our common stock.

Equity-Based Security Awards Granted

The following table sets forth by grant date and type of award the number of securities granted since inception, which were granted for no returned consideration:

Grant Date	Type of Award Granted	Number of Securities Underlying Grants	Fair	nt Date /alue Per or Share
July 31, 2014	Common units	1,351,763	\$	0.37
July 31, 2014	Incentive units	2,297,999	\$	0.13
October 1, 2014	Incentive units	270,353	\$	0.79
October 30, 2014	Incentive units	27,035	\$	0.79
November 12, 2014	Incentive units	27,035	\$	0.79
November 13, 2014	Incentive units	27,035	\$	0.79
April 15, 2015	Incentive units	929,505	\$	0.79
June 23, 2015	Incentive units	221,700	\$	0.79
June 29, 2015	Incentive units	142,500	\$	0.79
July 6, 2015	Incentive units	63,000	\$	0.79
July 13, 2015	Incentive units	135,000	\$	0.79
September 22, 2015	Stock options	459,953	\$	3.42
September 28, 2015	Stock options	2,700	\$	3.42
October 5, 2015	Stock options	15,000	\$	3.42
December 22, 2015	Stock options	298,200	\$	3.77
February 2, 2016	Stock options	137,412	\$	4.02
February 3, 2016	Stock options	3,537,269	\$	4.02

Emerging Growth Company Status

The Jumpstart Our Business Startups Act of 2012, or the JOBS Act, permits an "emerging growth company" such as us to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies. We are irrevocably choosing to "opt out" of this provision and, as a result, we will comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for other public companies.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update, or ASU, No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*, which supersedes existing revenue recognition guidance. The standard's core principle is that a company will recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. The standard defines a five-step process to achieve this principle and will require companies to use more judgment and make more estimates than under the current guidance. We expect that these judgments and estimates will include identifying performance obligations in the customer contract, estimating the amount of variable consideration to include in the transaction price and allocating the transaction price to each separate performance obligation. ASU 2014-09 also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts. In July 2015, the FASB voted to delay the effective date of this standard such that ASU 2014-09 will be effective for us for annual periods beginning after December 15, 2017 and for interim periods within those fiscal years. Early adoption of the standard is permitted for annual periods beginning after December 15, 2016. We are evaluating the impact that the adoption of ASU 2014-09 will have on our consolidated financial statements.

In August 2014, the FASB issued ASU No. 2014-15, *Disclosure of Uncertainties About an Entity's Ability to Continue as a Going Concern*. ASU 2014-15 amends Accounting Standards Codification, or ASC, 205-40, *Presentation of Financial Statements—Going Concern*, by providing guidance on determining when and how

reporting entities must disclose going-concern uncertainties in their financial statements, including requiring management to perform interim and annual assessments of an entity's ability to continue as a going concern within one year of the date of issuance of the entity's financial statements and providing certain disclosures if there is substantial doubt about the entity's ability to continue as a going concern. ASU 2014-15 will be effective for us for annual periods ending after December 15, 2016 and interim periods within annual periods beginning after December 15, 2016. We are evaluating the potential impact of this ASU on our consolidated financial statements but believe its adoption will have no impact on our financial position, results of operations or cash flows.

In February 2015, the FASB issued ASU No. 2015-02, *Consolidation (Topic 810)—Amendments to the Consolidation Analysis*. ASU 2015-02 modifies the existing consolidation guidance in ASC 810, *Consolidation*, by significantly changing the consolidation analysis reporting organizations are required to complete in determining whether to consolidate certain legal entities. ASU 2015-02 requires either a retrospective or modified retrospective approach to adoption and will be effective for us for annual periods beginning after December 15, 2015 and for interim periods within those fiscal years. We are evaluating the impact of the adoption of ASU 2015-02 on our consolidated financial statements but believe its adoption will have no material impact on our financial position, results of operations or cash flows.

In April 2015, the FASB issued ASU No. 2015-05, *Customer's Accounting for Fees Paid in a Cloud Computing Arrangement*. ASU 2015-05 amends ASC 350-40, *Internal-Use Software*, by providing customers with guidance on determining whether a cloud computing arrangement contains a software license that should be accounted for as internal-use software. ASU 2015-05 will be effective for us for annual periods beginning after December 15, 2016. We are evaluating the impact that this ASU may have on our consolidated financial statements, if any.

In November 2015, the FASB issued ASU No. 2015-17, *Balance Sheet Classification of Deferred Taxes*. ASU 2015-17 amends ASC 740, *Income Taxes*, by requiring entities to present deferred tax assets and deferred tax liabilities as noncurrent in a classified balance sheet. ASU 2015-17 would be effective for annual periods beginning after December 15, 2016 and interim periods within those fiscal years. Early adoption is permitted. We elected to early adopt this guidance on a prospective basis beginning with our year ending as of December 31, 2015; however there was no material impact to our financial position as we carry a full valuation allowance.

In February 2016, the FASB issued ASU 2016-02, *Leases*. ASU 2016-02 amends ASC 840, *Leases*, by introducing a lessee model that requires balance sheet recognition of most leases. We are the lessee under certain leases that are accounted for as operating leases. The proposed changes would require that substantially all of our operating leases be recognized as assets and liabilities on our balance sheet. ASU 2016-02 will be effective for public companies for annual periods beginning after December 15, 2018 and interim periods within those fiscal years and for private companies for annual periods beginning after December 15, 2019 and interim periods within fiscal years beginning after December 15, 2020. We are evaluating the impact that the adoption of ASU 2016-02 will have on our consolidated financial statements.

Off-Balance Sheet Arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements as defined under the rules and regulations of the Securities and Exchange Commission.

Quantitative and Qualitative Disclosures about Market Risk

The market risk inherent in our financial instruments and in our financial position consists of the potential loss arising from adverse changes in interest rates. As of December 31, 2015, we had cash equivalents of \$30.0 million consisting of interest-bearing money market accounts. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates. Due to the short-term maturities of our cash equivalents and the low risk profile of our investments, an immediate 100 basis point change in interest rates would not have a material effect on the fair market value of our cash equivalents.

We occasionally contract with vendors internationally. Transactions with these vendors are predominantly settled in U.S. dollars, and, therefore, we believe that we have only minimal exposure to foreign currency exchange risks. We do not hedge against foreign currency risks.

BUSINESS

Overview

We are a leading gene editing company focused on the development of proprietary, potentially curative therapeutics utilizing a recently developed biological tool known as the CRISPR/Cas9 system. We believe that the CRISPR/Cas9 technology has the potential to transform medicine by permanently editing disease-associated genes in the human body with a single treatment course. We intend to leverage our leading scientific expertise, clinical development experience and intellectual property position to unlock broad therapeutic applications of CRISPR/Cas9 gene editing and develop a potential new class of therapeutic products.

In 2012, one of our co-founders and current scientific advisors, Dr. Jennifer Doudna, and her colleagues published a paper in the journal *Science* describing the use of CRISPR/Cas9 as a gene editing tool. Gene editing is the precise and targeted modification of the genetic material of cells. Since the publication of Dr. Doudna's landmark paper, more than 2,600 research papers have been published on the CRISPR/Cas9 technology. The CRISPR/Cas9 system offers a revolutionary approach for therapeutic development due to its broad potential to precisely edit genes. This system can be used to make three general types of edits: knockouts, repairs and insertions. Each of these editing strategies takes advantage of naturally-occurring biological mechanisms to effect the desired genetic alteration. This approach has the potential to provide curative therapeutic options for patients with chronic diseases by addressing the underlying cause of the disease.

We plan to use the CRISPR/Cas9 system across two broad areas: *in vivo* applications, in which CRISPR/Cas9 therapeutic products are delivered directly to target cells within the body, and *ex vivo* applications, in which cells are removed from a patient's body, modified using CRISPR/Cas9 and then returned to the patient. Initially, our *in vivo* pipeline includes proprietary programs targeting hepatitis B virus, or HBV, alpha-1 antitrypsin deficiency, or AATD, and inborn errors of metabolism, or IEMs. Our initial *ex vivo* pipeline includes both proprietary and partnered programs focused on chimeric antigen receptor T cells, or CAR T cells, and hematopoietic stem cells, or HSCs, the stem cells from which all of the various types of blood cells originate, which we are developing in collaboration with Novartis Institutes for Biomedical Research, Inc., or Novartis.

To maximize our opportunity to rapidly develop clinically successful products, we have applied a risk- mitigated approach to selecting our initial indications, which we refer to as our sentinel indications. Specifically, we have selected indications with significant unmet medical need and which have relatively low technical and development hurdles based on four primary axes:

- the type of edit—knockout, repair or insertion;
- the presence of established therapeutic endpoints;
- the delivery modality for *in vivo* and *ex vivo* applications; and
- the appropriate CRISPR/Cas9 complex.

These selection criteria position us to build a risk-diversified pipeline, where we are not reliant on any single delivery technology or editing approach for success. In addition, we can apply the learnings from these approaches to support multiple value drivers thereby increasing the probabilities of success in our sentinel indications, generating insights that will accelerate the development of subsequent therapeutic products and broadening the opportunity for potential strategic alliances.

The following table illustrates our current discovery programs and opportunities:

	Intellia Rights	Type of Edit	Upcoming Milestones: Next 12–24 Months
In Vivo			
Delivery			
Lipid Nanoparticle	Proprietary	Knockout, repair	Demonstrate in vivo delivery first with knockout editing, followed by more complex repair editing
Programs			
Hepatitis B Virus	Proprietary	Knockout	Demonstrate in vivo proof-of-concept
Alpha-1 Antitrypsin Deficiency	Proprietary	Knockout, repair	Demonstrate in vivo proof-of-concept
Inborn Errors of Metabolism	Proprietary	Knockout, repair, insertion	Select lead indication based on in vitro data
Ex Vivo			
Programs			
CAR T Cells	Partnered with Novartis	Undisclosed	Advance preclinical development
Hematopoietic Stem Cells	Proprietary and others selectively partnered with Novartis	Undisclosed	Advance preclinical development

Delivery plays a key role in our *in vivo* therapeutic approach. Our lipid nanoparticle, or LNP, delivery technology, which involves encapsulating therapeutic agents into microscopic lipid droplets, has demonstrated delivery of nucleic acids to the liver, our initial organ of focus for *in vivo* applications. With our team's expertise with LNP delivery technology, we expect to be able to readily translate the LNPs that we are using for our preclinical development to clinical development in humans. In parallel, we are developing additional delivery vehicles, including viral delivery vectors, which are viruses engineered to carry non-viral nucleic acids to patients' cells, that we believe will allow us to target other organs, such as the lung for cystic fibrosis, or CF.

We have chosen three sentinel in vivo indications employing different editing strategies to explore the scope of gene edits with the CRISPR/Cas9 system:

- HBV program, which utilizes a knockout strategy to target covalently closed circular DNA, or cccDNA;
- · AATD program, which utilizes either a gene knockout strategy or a gene repair strategy; and
- IEM program, which has the potential to utilize all three editing approaches, including targeted DNA insertion.

In addition to giving us three potential product opportunities, each of these programs will provide us with learnings that we intend to translate to a broader set of disease indications requiring the same types of edits.

Our sentinel *ex vivo* programs in CAR T cell and HSC applications are being developed in partnership with Novartis, where we retain the right to develop and commercialize rights to certain HSC programs. In CAR T cell therapy, naturally-occurring immune cells, specifically T cells, are modified *ex vivo* by inserting a chimeric antigen receptor, or CAR, to selectively target cancer cells by activating an immune response against them. The CAR is an engineered fusion protein expressed on a cell's surface that has an antibody-based portion that can recognize certain markers on other cells, such as cancer cells, and a signaling portion inside the cell that can deliver the desired signals when the antibody portion binds its markers. We believe CRISPR/Cas9 can further enhance CAR T cells by, for example, generating a universal donor CAR T cell or modifying pathways. In the HSC programs, we can apply CRISPR/Cas9 to correct defective proteins in HSCs of a given patient for the potential treatment of blood disorders or primary immune deficiencies. These sentinel programs will help inform

the broader applicability of CRISPR/Cas9 in an *ex vivo* setting, which we plan to explore in eXtellia, a division of our company focused on the application of CRISPR/Cas9 gene editing in the fields of immuno-oncology and autoimmune and inflammatory diseases. We expect eXtellia to focus on other relevant types of immune cells, such as natural killer, or NK, cells and tumor infiltrating lymphocytes, or TILs, for immuno-oncology applications, T regulatory cells, or Tregs, for autoimmune disorders and other cell types, including induced pluripotent stem cells, mesenchymal stem cells and muscle satellite stem cells for tissue-targeted treatments, for which we retain proprietary rights. Our *ex vivo* delivery approach includes clinically proven delivery methods, such as electroporation, an electrical charge-based technique for delivering molecules into cells. In parallel, we are exploring other delivery methods for *ex vivo* introduction of biological material to cells, which may provide advantages in delivery efficiency or cell viability.

We believe our approach to selecting our sentinel *in vivo* and *ex vivo* programs positions us to build a pipeline across a range of indications and to generate a wealth of data that opens the potential therapeutic applications of the CRISPR/Cas9 technology across a broad range of diseases. Our collaboration and intellectual property strategies focus on leveraging existing third-party expertise in therapeutic research, preclinical and clinical development, regulatory affairs, manufacturing and commercialization, while also enhancing our industry-leading access to evolving gene editing technology and delivery vehicles. Through our product research and development programs, we believe we can apply CRISPR/Cas9 technology to improve the lives of patients with significant unmet medical need.

To enable further development of our technology and *in vivo* and *ex vivo* programs, we completed a private placement for gross proceeds of \$70.0 million of our Series B preferred stock in August 2015 led by OrbiMed HealthCare Fund Management. Additional investors in this financing included Fidelity Management & Research, Janus Capital Management, Foresite Capital, Sectoral Asset Management Inc., EcoR1 Capital LLC, our existing investors, Atlas Venture Fund IX and Novartis, as well as other leading mutual fund and healthcare investors.

Our Team

We have assembled a world-class team of executives, founders and advisors who are dedicated to the development of CRISPR/Cas9-based therapeutic products for patients with significant unmet medical need. Our team's expertise spans CRISPR/Cas9 and broader gene editing technologies, *in vivo* and *ex vivo* therapeutic delivery technologies, preclinical and clinical development, product scale-up and manufacturing, cell and molecular biology, intellectual property, finance and regulatory affairs.

Our executive team comprises leaders with proven track records of successfully translating scientific visions into tangible therapies, solving complex issues in delivering novel therapeutics and progressing new and novel therapies through regulatory approval. Our management team includes the following key individuals:

- Nessan Bermingham, Ph.D., our Founder, President and Chief Executive Officer, who brings 15 years of experience in biotechnology investing and operational oversight across a number of companies, most recently as a venture partner at Atlas Venture;
- *Thomas M. Barnes, Ph.D., our Chief Scientific Officer*, who brings over 20 years of experience in drug discovery, including at Eleven Biotherapeutics Inc., Ore Pharmaceuticals, Inc. and Millennium Pharmaceuticals, Inc.;
- John M. Leonard, M.D., our Chief Medical Officer, who, during 21 years at AbbVie Inc. and Abbott Laboratories, oversaw the development and approval of 15 medicines, including Humira and Kaletra;
- David V. Morrissey, Ph.D., our Chief Technology Officer, who was instrumental in the development of LNP technology at Novartis and brings over 17 years of experience in drug development, including at Novartis, Sirna Therapeutics Inc., and Bristol-Myers Squibb;
- José E. Rivera, J.D., our Chief Operating Officer and Chief Legal Officer, who brings 17 years of experience in managing complex legal issues in the biopharmaceutical and healthcare industries, including strategically developing, protecting and defending valuable intellectual property at Abbott Laboratories; and

• Sapna Srivastava, Ph.D., our Chief Financial and Strategy Officer, who brings more than 13 years of financial and industry experience as a biotechnology analyst at Goldman Sachs & Co., Morgan Stanley and J.P. Morgan Chase & Co.

In addition, our founders and scientific advisors embody the core elements of our therapeutic approach, having experience with the CRISPR/Cas9 complex, delivery modalities and target diseases. They are considered to be some of the world's leading experts in CRISPR/Cas9 technology and in their respective fields. One of our co-founders, Dr. Jennifer Doudna, is widely recognized for her contributions to the development of CRISPR/Cas9 as a genome engineering tool. Additional members of our advisory team have made significant contributions to the understanding of CRISPR/Cas systems and help support the foundation we have today for developing human therapeutics based on gene editing technologies. Our founders are also currently active scientific advisors to the Company and include Dr. Doudna; Dr. Rodolphe Barrangou of North Carolina State University, a pioneer in establishing the adaptive immune function of CRISPR systems; Dr. Rachel Haurwitz, who also serves on our board of directors, and Dr. Andrew May of Caribou Biosciences; Dr. Luciano Marraffini of Rockefeller University, a leader in the investigation of the underlying molecular mechanisms of CRISPR immunity; Dr. Derrick Rossi of Harvard Medical School, a hematopoietic stem cell expert; and Dr. Erik Sontheimer of the University of Massachusetts Medical School, an innovator in understanding the mechanism of CRISPR-mediated immunity in bacteria. All of these founder advisors are equity holders of our company and receive compensation as scientific advisors. Although they are regularly available for scientific consultation, our arrangements with these individuals do not entitle us to to any of their existing or future intellectual property derived from their independent research or research with other third parties.

Strategy

Our goal is to build a fully integrated, product-driven biotechnology company, focused on developing and commercializing potentially curative CRISPR/Cas9-based therapeutics. Our approach to advancing the broad potential of gene editing includes our plans to:

Focus on Sentinel Indications that Enable Us to Fully Develop the Potential of the CRISPR/Cas9 System. To maximize our opportunity to rapidly develop clinically successful products, we have applied a risk-mitigated approach to selecting sentinel indications that have significant unmet medical need and which have relatively low technical and development hurdles based on four primary axes:

- the type of edit—knockout, repair or insertion;
- the presence of established therapeutic endpoints;
- the delivery modality for in vivo and ex vivo applications; and
- the appropriate CRISPR/Cas9 complex.

These selection criteria position us to build a risk-diversified pipeline, where we are not reliant on any single delivery technology or editing approach for success. In addition, we can apply the learnings from these approaches to support multiple value drivers thereby increasing the probabilities of success in our sentinel indications, generating insights that will accelerate the development of subsequent therapeutic products and broadening the opportunity for potential strategic alliances.

Aggressively Pursue In Vivo Liver Indications to Develop Therapeutics Rapidly with Existing Delivery Technology. For our sentinel *in vivo* indications, we selected well-validated targets in diseases with significant unmet medical need where there are predictive biomarkers, or measurable indicators of a biological condition or state, with strong disease correlation and where the CRISPR/Cas9 technology and delivery tools existing today could be applied towards developing a novel therapeutic. Our initial *in vivo* pipeline opportunities target diseases of the liver, which we believe we can develop using our existing LNP delivery technology. The first *in vivo* indications we are evaluating are HBV, AATD and IEMs.

Continue to Develop and Expand our Ex Vivo *Therapeutic Programs.* In collaboration with Novartis, we intend to rapidly develop the CAR T cell and HSC programs. We believe that our sentinel work in CAR T cells

and HSCs will guide us in building a portfolio of additional proprietary *ex vivo* opportunities through our eXtellia division, including expanded immuno-oncology therapeutics beyond CAR T cells, such as modified NK cells and TILs, and autoimmune applications of Tregs, in addition to potential applications for other cell types such as induced pluripotent stem cells, mesenchymal stem cells and muscle satellite stem cells.

Continue to Leverage Strategic Partnerships to Accelerate Clinical Development. We view strategic partnerships as important drivers for accelerating the achievement of our goal of rapidly developing potentially curative therapies. The potential application of CRISPR/Cas9 is extremely broad, and we plan to continue to identify partners who can contribute meaningful resources and insights to our programs and allow us to more rapidly expand our impact to broader patient populations. Our partnership focusing on CAR T cells with Novartis, an industry leader with one of the most advanced clinical CAR T cell programs, exemplifies this strategy.

Grow Our Leadership Position in the Field of Gene Editing. We are committed to broadening our capabilities to remain at the cutting edge of gene editing research. We will continue to invest internally in developing our innovative delivery modalities, technologies and tools to advance our therapeutic programs. We will also systematically explore accessing external technologies or opportunities to enhance our leadership position in developing innovative therapeutics.

Gene Editing

Gene editing is the precise and targeted modification of the genetic material of cells. Gene editing works by using an enzyme to make a cut at a particular sequence in the genome, followed by deletions, repairs or insertions of genetic material at the cut site facilitated by the cell's natural DNA repair mechanisms. Coupled with recent advances, including a greater understanding of genetic diseases and maturation of gene therapy and associated delivery technologies, the development of gene editing tools that can permanently and precisely edit DNA may enable the development of therapies that can address, and potentially cure, the cause of DNA-based diseases.

Accordingly, we believe that gene editing has the potential to treat a broad range of diseases not adequately addressed by more traditional therapeutic modalities such as small molecules and biologics. Given its permanent effects on the target DNA in question, gene editing could potentially cure a disease with a single treatment course as opposed to the multi-treatment or chronic dosing regimens often seen with traditional modalities, which typically have transient effects and may require life-long treatment. Additionally, unlike gene therapy, which typically involves introducing a copy of a gene into a patient's cells, gene editing has the potential to make permanent, precise changes directly to the target gene in its normal location, repairing the underlying genetic mutation. This attribute may provide a significant competitive edge over gene therapy, as gene editing can yield a result close to or identical to the normal biological system in addition to addressing a broader spectrum of diseases.

Earlier-generation gene editing methods such as zinc finger nucleases (ZFNs) and transcription activator-like effector nucleases (TALENs) use pairs of synthetic proteins engineered to recognize specific DNA sequences. While these systems have contributed to the clinical development and regulatory pathway for gene editing therapies, their development is relatively complex and costly because each synthetic protein may have variable cleavage activity and can be challenging and time consuming to manufacture because both proteins in the pair must be redesigned for each new target DNA sequence.

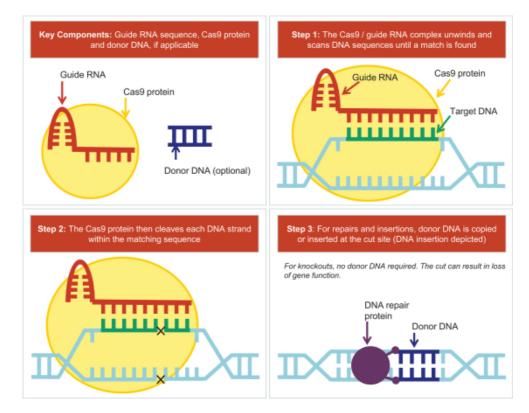
About CRISPR/Cas9

One of our co-founders and current scientific advisors, Dr. Rodolphe Barrangou, and other researchers originally characterized CRISPR/Cas systems as naturally occurring defense mechanisms in various bacterial species that protect against foreign DNA. In 2012, another one of our co-founders and current scientific advisors, Dr. Jennifer Doudna, and her colleagues published a paper in the journal *Science* describing the use of CRISPR/Cas9 as a gene editing tool. Following Dr. Doudna's pioneering work, researchers were able to demonstrate the simplicity and versatility of the CRISPR/Cas9 system by quickly applying the system in a variety of contexts to

better understand biological mechanisms and investigate disease models, resulting in more than 2,600 published papers since 2012.

Generally, CRISPR/Cas systems include one or more proteins that cleave DNA guided by an RNA guide sequence, pieces of RNA that both recognize specific DNA sequences and activate the cleaving activity of the Cas proteins. In the original bacterial systems, arrays of RNA sequences that recognize foreign DNA are sometimes referred to as clustered regularly interspaced short palindromic repeats, or CRISPRs, while certain proteins have been named as numbered CRISPR associated, or Cas, proteins. Currently, the simplest and most versatile type of CRISPR/Cas system uses the Cas9 protein as the DNA cutting enzyme, as described in Dr. Doudna's seminal paper.

Two basic components of the CRISPR/Cas9 gene editing system are the Cas9 protein and a guide RNA sequence that recognizes and directs the Cas9 to a specific target DNA sequence. The system edits DNA as follows:



Because an RNA sequence complementary to any DNA sequence can be rapidly designed and synthesized, a CRISPR/Cas9 system can be efficiently and specifically reprogrammed by changing only the guide RNA sequence, without any need to modify the cutting protein. The simplicity of programming the CRISPR/Cas9 system, coupled with its efficiency and flexibility, opens the door to a wide range of *in vivo* and *ex vivo* therapeutic applications, including the potential to apply an approach in which multiple genes are edited simultaneously to target more complex multi-gene or polygenic disorders.

We believe that CRISPR/Cas9 offers significant potential benefits over other gene editing methods, including:

- higher selectivity and cleavage efficiency;
- simpler tools allowing for rapid scaling and optimization;

- more efficient path to achieve preclinical proof-of-concept;
- broader applicability to *in vivo* and *ex vivo* therapies;
- greater potential for single curative treatment;
- greater ability to address almost any site in the genomes; and
- ability to target multiple DNA sites simultaneously.

The CRISPR/Cas9 system allows us to make three general types of edits: knockouts, repairs and insertions. Different diseases can be addressed using one or more of these editing strategies, depending on the particular genetic defect and the spectrum of genetic defects within a patient population.

Type of Edit	Description	Mechanism of Action	Example Indications
Knockout	 Edits that cause loss of function Can be applied to genes that make harmful proteins or disease-causing viruses 	 CRISPR/Cas9 engineered to make: A single cut in a gene to promote addition or deletion of short pieces of DNA, or two cuts in close proximity to delete a fragment of DNA As a result, the gene is disrupted and the protein is either not made or is non- functional 	Hepatitis B Virus Alpha-1 Antitrypsin Deficiency Some Inborn Errors of Metabolism
Repair	 Edits that repair disease- associated gene mutation(s) Can be applied to single point mutation or mutations restricted to a small region of DNA 	 CRISPR/Cas9 engineered to make: At least one cut at the target site, delivered with a short, single-stranded DNA donor template containing the correct sequence Cell repairs DNA break by filling in the gap with the corrected sequence from the donor template Results in expression of the corrected protein 	Alpha-1 Antitrypsin Deficiency Several Inborn Errors of Metabolism Cystic Fibrosis
Insertion	 Edits that correct a disease- associated gene Can be applied to insert a functional gene or replace part of a gene where mutations are distributed across a large region of DNA 	 CRISPR/Cas9 engineered to make: At least one cut at the target site, delivered with a large, double-stranded DNA donor template containing the correct sequence Cell repairs DNA break by inserting the donor sequence Results in expression of the corrected or functional protein 	 Several Inborn Errors of Metabolism Cystic Fibrosis

Our Pipeline

To accelerate the development and commercialization of CRISPR/Cas9-based products in multiple therapeutic areas, we are targeting sentinel indications using *in vivo* and *ex vivo* approaches to demonstrate proof-of-concept of the various facets of our technology, including the type of edit and CRISPR/Cas9 selectivity and efficiency. The learnings we gain from each indication will pave the way for rapid expansion of our pipeline by allowing us to target subsequent indications that use the same or analogous delivery vehicles, guide structures and types of edits.

We believe that effective delivery methods will be important for the clinical success of the CRISPR/Cas9 system. Our approach is to undertake a parallel effort on both *in vivo* and *ex vivo* delivery that leverages nearly two decades of research and development in nucleic acid therapeutics and capitalizes on currently available, clinically and preclinically validated technologies, while developing next-generation delivery methods optimized for the CRISPR/Cas9 system.

In Vivo Pipeline

Our sentinel *in vivo* indications initially target chronic liver diseases, including HBV, AATD and IEMs. Our initial efforts on *in vivo* delivery focus on the use of LNPs for delivery of the CRISPR/Cas9 complex to the liver. LNPs encapsulate the therapeutic material, providing it with stability, improved pharmacologic properties and controlled circulation time.

We see multiple advantages of using LNPs as our initial *in vivo* delivery vehicles, particularly as optimized by us for delivery of the CRISPR/Cas9 system. Certain LNPs have demonstrated efficacy, safety and favorable tolerability and are currently used as a delivery system for therapeutic small interfering RNA, or siRNA, as well as therapeutic messenger RNA, or mRNA. mRNA is RNA that encodes proteins, while siRNA is RNA that can interfere with the function of mRNA. There are currently several LNP/siRNA programs in the clinic, with the most advanced in Phase III development. For CRISPR/Cas9-based therapies, where potentially only one or few treatment courses are needed, LNPs have the potential to show a more favorable safety profile when compared to therapeutic modalities like siRNAs where chronic dosing is needed. With our team's expertise in developing LNPs, we expect to be able to readily translate the LNPs that we are using for our preclinical development to clinical development in humans. We are currently evaluating various methods to deliver CRISPR/Cas9 components *in vivo* using LNPs, for example, Cas9 mRNA or Cas9 protein with guide RNA. We expect to have this data in 2016 to determine the optimal path forward.

Hepatitis B Virus Program (Knockout Strategy)

Hepatitis B is an infection of the liver caused by HBV which can progress from acute to chronic infection in approximately 5-10% of infected adults. Chronic HBV can result in long-term health problems, including liver damage, liver failure, liver cancer or even death. Chronic HBV affects approximately 240 million people globally and contributes to an estimated 786,000 deaths each year. In the United States, an estimated 700,000 to 1.4 million persons have chronic HBV, with 2,000 to 4,000 HBV-related deaths per year.

Limitations of Current Treatment Options

There is a clear unmet need for patients with chronic HBV. The current treatment options, which include interferons and nucleos(t)ide analogs, primarily control viral replication but rarely eradicate the virus. Additionally, different genotypes of HBV have variable responses to existing treatments. In the United States, despite the large pool of diagnosed HBV patients, many patients do not receive treatment. Current treatments are typically life-long with risks of long-term side effects.

The persistence of chronic HBV results from a form of the virus that is found in the host nucleus known as cccDNA, which serves as a template for viral replication. It also acts as a reservoir of the virus, which can become reactivated and re-infect that patient. Evidence shows that the presence of cccDNA is a major reason that HBV cannot be eliminated in most patients. There are currently no approved therapies that specifically eradicate cccDNA from infected patients.

Our Solution

We believe that treatment of HBV with a CRISPR/Cas9-based therapeutic has the potential to cure the disease as it could eradicate cccDNA reservoirs with one or a few treatment courses. For this therapeutic program, we intend to use a knockout strategy to destroy or render inactive the copies of HBV cccDNA in infected human cells. This therapy could offer a major improvement over existing treatment options that are life-long and do not cure the disease. We believe it is also possible that a common treatment solution can be developed for all genotypes of HBV because we can target portions of the cccDNA sequences that are the same across genotypes. In addition, there is potential to reduce viral resistance as the virus itself is eradicated.

According to published research studies, CRISPR/Cas9-mediated cuts can significantly reduce intracellular levels of cccDNA when tested *in vitro*. We believe we can use the CRISPR/Cas9 system to help eliminate the reservoirs of cccDNA in infected HBV patients. We intend to evaluate different knockout approaches to eliminate cccDNA *in vivo*, including cleaving the cccDNA in various individual or a combination of locations.

We have completed a bioinformatic analysis of potential CRISPR/Cas9 target sites in the HBV genome to select a set of guide RNAs, including several which can be effective across all HBV genotypes. We identified potential CRISPR/Cas9 target sites by examining the known sequences of HBV isolated from patients. We plan to use a cell line that produces infectious HBV particles as well as cccDNA to identify lead guide RNAs. The lead guide RNAs will then be assessed for their ability to prevent infection and propagation of HBV, and evaluated for off-target effects, in both cell and animal models of HBV. We are commencing *in vitro* proof-of-concept studies using our lead guide RNAs in the near term and expect to complete proof-of-concept studies in an HBV mouse model in 2016.

Clinical Development Pathway

Our expected clinical development path will initially establish evidence of safety and antiviral activity in patients infected with HBV. The key objective of this study will be to show that the therapy can be delivered safely to the patient, with a secondary objective of identifying early indicators of antiviral effect. We expect that the results of our preclinical studies and discussions with the U.S. Food and Drug Administration, or FDA, other global regulatory agencies and the HBV community, will be important for selecting the appropriate patients and endpoints for our clinical trials.

Alpha-1 Antitrypsin Deficiency Program (Knockout and Repair Strategies)

AATD is an inherited genetic disorder that may cause lung or liver disease. The lung disease may result in chronic obstructive pulmonary disease, or COPD, a progressive disease that causes substantial morbidity and mortality while the liver disease is characterized by inflammation of the liver. In the United States, an estimated 60,000 to 100,000 people have AATD, which is the result of a mutation in the SERPINA1 gene that normally produces secreted alpha-1 antitrypsin, or AAT, protein. AAT is a protease inhibitor that blocks the activity of various enzymes such as neutrophil elastase, which is an enzyme that fights infections, but when not adequately controlled by AAT, can attack normal tissues, such as lung tissue.

The most common form of AATD arises when a patient has a mutation in both copies of the SERPINA1 gene, which causes AAT to aggregate inside liver cells, or hepatocytes, rather than being secreted from the liver. The inability to secrete AAT leaves the lung unprotected from neutrophil elastase and can result in pulmonary disease. The pulmonary consequences of AATD can sometimes culminate in COPD. Estimates suggest that between 1% and 2% of all cases of COPD in the United States have AATD as the underlying cause. In some patients, AAT accumulates in the liver, causing liver inflammation and disease, which leads to liver damage and scarring and, in the most severe cases, liver failure or cancer. Liver disease associated with AATD is diagnosed from infancy to adulthood, whereas lung disease is most common in adult patients.

Limitations of Current Treatment Options

There is currently no cure for AATD. The most common form of treatment for AATD-related lung disease is intravenous augmentation therapy, or plasma protein replacement therapy, where patients are infused with donor plasma proteins enriched for AAT. The goal is to increase the levels of AAT circulating in the body to protect lung tissue from neutrophil elastase. Patients are infused weekly and require life-long treatment. The infused proteins slow, but do not cure, the pulmonary pathology. Existing treatment options also include standard forms of therapy for COPD, such as bronchodilators, anti-inflammatory agents and antibiotics, which only address disease symptoms. None of these treatments address the hepatic form of the disease, where in the most severe cases, liver transplantation may be needed.

Our Solution

We believe that we can apply the CRISPR/Cas9 technology to cure AATD by addressing the defective SERPINA1 gene. We intend to evaluate two editing approaches—a knockout and a repair. Our knockout program for AATD will be best suited for patients with AATD-associated liver disease, as there is currently no effective way to reduce the accumulation of mutated AAT in the liver. With this strategy, we intend to eliminate

production of the aberrant form of AAT by knocking out the mutated SERPINA1 gene with a Cas9-mediated cut. We believe this knockout will halt the production and accumulation of AAT in the liver but will not by itself address the lack of AAT circulation that leads to lung disease. Therefore, in this approach, we expect that patients with AATD-associated lung disease will be treated with plasma protein supplementation to achieve levels of the normal form of AAT to be active against the lung disease. Appropriate guide RNA selection will be important for achieving this knockout with high specificity and high efficiency. We have begun discovery efforts for the knockout approach and expect to complete proof-of-concept studies in mouse models in 2016.

We believe our repair approach for AATD will address the lung disease as well as the liver disease. With this strategy, we intend to correct the mutated SERPINA1 gene, which we believe will eliminate production of the aberrant form of AAT and also establish production of the normal protein in the liver. We believe this correction will reduce or eliminate liver inflammation and increase levels of normal circulating AAT, which should protect the lung from neutrophil elastase, thereby reducing or eliminating the need for plasma protein augmentation therapy. There is preclinical evidence that hepatocytes with normal AAT may possess a growth advantage over those that express the mutated form, suggesting that repair of only a limited number of hepatocytes might be sufficient to address this disease. We expect the progress of this program to follow our AATD knockout program. Depending on the results of our studies and potential development requirements and timelines, we may decide to pursue one or both of our knockout and repair programs in clinical development.

Clinical Development Pathway

For both our knockout and repair strategies, our first in-human studies will take place in a small number of patients with AATD. The key objective of these studies will be to show that the therapy can be delivered safely to the patient. A secondary objective will be to identify early indicators of efficacy, which may include reductions in levels of mutated AAT protein, increases in production of normal circulating AAT protein and the required tests for determining liver and lung function. We will also seek to observe whether we have achieved pre-determined levels of properly functioning AAT in the blood, which has been used historically as a biomarker for approval of augmentation therapy approaches. We expect that the results of our preclinical studies and discussions with the FDA, other global regulatory agencies and the AATD community will be important for selecting the appropriate patients and endpoints for our clinical trials.

Inborn Errors of Metabolism, or IEM, Program (Knockout, Repair and Insertion Strategies)

IEMs span a range of conditions, many severe or fatal, and frequently untreatable. Current treatment options for many IEMs are unsatisfactory and often include bone marrow or liver transplants, which pose the challenge of serious side effects including high risk of mortality in some cases. Individual IEMs are rare disorders, many having an incidence of fewer than 1 in 100,000 births. These diseases typically involve defects in single genes that code for enzymes that facilitate the metabolism of certain cellular components. Errors in these enzymes can result in accumulation of metabolic intermediates, which are molecules that are precursor compounds in the chemical pathway leading to final metabolic products, that are toxic or interfere with normal biology. We are evaluating a large set of candidate IEMs, including argininosuccinic lyase deficiency, ornithine transcarbamylase deficiency and maple syrup urine disease. Our selection criteria for our initial IEM indications include identifying diseases that originate in the liver, have well-defined mutations that can be addressed by a single knockout, repair or insertion approach, have readily measurable therapeutic endpoints with observable clinical responses, and for which there are no effective treatments. We expect to select a lead IEM indication based on *in vitro* data in 2016.

Ex Vivo Pipeline

Our sentinel *ex vivo* programs are in CAR T cell and HSC applications. Under our strategic collaboration with Novartis, our CAR T cell program is exclusive to Novartis. We retain the right to develop and commercialize certain of the HSC programs that we discover with Novartis while others will be proprietary to Novartis. Our *ex vivo* programs will help inform the broader applicability of CRISPR/Cas9 in other relevant

types of immune cells, such as NK cells and TILs, in addition to potential applications in other cell types such as induced pluripotent stem cells, mesenchymal stem cells and muscle satellite stem cells.

For our *ex vivo* programs requiring delivery to extracted cells such as HSCs or T cells, we initially plan to deliver the CRISPR/Cas9 complex by electroporation. In parallel with electroporation, we are exploring several newer technologies for delivery to cells *ex vivo*, such as membrane disruption via mechanical forces or modified chemical compositions outside the cells, which may provide advantages in delivery efficiency or cell viability.

CAR T Cell Program

CAR T cell therapies are currently being developed for blood cancers such as acute lymphoblastic leukemia, or ALL, acute myeloid leukemia, multiple myeloma and chronic lymphocytic leukemia. In CAR T cell therapy, naturally-occurring immune cells, specifically T cells, are modified *ex vivo* by inserting a chimeric antigen receptor, or CAR, into the T cells, thereby activating an immune response against cancer cells. CAR T cell products, including Novartis' CAR T cell candidate, CTL019, have shown clinical promise in addressing hematological malignancies such as ALL. While existing CAR T cell products have shown great clinical promise, they can benefit from the application of CRISPR/Cas9 in multiple ways.

- CRISPR/Cas9 could be used to create a universal donor CAR T cell by knocking out cell surface markers that cause a patient's immune system to recognize another person's cells as foreign. Allowing multiple patients to be treated using cells from a single donor could significantly streamline manufacturing and make CAR T cell therapy more widely accessible.
- · CRISPR/Cas9 could be used to modify immune checkpoint pathways, thus enhancing efficacy.
- CRISPR/Cas9 could be used to introduce the CAR into a precise location, as opposed to the current method involving semi-random integration, thus
 potentially improving the safety profile of the resulting cells.
- CRISPR/Cas9 could be used to knockout one or more of the proteins believed to be responsible for certain serious side effects that can result in dangerously high fevers or severe loss of blood pressure.

We could potentially combine two or more of these approaches to further enhance CAR T cell therapy.

HSC Program

HSCs are the stem cells from which all of the various types of blood cells originate. HSCs can fully repopulate a patient's blood system following transplantation of bone marrow, mobilized peripheral blood or cord blood, which contain HSCs. There are multiple potential opportunities for treating patients using engineered HSCs, including three common classes of blood-related disorders: hemoglobin disorders, such as sickle cell disease and beta thalassemia; primary immune deficiencies, such as X-linked severe combined immunodeficiency, or X-SCID; and bone marrow failures, such as Fanconi anemia. There are limited treatment options available for these types of blood disorders, and available options typically require chronic blood transfusions or bone marrow transplants. These procedures are associated with significant risk, including mortality. We believe the CRISPR/Cas9 system can be used to potentially provide curative benefits by correcting the underlying genetic defect in blood cells of patients with these disorders.

Challenges of developing stem cell products include the relatively low quantity of available cells for treatment and a limited ability to expand HSCs *ex vivo*. We expect to counter these challenges by employing a proprietary small molecule for HSC expansion to which Novartis has granted us rights. This small molecule could allow us to generate large numbers of HSCs for re-implantation in patients after editing. We expect that the application of this technology will improve the performance of the blood cell graft and improve patient outcomes and recovery times as more therapeutic cells can be administered.

We are pursuing a number of potential gene targets and therapeutic indications in collaboration with Novartis. Under our collaboration with Novartis, we and Novartis each have the right to designate a fixed number of HSC therapeutic targets during multiple selection windows, with Novartis having the right of first target

selection. Our selection criteria for development programs include, among others, disease severity, existing treatment options, delivery efficiency, the nature of the genetic edit required and the expected performance of cells modified by the procedure.

CAR T Cell and HSC Development Collaboration with Novartis

Under this collaboration, we received an upfront technology access payment from Novartis of \$10.0 million and are entitled to an additional \$40.0 million, in the aggregate, in additional technology access fees and research payments during the five-year collaboration term, subject to certain credits and adjustments in favor of Novartis. In addition, we are eligible to earn up to \$230.3 million in development, regulatory and sales-based milestone payments and mid single-digit royalties, in each case, on a per-product basis for the products developed by Novartis. For more information regarding our ongoing collaboration with Novartis, see the section entitled "—Collaborations—Novartis Institutes for BioMedical Research, Inc." appearing elsewhere in this prospectus for more information.

Future Development Opportunities

We believe our sentinel indications will provide us with broad experience across a variety of gene editing strategies that we can apply to selecting future therapeutic opportunities.

In Vivo

Future indications requiring delivery to tissues in organs beyond the liver will require more research and development work, particularly around generation of new viral delivery vectors. As we progress our sentinel liver programs, we are actively investigating multiple viral delivery vectors that will allow us to explore therapies for indications in these other tissues. One viral vector that we are evaluating, adeno-associated virus, or AAV, is already utilized in a gene therapy product approved in the European Union, or EU. While AAV has enough capacity to deliver a Cas9 protein and guide RNA, a second vector would be required for applications involving a larger DNA repair template. We believe that using a multi-vector system is feasible for effecting more complex repairs; however, we are also exploring alternative viral delivery systems including larger capacity vectors based on adenovirus, lentivirus and herpes simplex virus. In certain cases, these viral vectors can be modified to deliver nucleic acid material to specific cells or tissue types, allowing for customized delivery of CRISPR/Cas9 components to the cells needing repair. Given the variety of possible genetic targets for CRISPR/Cas9, we are currently evaluating the technologies of several academic groups and companies with expertise in each of these vector systems to determine the best delivery vehicle for different therapeutic indications. In choosing a vector for a particular application, we will consider factors including vector size, delivery specificity and efficiency, clinical safety, immunogenicity and manufacturing ability. Internally, we are developing CRISPR/Cas9 components and systems that we believe can be easily adapted to multiple viral vector systems.

One example of a potential future indication in this area is CF. CF is the most common and fatal inherited disease in the western world, associated with over 1,800 different mutations in the gene that encodes the cystic fibrosis transmembrane conductance regulator protein, and affects an estimated 70,000 patients worldwide. While certain mutations are beginning to be addressed by small molecule therapies, there are a large number of mutations for which there is no available therapy. The insertion of a large segment of corrected DNA which spans these mutations has the potential advantage of addressing a majority of these patients with a range of otherwise untreatable genetic mutations with a single therapeutic product. We may seek to advance a gene editing therapy for CF patients by applying the experience we obtain developing insertion edits for IEMs and viral vectors developed to target lung tissue.

Ex Vivo

We expect that our experience in CAR T cells will guide us in building a portfolio of additional *ex vivo* opportunities through our eXtellia division, enabling us to expand the application of CRISPR/Cas9 for immuno-oncology therapeutics beyond CAR T cells. The field of immuno-oncology is still emerging and rapidly developing. Immunologists continue to gain key insights about the regulation of the immune system, the role of

different cell types that elicit the immune response, pathways that govern the survival of cells and methods to manipulate cells for therapeutic purposes. We plan to apply this information to further expand our efforts in oncology.

We believe that we can further apply the experience we gain in immuno-oncology to autoimmune diseases, which result from the immune system recognizing a patient's own cells or proteins as foreign to the body. Autoimmune diseases can arise when Tregs have insufficient activity. Gene editing may be used to increase the activity of Tregs by targeting certain regulatory proteins.

While our initial focus is on CAR T cells and HSCs, under our Novartis collaboration, and immuno-oncology and autoimmune and inflammatory diseases under our eXtellia division, we plan to explore in eXtellia other cell types where we believe we can effectively apply CRISPR/Cas9 technology, such as pluripotent stem cells, mesenchymal stem cells and muscle satellite stem cells. We believe that we can apply CRISPR/Cas9 to modify these cells to produce therapeutically relevant proteins for the treatment of systemic disease upon reimplantation of the modified cells into patients. Advances in delivery technologies and CRISPR/Cas9 platform optimizations made through our sentinel *ex vivo* programs will facilitate development of any of these subsequent programs.

Collaborations

To accelerate the development and commercialization of CRISPR/Cas9-based products in multiple therapeutic areas, we have formed, and intend to seek other opportunities to form, strategic alliances with collaborators who can augment our leadership in CRISPR/Cas9 therapeutic development.

Novartis Institutes for BioMedical Research, Inc.

In December 2014, we entered into a strategic collaboration and license agreement with Novartis, focused on the development of new *ex vivo* CRISPR/Cas9-based therapies using CAR T cells and HSCs.

Under the terms of the collaboration, we and Novartis may research potential therapeutic, prophylactic and palliative *ex vivo* applications of our CRISPR/Cas9 platform in HSCs and CAR T cells. The collaboration is also governed by research plans for each of the HSC and CAR T cell programs that outline the parties' responsibilities under, anticipated timelines of and budgets for the programs, and is overseen by a joint steering committee, or JSC, formed by representatives from us and Novartis. Among other activities, the JSC reviews the collaboration program and forms subcommittees to evaluate and nominate the pool of potential research targets under and approve the research plans for the HSC and CAR T cell programs.

Within the HSC therapeutic space, Novartis may obtain exclusive rights to a limited number of HSC targets, to be chosen by Novartis in multiple selection windows. We have the right to choose a limited number of HSC targets for our exclusive development and commercialization per the specified selection schedule. Following these selections by Novartis and us, Novartis may obtain rights to research an additional limited number of HSC targets on a non-exclusive basis. Novartis is required to use commercially reasonable efforts to research, develop, and commercialize a specified number HSC products directed to each of their selected HSC targets.

We have also agreed to collaborate with Novartis on research activities for CAR T cell targets pursuant to the CAR T cell program research plan approved by the CAR T cell subcommittee of the JSC. After completion of the research activities contemplated by the CAR T cell program research plan, Novartis will assume sole responsibility for developing any products arising from that research plan and the costs and expenses of developing, manufacturing and commercializing selected research targets. Novartis is required to use commercially reasonable efforts to research, develop or commercialize at least one CAR T cell product directed to each of the selected CAR T cell targets.

In the last two years of the five-year collaboration term, Novartis will have the option to select a limited number of targets for research, development and commercialization of *in vivo* therapies using our CRISPR/Cas9 platform, on a non-exclusive basis. Following Novartis' selection of each *in vivo* target, Novartis may offer us the right to participate in the research and development of such targets, in which case an *in vivo* program research plan for such target will be entered into between us and Novartis. Novartis is required to use commercially reasonable efforts to research, develop and commercialize at least one *in vivo* product directed to each of their

selected *in vivo* targets. Novartis' *in vivo* target selections are subject to certain restrictions, including that the targets, or all targets within a limited number of organs: (i) have not already been reserved by us pursuant to our limited right to do so under the agreement; (ii) are not the subject of an existing out-license of our CRISPR/Cas9 platform to a third party; and (iii) are not the subject of ongoing or planned research and development by us.

During the collaboration term, with respect to the HSC and CAR T cell programs, and for as long as the applicable party continues to use commercially reasonable efforts to research, develop and commercialize the HSC, CAR T cell and *in vivo* products contemplated by the agreement, neither party may collaborate with a third party with regard to the activities contemplated by the HSC, CAR T cell or *in vivo* programs nor grant licenses to practice such party's intellectual property licensed under the agreement in the selected HSC or CAR T cell or *in vivo* field to a third party.

Under the agreement, we received an upfront technology access payment of \$10.0 million and are entitled to an additional \$40.0 million, in the aggregate, in additional technology access fees and research payments during the five-year collaboration term. In addition, we are eligible to earn up to \$230.3 million in development, regulatory and sales-based milestone payments and mid single-digit royalties, in each case, on a per-product basis for the products developed by Novartis.

We granted to Novartis a license to our CRISPR/Cas9 platform technology and Novartis granted us a non-exclusive license to its small molecule for HSC expansion and to its LNP platform technology for the purposes of performing activities contemplated by the collaboration. Our license grant to Novartis of our CRISPR/Cas9 platform technology, including a sublicense to certain platform rights licensed from Caribou, is exclusive in the HSC, CAR T cell and *in vivo* fields with respect to each target selected by Novartis pursuant to the agreement and the research plan as long as Novartis continues to use commercially reasonable efforts to research, develop, and commercialize products directed to such targets. Upon the expiration of the collaboration term, Novartis shall have the option to access and obtain a non-exclusive license to our CRISPR/Cas9 platform technology to research, develop and commercialize potential therapeutic, prophylactic and palliative products and services for a limited number of certain approved targets selected by Novartis, exercisable upon written notice to us within a specified time after the expiration of the collaboration term. Such approved targets are subject to certain restrictions, including that the targets may not have been already reserved by us pursuant to our limited right to do so under the agreement, may not be the subject of an existing out license of our CRISPR/Cas9 platform to a third party and may not be the subject of ongoing or planned research and development by us. This non-exclusive license will have a term of five years commencing upon the completion of the technology transfer by us enabling Novartis to practice such licensed rights, and Novartis may not select more than a specified number of approved targets in each year of this license term.

Intellectual property developed out of the collaboration related to our CRISPR/Cas9 platform will be owned solely by us, while all other intellectual property developed out of the collaboration, including intellectual property covering products arising from the collaboration, will be jointly owned by us and Novartis.

The collaboration term ends in December 2019. The term of the agreement expires on the later of (i) the expiration of Novartis' payment obligations under the agreement and (ii) the date of expiration of the last-to-expire of the patent rights licensed to us or Novartis under the agreement. We may terminate the agreement if Novartis or its affiliates institute a patent challenge against our intellectual property rights, and all improvements thereto, licensed to Novartis under the agreement. Novartis may terminate the agreement, without cause, upon 90 days' written notice to us subject to certain conditions, including its payment of any accrued and future obligations as if the collaboration had continued through December 2019. Novartis may terminate the agreement if the owners or licensees of U.S. patent 8,697,359 bring a suit against Novartis on or before December 31, 2017 claiming that the activities specifically contemplated by the collaboration research plans infringe an independent claim of such patent. Either party may terminate the agreement in the event of the other party's uncured material breach or bankruptcy—or insolvency-related events.

Potential Future Collaborations

We view strategic partnerships as important drivers for helping accelerate our goal of rapidly treating patients. The potential application of CRISPR/Cas9 is extremely broad, and we plan to continue to identify partners who can contribute meaningful resources and insights to our programs and allow us to more rapidly expand our impact to broader patient populations. In forming these partnerships, we believe we will be able to more rapidly expand our impact to broader patient populations.

Intellectual Property

We believe we are well positioned in terms of our intellectual property because we:

- have built, and intend to expand, a broad worldwide portfolio of intellectual property in areas relevant to the development and commercialization of human therapeutic products using CRISPR/Cas9 technology;
- · protect our intellectual property by maintaining trade secrets relating to our proprietary technology innovations and know-how; and
- intend to take additional steps, where appropriate, to further protect our intellectual property rights, including, for example, through the use of copyright protection and regulatory protection available via orphan drug designations, data exclusivity, market exclusivity, and patent term extensions.

Our licensed patent portfolio encompasses foundational filings on the use of CRISPR/Cas9 systems for gene editing, improvement modifications of these CRISPR systems, LNP technologies for delivering protein/nucleic acid complexes and RNA into cells, and cell expansion technology relevant to stem cell-based therapies. We access these patent estates through licenses from Caribou Biosciences, Inc., or Caribou, and Novartis. We also actively apply for, maintain, and plan to defend and enforce, as needed, our internally developed and externally licensed patent rights. Furthermore, we continue to search for and evaluate opportunities to in-license intellectual property relevant to our targeted therapeutic programs and to develop and acquire new intellectual property in collaboration with third parties.

Our portfolio of patent rights includes the following:

Caribou Biosciences In-Licensed Intellectual Property

In July 2014, we entered into a license agreement with Caribou, as subsequently amended and supplemented, for an exclusive, worldwide, royalty-free license for human therapeutic, prophylactic, and palliative uses, except for anti-fungal and anti-microbial uses, defined in the license agreement as our field of use, of any CRISPR/Cas9-related patents and applications owned, controlled or licensed by Caribou as well as companion diagnostics to our product or product candidates. The license agreement also includes exclusive rights in our field of use to any CRISPR/Cas9-related intellectual property developed by Caribou between July 16, 2014 and, at least, July 16, 2016. The agreement further includes a non-exclusive research license to conduct research and development on product candidates and products. The Caribou licensed patent portfolio includes several U.S. and foreign patents and patent applications owned by The Regents of the University of California and the University of Vienna, as well as U.S. and foreign patents and patent applications owned by Pioneer Hi-Bred and its affiliates. We have the right to grant sublicenses to the Caribou licensed patent portfolio to third parties in our field of use. Caribou retains the right to practice the licensed intellectual property in all other fields, including for its own specific therapeutics purposes, provided it does not pertain to the application of CRISPR/Cas9 technology to the development of products in our field of use.

Pursuant to a services agreement entered into with Caribou in parallel with the license agreement, we are also receiving two years of research and development services from Caribou. Under the services agreement's research plan, Caribou primarily focuses on the improvement and further development of the CRISPR/Cas9 system and its components. Any intellectual property developed under the services agreement is owned by Caribou and is included in, and subject to the terms of, our license agreement with Caribou.



In relation to our founding, we issued Caribou 8,110,599 shares of our junior preferred stock. We are paying Caribou \$5.0 million over the term of the twoyear services agreement; and have agreed to pay 30.0% of Caribou's patent prosecution, filing, and maintenance costs for the intellectual property included in the license agreement amounting to a total of \$1.1 million paid through December 31, 2015. We also granted Caribou an exclusive, royalty-free, worldwide license, with the right to sublicense, to any CRISPR/Cas9 patents, patent applications and know-how in Caribou's retained fields of use owned or developed by us between July 16, 2014 and, at least, July 16, 2016. Caribou, which is obligated to pay a portion of our patent filing, prosecution and maintenance costs for any such licensed intellectual property, also has an option to sublicense any CRISPR/Cas9 intellectual property in-licensed by us for uses and activities in its retained field of use.

The Caribou license agreement grants us sublicenses in our field of use to intellectual property in-licensed by Caribou from The Regents of the University of California and the University of Vienna, as well as intellectual property from Wageningen University. Further, under the license agreement, we have an option to sublicense for our field of use any new intellectual property in-licensed by Caribou through, at least, July 16, 2016. In July 2015, we exercised our option to sublicense a portfolio in-licensed by Caribou from Pioneer Hi-Bred International, according to the terms described below.

The term of the Caribou license is until the expiration of the last-to-expire patent right that is licensed to either party. We must use commercially reasonable and diligent efforts to research, develop, manufacture and commercialize at least one product. Either party may terminate the agreement in the event of the other party's uncured material breach, bankruptcy or insolvency-related events, or breach of its obligations with respect to the included in-licenses. The license agreement with Caribou also gives us access, in our field of use, to Caribou internally developed IP. Since March 2013, Caribou has filed over 40 patent applications in the United States and internationally that relate to the CRISPR/Cas platform, including modified and improved CRISPR/Cas9 systems or components, and methods of use. We cannot ensure that these applications will lead to issued claims that cover our products or activities. Any patents that grant from these applications will expire in or after 2034, assuming payment of necessary maintenance fees.

The Regents of the University of California and the University of Vienna IP

The Regents of the University of California and the University of Vienna, which we collectively refer to as UC/Vienna, co-own a worldwide patent portfolio with Dr. Emanuelle Charpentier that covers methods of use and compositions relating to engineered CRISPR/Cas9 system for, among other things, cleaving or editing DNA and altering gene product expression, in non-bacterial organisms, including humans. We refer to this co-owned worldwide patent portfolio as the UC/Vienna/Charpentier patent application. The earliest claimed priority date for this patent family is May 25, 2012. As of February 29, 2016, this family does not yet contain any issued patents in the United States, but claims have been found allowable pending interference proceedings described elsewhere in this prospectus. Any patents that ultimately issue from this family and are appropriately maintained will expire in or after 2033.

Caribou entered into an exclusive, worldwide license in all fields, with the right to sublicense, for this patent family with UC/Vienna in April 2013 under UC/Vienna ownership rights. Caribou's license remains in effect for the life of the last-to-expire patent or last-to-be-abandoned patent application licensed, whichever is later. Through our license agreement with Caribou, we have an exclusive sublicense to UC/Vienna's interest in this foundational CRISPR/Cas9 patent family for use in human therapeutics, except for anti-fungal and anti-microbial uses. In certain jurisdictions outside the United States, such as Canada and countries in the European Union, there are various limitations on or conditions to the ability of one co-owner to use, assign, license or enforce its patent rights without the consent of all other co-owners. Accordingly, because we do not yet have Dr. Charpentier's consent to our sublicense from UC/Vienna, we may be subject to these limitations in the applicable foreign jurisdictions. In addition, co-owners from whom we do not yet have a license may raise claims surrounding inventorship or ownership of patents that ultimately issue from this patent family, potentially resulting in issued patents to which we would not have rights our existing license. For products covered by this license and their companion diagnostics, we will owe low single-digit royalties on net sales. In addition, we may be subject to milestone payments of \$0.1 million upon the first filing of an investigational new drug application, a total of \$0.5 million for Phase II and Phase III clinical trials, \$0.5 million to \$1.0 million for each of the first

three approved new drug applications or biologics license applications in the United States, and \$0.2 million for each of the first three approved indications in Europe. Caribou has the right to terminate its agreement with UC/Vienna at any time or the agreement may be terminated due to an uncured material breach. We cannot guarantee that Caribou will maintain the UC/Vienna license for its full term. Should the license between Caribou and UC/Vienna be terminated for any reason, any compliant Caribou sublicenses as of the termination date will remain in effect and will be assigned to UC/Vienna in place of Caribou. Specifically, if we are in compliance with our obligations under our sublicense and Caribou and UC/Vienna terminate their agreement, we would become UC/Vienna's direct licensee instead of Caribou.

On April 13, 2015, UC/Vienna and Dr. Charpentier jointly filed a request with the United States Patent and Trademarks Office, or USPTO, asking that an interference be declared between the UC/Vienna/Charpentier patent application and certain patents issued to the Broad Institute, Massachusetts Institute of Technology and the President and Fellows of Harvard College, which we collectively refer to as the Broad Institute patent family, that claim aspects of CRISPR/Cas9 systems and methods to edit genes in eukaryotic cells, including human cells. The Broad Institute patent family includes, for example, US 8,697,359, issued on April 15, 2014. The earliest claimed priority date for the Broad Institute patent family is December 12, 2012. On January 11, 2016, the Patent Trial and Appeal Board, or PTAB, of the USPTO declared an interference involving the UC/Vienna/Charpentier application and 12 Broad issued patents. The USPTO named the UC/Vienna/Charpentier group as the senior party in the interference. In an interference proceeding, the senior party is presumed to be the first inventor, while the junior party has the burden of proving earlier invention. The PTAB could take up to 24 months or more to render a final decision, and its decision may subsequently be appealed to the U.S. Court of Appeals for the Federal Circuit. We cannot guarantee that UC/Vienna and Dr. Charpentier will prevail in the interference proceeding or obtain issued claims generally covering the use of the CRISPR/Cas9 gene editing system in humans.

Pioneer Hi-Bred International (DuPont Company) IP

Pioneer Hi-Bred and its affiliates, including the DuPont Company, have exclusively licensed to Caribou on a worldwide basis various patent families relating to CRISPR/Cas systems, components and methods of use generally and CRISPR/Cas9 specifically in certain fields, which include Intellia's field of use under our license agreement with Caribou. In July 2015, we exercised our option under the license agreement with Caribou to exclusively sublicense these Pioneer patent families in our field of use. The license from Pioneer to Caribou will expire upon the expiration, abandonment or invalidation of the last patent or patent application licensed from Pioneer to Caribou.

The sublicense is worldwide, exclusive and royalty-free, with a one-time \$0.6 million aggregate milestone payment for activities through Phase III clinical trials for a first therapeutic product and \$0.5 million to \$1.0 million for each of the first three new drug applications or biologics license applications filed. The license from Pioneer to Caribou is currently exclusive. Pioneer may, at its option, convert the license to non-exclusive on or after April 1, 2016, if certain events have not happened by that time. These events are not within our control and there is no certainty that the events will occur prior to April 1, 2016 or, even if the events have not occurred, if or when Pioneer will exercise its option to convert the license to non-exclusive.

The licensed Pioneer portfolio includes a family of applications filed by Vilnius University that discloses the components of a CRISPR/Cas9 system required for gene editing in non-bacterial organisms. Any patents obtained from this family will expire in or after 2033, assuming payment of necessary maintenance fees. We cannot ensure that these applications will lead to issued claims that cover our products or activities.

Wageningen University IP

Our license agreement with Caribou also includes exclusive access to a patent family from the Wageningen University relating to CRISPR/Cas systems, which has been assigned from Wageningen University to Caribou. The family claims priority to a December 30, 2011 application, which discloses various Cas proteins and

CRISPR/Cas systems. If we develop and sell a product covered by issued patents in this family, we will owe royalties of less than one percent on net sales. We cannot be certain whether patents will issue from these applications that cover our products.

Novartis In-Licensed Intellectual Property

Our December 2014 strategic collaboration and license agreement with Novartis grants us worldwide, non-exclusive, royalty-free rights to a portfolio of 14 Novartis patent families containing pending applications in the United States and internationally relating to LNP compositions, methods of use and modified nucleic acids. The license permits us to use the Novartis LNPs to develop therapeutic, prophylactic, and palliative CRISPR-based *in vivo* products. The earliest claimed priority dates for the licensed patent families range from December 2009 through June 2013, and accordingly will expire by or after December 2030. The term of the license continues until the expiration of the last-to-expire patent right that is licensed to either party. If we attempt to challenge any of the patents in the licensed families, Novartis may terminate the license on a patent-by-patent basis. We cannot guarantee that our products or delivery methods will be covered by issued claims in these families.

In addition, Novartis has also granted us rights to use its proprietary small molecule for HSC expansion. Our rights to this technology are subject to a singledigit royalty based on whether we develop and commercialize the relevant product solely or in collaboration with another third party.

Under our agreement with Novartis, any platform intellectual property developed as part of the collaboration is owned solely by us, while all other intellectual property developed out of the collaboration, including product-based intellectual property, is jointly owned by us and Novartis. We cannot guarantee that intellectual property filed based on collaboration data will result in issued claims covering our products or delivery methods. Under our agreement with Novartis, we have also granted Novartis a sublicense to the intellectual property we license under our agreement with Caribou for the Novartis-selected HSC and CAR T cells products, and *in vivo* products if applicable, with such sublicense being exclusive as long as Novartis uses commercially reasonable efforts to develop and commercialize those products.

Manufacturing

We currently have no commercial manufacturing or cell processing capabilities. We plan to rely on qualified third-party organizations to produce or process bulk compounds, formulated compounds, viral vectors or engineered cells for IND-supporting activities and early stage clinical trials. We expect that commercial quantities of any compound, vector, or engineered cells that we may seek to develop will be manufactured in facilities and by processes that comply with FDA and other regulations. At the appropriate time in the product development process, we will determine whether to establish manufacturing facilities or continue to rely on third parties to manufacture commercial quantities of any products that we may successfully develop.

Competition

The biotechnology industry is extremely competitive in the race to develop new products. While we believe we have significant competitive advantages with our industry-leading expertise in gene editing, clinical development expertise and dominant intellectual property position, we currently face and will continue to face competition for our development programs from companies that use gene editing or gene therapy development platforms and from companies focused on more traditional therapeutic modalities such as small molecules and antibodies. The competition is likely to come from multiple sources, including larger pharmaceutical companies, biotechnology companies and academia. Many of these competitors may have access to greater capital and resources than us. For any products that we may ultimately commercialize, not only will we compete with any existing therapies and those therapies currently in development, we will have to compete with new therapies that may become available in the future.

Competitors in our efforts to provide genetic therapies to patients can be grouped into at least three sets based on their product discovery platforms:

• gene editing companies focused on CRISPR/Cas9 including: CRISPR Therapeutics, Inc., Editas Medicine, Inc. and Tracr Hematology Limited;

- other gene editing companies including: bluebird bio, Inc., Cellectis S.A., Poseida, Inc., Precision BioSciences, Inc., and Sangamo BioSciences, and
- gene therapy companies developing ex vivo therapies including: bluebird bio, Inc., Cellectis S.A., and Juno Therapeutics, Inc.

Our competitors will also include companies that are or will be developing other gene editing methods as well as small molecules, biologics and nucleic acid based therapies for the same indications that we are targeting with our CRISPR/Cas9-based therapeutics.

Government Regulation and Product Approval

We are subject to extensive regulation. We expect our future product candidates to be regulated as biologics. Biological products are subject to regulation under the Federal Food, Drug, and Cosmetic Act, or FD&C Act, and the Public Health Service Act, or PHS Act, and other federal, state, local and foreign statutes and regulations. Both the FD&C Act and the PHS Act and their corresponding regulations govern, among other things, the testing, manufacturing, safety, efficacy, labeling, packaging, storage, record keeping, distribution, reporting, advertising and other promotional practices involving biological products. Before clinical testing of biological products in the United States may begin, we must submit an investigational new drug application, or IND, to the FDA, which reviews the clinical protocol, and the IND must become effective before clinical trials may begin. In some instances, we must also submit our protocols to the National Institutes of Health, or NIH, through its Recombinant DNA Advisory Committee, or RAC, for review before initiating clinical testing.

Biologic products must be approved by the FDA before they may be legally marketed in the United States and by the appropriate foreign regulatory agencies before they may be legally marketed in foreign countries. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources and we may not be able to obtain the required regulatory approvals.

Within the FDA, the Center for Biologics Evaluation and Research, or CBER, regulates biologic products. Proposed human clinical trials involving nucleic acid transfer conducted at, or sponsored by, institutions receiving NIH funding for research with recombinant or synthetic nucleic acid molecules are also subject to review by the NIH RAC. Moreover, certain therapeutic protocols that raise important scientific, safety, medical, ethical, or social issues are discussed at the RAC's quarterly public meetings. While the FDA has not provided specific guidance on gene editing in humans, it has published guidance documents related to, among other things, gene therapy products in general, their preclinical assessment, observing subjects involved in gene therapy clinical trials for delayed adverse events, potency testing, and chemistry, manufacturing and control information in gene therapy INDs.

Although the FDA has not yet approved any human gene therapy product for sale, it has provided guidance for the development of gene therapy products which may be relevant to gene editing products as well. For example, the FDA has established the Office of Cellular, Tissue and Gene Therapies, or OCTGT, within CBER, to consolidate the review of gene therapy and related products, and the Cellular, Tissue and Gene Therapies Advisory Committee, or CTGTAC, to advise CBER on its reviews. In addition, the FDA has issued a growing body of clinical guidelines, chemistry, manufacturing and control, or CMC, guidelines and other guidelines, all of which are intended to facilitate industry's development of gene therapy products. In 2012, the European Medicines Agency approved a gene therapy product called Glybera, which is the first gene therapy product approved by regulatory authorities anywhere in the Western world.

Ethical, social and legal concerns about gene-editing technology, gene therapy, genetic testing and genetic research could result in additional regulations restricting or prohibiting the processes we may use. Federal and state agencies, congressional committees and foreign governments have expressed interest in further regulating biotechnology. More restrictive regulations or claims that our products are unsafe or pose a hazard could prevent us from commercializing any product candidates. New government requirements may be established that could delay or prevent regulatory approval of our product candidates under development. It is impossible to predict

whether legislative changes will be enacted, regulations, policies or guidance changed, or interpretations by agencies or courts changed, or what the impact of such changes, if any, may be.

U.S. Biological Products Development Process

The FDA approves biologics through the Biologics License Application, or BLA, process before they may be legally marketed in the United States. This process generally involves the following:

- completion of extensive nonclinical, sometimes referred to as preclinical laboratory tests, and preclinical animal studies and applicable requirements for the humane use of laboratory animals and formulation studies in accordance with applicable regulations, including good laboratory practices, or GLPs;
- submission to the FDA of an IND application, which must become effective before human clinical trials may begin;
- performance of adequate and well-controlled human clinical trials according to the FDA's regulations commonly referred to as good clinical practices, or GCPs, and any additional requirements for the protection of human research subjects and their health information, to establish the safety and efficacy of the proposed biological product for its intended use;
- submission to the FDA of a BLA for marketing approval that includes substantive evidence of safety, purity, and potency from results of nonclinical testing and clinical trials;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities where the biological product is produced to assess compliance
 with current Good Manufacturing Practices, or cGMPs, to assure that the facilities, methods and controls are adequate to preserve the biological product's
 identity, strength, quality and purity and, if applicable, the FDA's current good tissue practices, or cGTPs, for the use of human cellular and tissue
 products;
- positive results from potential FDA audit of the nonclinical study and clinical trial sites that generated the data in support of the BLA; and
- FDA review and approval, or licensure, of the BLA.

Before testing any biological product candidate in humans, the product candidate enters the preclinical testing stage. Preclinical tests, also referred to as nonclinical studies, include laboratory evaluations of product chemistry, toxicity and formulation, as well as animal studies to assess the potential safety and activity of the product candidate. The conduct of the preclinical tests must comply with federal regulations and requirements including GLPs.

Where a study involving the transfer of nucleic acids into humans is conducted at, or sponsored by, institutions receiving NIH funding for recombinant DNA research or synthetic nucleic acid molecules, prior to the submission of an IND to the FDA, a protocol and related documentation is submitted to and the study is registered with the NIH Office of Biotechnology Activities, or OBA, pursuant to the NIH Guidelines for Research Involving Recombinant DNA Molecules, or NIH Guidelines. Compliance with the NIH Guidelines is mandatory for investigators at institutions receiving NIH funds for research involving recombinant DNA, however many companies and other institutions not otherwise subject to the NIH Guidelines voluntarily follow them. The NIH is responsible for convening the RAC, a federal advisory committee that reviews research proposals involving human-gene transfer research and discusses, if needed, protocols that raise novel or particularly important scientific, safety or ethical considerations at one of its quarterly public meetings. The RAC decides whether a protocol raises issues that warrant further discussion at its quarterly meetings, and the OBA will notify the FDA of the RAC's decision regarding the necessity for full public review of a particular protocol. RAC proceedings and reports are posted to the OBA web site and may be accessed by the public.

The clinical trial sponsor must submit the results of the preclinical tests, together with manufacturing information, analytical data, any available clinical data or literature and a proposed clinical protocol, to the FDA as part of the IND. Some preclinical testing may continue even after the IND is submitted. The IND

automatically becomes effective 30 days after receipt by the FDA, unless the FDA places the clinical trial on a clinical hold within that 30-day time period. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. With gene therapy protocols, if the FDA allows the IND to proceed, but the RAC decides that full public review of the protocol is warranted, the FDA will request at the completion of its IND review that sponsors delay initiation of the protocol until after completion of the RAC review process. The FDA may also impose clinical holds on a biological product candidate at any time before or during clinical trials due to, among other reasons, safety concerns or non-compliance with regulatory requirements. If the FDA imposes a clinical hold, trials may not recommence without FDA authorization and then only under terms authorized by the FDA. Accordingly, we cannot be sure that submission of an IND will result in the FDA allowing clinical trials to begin, or that, once begun, issues will not arise that suspend or terminate such trials.

Clinical trials involve the administration of the biological product candidate to healthy volunteers or patients under the supervision of qualified investigators, generally physicians not employed by or under the study sponsor's control. Clinical trials are conducted under protocols detailing, among other things, the objectives of the clinical trial, dosing procedures, subject selection and exclusion criteria, and the parameters to be used to monitor subject safety, including stopping rules that assure a clinical trial will be stopped if certain adverse events should occur. Each protocol and any amendments to the protocol must be submitted to the FDA as part of the IND. Clinical trials must be conducted and monitored in accordance with the FDA's regulations comprising the GCP requirements, including the requirement that all research subjects provide informed consent. Further, each clinical trial must be reviewed and approved by an independent institutional review board, or IRB, at or servicing each institution at which the clinical trial will be conducted. An IRB is charged with protecting the welfare and rights of study participants and considers such items as whether the risks to individuals participating in the clinical trials are minimized and are reasonable in relation to anticipated benefits. The IRB also approves the form and content of the informed consent that must be signed by each clinical trial subject or his or her legal representative and must monitor the clinical trial until completed. Certain clinical trials also must be reviewed by an institutional biosafety committee, or IBC, a local institutional committee that reviews and all forms of research conducted at that institution involving recombinant or synthetic nucleic acid molecules. The IBC assesses the safety of the research and identifies any potential risk to public health or the environment and ensures that all research is conducted in compliance with NIH Guidelines.

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

- Phase I. The biological product candidate is initially introduced into healthy human subjects and tested for safety. In the case of some products for severe
 or life-threatening diseases, especially when the product may be too inherently toxic to ethically administer to healthy volunteers, the initial human
 testing is often conducted in patients.
- Phase II. The biological product candidate is evaluated in 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, optimal dosage and dosing schedule.
- Phase III. Clinical trials are undertaken to further evaluate dosage, clinical efficacy, potency, and safety in an expanded patient population at geographically dispersed clinical trial sites. These clinical trials are intended to establish the overall risk/benefit ratio of the product and provide an adequate basis for product approval and labeling.

Post-approval clinical trials, sometimes referred to as Phase IV clinical trials, may be conducted after initial marketing approval. These clinical trials are used to gain additional experience from the treatment of patients in the intended therapeutic indication, particularly for long-term safety follow-up. The FDA recommends that sponsors observe subjects for potential gene therapy-related delayed adverse events for a 15-year period, including a minimum of five years of annual examinations followed by ten years of annual queries, either in person or by questionnaire.

During all phases of clinical development, regulatory agencies require extensive monitoring and auditing of all clinical activities, clinical data, and clinical trial investigators. Annual progress reports detailing the results of the clinical trials must be submitted to the FDA. Written IND safety reports must be promptly submitted to the FDA, the NIH and the investigators for serious and unexpected adverse events, any findings from other trials, tests in laboratory animals or *in vitro* testing that suggest a significant risk for human subjects, or any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigator brochure. The sponsor must submit an IND safety report within 15 calendar days after the sponsor determines that the information qualifies for reporting. The sponsor also must notify the FDA of any unexpected fatal or life-threatening suspected adverse reaction within any specified period, if at all. The FDA or the sponsor or its data safety monitoring board may suspend a clinical trial at any time on various grounds, including a finding that the research subjects or patients are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's requirements or if the biological product candidate has been associated with unexpected serious harm to patients.

There are also requirements governing the reporting of ongoing clinical trials and completed clinical trial results to public registries. Sponsors of certain clinical trials of FDA-regulated products, including biologics, are required to register and disclose certain clinical trial information, which is publicly available at www.clinicaltrials.gov. Information related to the product, patient population, phase of investigation, study sites and investigators, and other aspects of the clinical trial is then made public as part of the registration. Sponsors are also obligated to discuss the results of their clinical trials after completion. Disclosure of the results of these trials can be delayed until the new product or new indication being studied has been approved.

Human therapeutic products based on gene-editing technology are a new category of therapeutics. Because this is a relatively new and expanding area of novel therapeutic interventions, there can be no assurance as to the length of the study period, the number of patients the FDA will require to be enrolled in the trials in order to establish the safety, purity and potency of human gene editing products, or that the data generated in these trials will be acceptable to the FDA to support marketing approval. The NIH and the FDA have a publicly accessible database, the Genetic Modification Clinical Research Information System, which includes information on gene transfer trials and serves as an electronic tool to facilitate the reporting and analysis of adverse events in these trials.

Concurrent with clinical trials, companies usually complete additional animal trials and must also develop additional information about the physical characteristics of the biological product candidate as well as finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. To help reduce the risk of the introduction of adventitious agents with use of biological products, the PHS Act emphasizes the importance of manufacturing control for products whose attributes cannot be precisely defined. The manufacturing process must be capable of consistently producing quality batches of the product candidate and, among other things, the sponsor must develop methods for testing the identity, strength, quality, potency and purity of the final biological product. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the biological product candidate does not undergo unacceptable deterioration over its shelf life.

U.S. Review and Approval Processes

After the completion of clinical trials of a biological product candidate, FDA approval of a BLA must be obtained before commercial marketing of the biological product. The BLA must include results of product development, laboratory and animal trials, human trials, information on the manufacture and composition of the product, proposed labeling and other relevant information. In addition, under the Pediatric Research Equity Act, or PREA, a BLA or supplement to a BLA must contain data to assess the safety and effectiveness of the biological product candidate 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. The Food and Drug Administration Safety and Innovation Act, or FDASIA, requires that a sponsor who is planning to

submit a marketing application for a drug or biological product that includes a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration submit an initial Pediatric Study Plan, or PSP, within sixty days after an end-of-Phase 2 meeting or as may be agreed between the sponsor and FDA. The initial PSP must include, among other things, an outline of the pediatric study or studies that the sponsor plans to conduct, including to the extent practicable study objectives and design, age groups, relevant endpoints and statistical approach, or a justification for not including such detailed information, and any request for a deferral of pediatric assessments or a full or partial waiver of the requirement to provide data from pediatric studies along with supporting information, along with any other information specified in FDA regulations. The FDA and the sponsor must reach agreement on the PSP. A sponsor can submit amendments to an agreed-upon initial PSP at any time if changes to the pediatric plan need to be considered based on data collected from nonclinical studies, early phase clinical trials, or other clinical development programs. The FDA may grant deferrals for submission of data or full or partial waivers. Unless otherwise required by regulation, PREA does not apply to any biological product for an indication for which orphan designation has been granted. The testing and approval processes require substantial time and effort and there can be no assurance that the FDA will accept the BLA for filing and, even if filed, that any approval will be granted on a timely basis, if at all.

Under the Prescription Drug User Fee Act, or PDUFA, as amended, each BLA must be accompanied by a user fee. The FDA adjusts the PDUFA user fees on an annual basis. According to the FDA's fee schedule, effective through September 30, 2015, the user fee for an application requiring clinical data, such as a BLA, is \$2,335,200. PDUFA also imposes an annual product fee for biologics (\$110,370) and an annual establishment fee (\$569,200) on facilities used to manufacture prescription biologics. Fee waivers or reductions are available in certain circumstances, including a waiver of the application fee for the first application filed by a small business. Additionally, no user fees are assessed on BLAs for products designated as orphan drugs, unless the product also includes a non-orphan indication.

Within 60 days following submission of the application, the FDA reviews a BLA submitted to determine if it is substantially complete before the agency accepts it for filing. The FDA may refuse to file any BLA that it deems incomplete or not properly reviewable at the time of submission and may request additional information. In this event, the BLA must be resubmitted with the additional information. The resubmitted application also is 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 of the BLA. The FDA reviews the BLA to determine, among other things, whether the proposed product is safe and potent, or effective, for its intended use, and has an acceptable purity profile, and whether the product is being manufactured in accordance with cGMP requirements to assure and preserve the product's identity, safety, strength, quality, potency and purity. The FDA may refer applications for novel biological products or biological products that present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and 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. During the biological product approval process, the FDA also will determine whether a Risk Evaluation and Mitigation Strategy, or REMS, is necessary to assure the safe use of the biological product candidate. If the FDA concludes a REMS is needed, the sponsor of the BLA must submit a proposed REMS; the FDA will not approve the BLA without a REMS, if required.

Before approving a BLA, the FDA will inspect the facilities at which the product is manufactured. The FDA will not approve the product unless it determines that the manufacturing processes and facilities are in compliance with cGMP and, if applicable, cGTP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving a BLA, the FDA will typically inspect one or more clinical sites to assure that the clinical trials were conducted in compliance with IND study requirements and cGCP requirements. To assure cGMP, cGTP and GCP compliance, an applicant must incur significant expenditure of time, money and effort in the areas of training, record keeping, production, and quality control.

Notwithstanding the submission of relevant data and information, the FDA may ultimately decide that the BLA does not satisfy its regulatory criteria for approval and deny approval. Data obtained from clinical trials are

not always conclusive and the FDA may interpret data differently than we interpret the same data. If the agency decides not to approve the BLA in its present form, the FDA will issue a complete response letter that usually describes all of the specific deficiencies in the BLA identified by the FDA. The deficiencies identified may be minor, for example, requiring labeling changes, or major, for example, requiring additional clinical trials. Additionally, the complete response letter may include recommended actions that the applicant might take to place the application in a condition for approval. If a complete response letter is issued, the applicant may either resubmit the BLA, addressing all of the deficiencies identified in the letter, challenge the determination set forth in the letter by requesting a hearing or withdraw the application.

If a product receives regulatory approval, the approval may be significantly limited to specific diseases and dosages or the indications for use may otherwise be limited, which could restrict the commercial value of the product. Further, the FDA may require that certain contraindications, warnings or precautions be included in the product labeling. The FDA may impose restrictions and conditions on product distribution, prescribing, or dispensing in the form of a REMS, or otherwise limit the scope of any approval. In addition, the FDA may require post marketing clinical trials, sometimes referred to as Phase IV clinical trials, designed to further assess a biological product's safety and effectiveness, and testing and surveillance programs to monitor the safety of approved products that have been commercialized.

One of the performance goals agreed to by the FDA under the PDUFA is to review 90% of standard BLAs in 10 months from the filing date and 90% of priority BLAs in six months from the filing date, whereupon a review decision is to be made. The FDA does not always meet its PDUFA goal dates for standard and priority BLAs and its review goals are subject to change from time to time. The review process and the PDUFA goal date may be extended by three months if the FDA requests or the BLA sponsor otherwise provides additional information or clarification regarding information already provided in the submission within the last three months before the PDUFA goal date.

Orphan Drug Designation

The FDA may grant Orphan Drug Designation to drugs intended to treat a rare disease or condition that affects fewer than 200,000 individuals in the United States, or if it affects more than 200,000 individuals in the United States, there is no reasonable expectation that the cost of developing and marketing the drug for this type of disease or condition will be recovered from sales in the United States. Orphan product designation must be requested before submitting a BLA. After the FDA grants orphan product designation, the identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. Orphan product designation does not convey any advantage in or shorten the duration of the regulatory review and approval process

In the United States, Orphan Drug Designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages and user-fee waivers. In addition, if a product receives the first FDA approval for the indication for which it has orphan designation, the product is entitled to orphan drug exclusivity, which means the FDA may not approve any other application to market the same drug for the same indication for a period of seven years, except in limited circumstances, such as a showing of clinical superiority over the product with orphan exclusivity or where the manufacturer with orphan exclusivity is unable to assure sufficient quantities of the approved orphan designated product. Competitors, however, may receive approval of different products for the indication for which the orphan product has exclusivity or obtain approval for the same product but for a different indication for which the orphan product exclusivity also could block the approval of one of our products for seven years if a competitor obtains approval of the same biological product as defined by the FDA or if our product candidate is determined to be contained within the competitor's product for the same indication or disease. If a drug or biological product designated as an orphan product receives marketing approval for an indication broader than what is designated, it may not be entitled to orphan product exclusivity.

Expedited Development and Review Programs

The FDA has a Fast Track program that is intended to expedite or facilitate the process for reviewing new biological products that meet certain criteria. Specifically, new biological products are eligible for Fast Track

designation if they are intended to treat a serious or life-threatening disease or condition and demonstrate the potential to address unmet medical needs for the disease or condition. Fast Track designation applies to the combination of the product and the specific indication for which it is being studied. The sponsor of a new biologic may request that the FDA designate the biologic as a Fast Track product at any time during the clinical development of the product, but ideally not later than the pre-BLA meeting. The FDA may consider for review sections of the marketing application for a Fast Track product on a rolling basis before the complete application is submitted, if the sponsor provides a schedule for the submission of the sections of the application, the FDA agrees to accept sections of the application and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the application.

Any product submitted to the FDA for marketing, including under a Fast Track program, may be eligible for other types of FDA programs intended to expedite development and review, such as priority review and accelerated approval. Any product is eligible for priority review if it treats a serious condition and, if approved, would provide a significant improvement in safety or effectiveness of the treatment, prevention, or diagnosis of that condition. The FDA will attempt to direct additional resources to the evaluation of an application for a new biological product designated for priority review in an effort to facilitate the review. Additionally, a product may be eligible for accelerated approval. Biological products studied for their safety and effectiveness in treating serious or life-threatening illnesses and that provide meaningful therapeutic benefit over existing treatments may be eligible for accelerated approval, which means that they may be approved on the basis of adequate and well-controlled clinical trials establishing that the product has an effect on a surrogate endpoint that is reasonably likely to predict a clinical benefit, or on the basis of an effect on a clinical endpoint other than survival or irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. As a condition of approval, the FDA may require that a sponsor of a biological product subject to accelerated approval perform adequate and well-controlled post-marketing clinical trials. In addition, the FDA currently requires as a condition for accelerated approval of promotional materials, which could adversely impact the timing of the commercial launch of the product. Fast Track designation, priority review and accelerated approval do not change the standards for approval but may expedite the development or approval process.

In addition, under the provisions of the Food and Drug Administration Safety and Innovation Act of 2012, or FDASIA, the FDA established a Breakthrough Therapy Designation, which is intended to expedite the development and review of products that treat serious or life-threatening diseases or conditions. A breakthrough therapy is defined as a drug that is intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the drug 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 designation includes all of the features of Fast Track designation, as well as more intensive FDA interaction and guidance. The Breakthrough Therapy Designation is a distinct status from both accelerated approval and priority review, but these can also be granted to the same product candidate if the relevant criteria are met. The FDA must take certain actions, such as holding timely meetings and providing advice, intended to expedite the development and review of an application for approval of a breakthrough therapy. All requests for breakthrough therapy designation will be reviewed within 60 days of receipt, and FDA will either grant or deny the request.

Fast Track designation, priority review, accelerated approval and breakthrough therapy designation do not change the standards for approval but may expedite the development or approval process. Where applicable, we plan to request Fast Track and Breakthrough Therapy Designation for our product candidates. Even if we receive one or both of these designations for our product candidates, the FDA may later decide that our product candidates no longer meets the conditions for qualification. In addition, these designations may not provide us with a material commercial advantage.

Post-Approval Requirements

Maintaining substantial compliance with applicable federal, state, and local statutes and regulations requires the expenditure of substantial time and financial resources. Rigorous and extensive FDA regulation of biological

products continues after approval, particularly with respect to cGMP requirements. We will rely, and expect to continue to rely, on third parties for the production of clinical and commercial quantities of any products that we may commercialize. Manufacturers of our products are required to comply with applicable requirements in the cGMP regulations, including quality control and quality assurance and maintenance of records and documentation. Other post-approval requirements applicable to biological products, include reporting of cGMP deviations that may affect the identity, potency, purity and overall safety of a distributed product, record-keeping requirements, reporting of adverse effects, reporting updated safety and efficacy information, and complying with electronic record and signature requirements. After a BLA is approved, the product also may be subject to official lot release. As part of the manufacturing process, the manufacturer is required to perform certain tests on each lot of the product before it is released for distribution. If the product is subject to official release by the FDA, the manufacturer submits samples of each lot of product to the FDA together with a release protocol showing a summary of the history of manufacture of the lot and the results of all of the manufacturer's tests performed on the lot. The FDA also may perform certain confirmatory tests on lots of some products, such as viral vaccines, before releasing the lots for distribution by the manufacturer. In addition, the FDA conducts laboratory research related to the regulatory standards on the safety, purity, potency, and effectiveness of biological products.

We also must comply with the FDA's advertising and promotion requirements, such as those related to direct-to-consumer advertising, the prohibition on promoting products for uses or in patient populations that are not described in the product's approved labeling (known as "off-label use"), industry-sponsored scientific and educational activities, and promotional activities involving the internet and social media platforms. Discovery of previously unknown problems or the failure to comply with the applicable regulatory requirements may result in restrictions on the marketing of a product or withdrawal of the product from the market as well as possible civil or criminal sanctions. Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process or after approval, may subject an applicant or manufacturer to administrative or judicial civil or criminal sanctions and adverse publicity. FDA sanctions could include refusal to approve pending applications, withdrawal of an approval, clinical hold, warning or untitled letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, mandated corrective advertising or communications with doctors, debarment, restitution, disgorgement of profits, or civil or criminal penalties. Any agency or judicial enforcement action could have a material adverse effect on us.

Biological product manufacturers and other entities involved in the manufacture and distribution of approved biological products are required to register their establishments with the FDA and certain other federal and state agencies, and are subject to periodic unannounced inspections by the FDA and certain other federal and state agencies for compliance with cGMP requirements and other laws. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP compliance. Discovery of problems with a product after approval may result in restrictions on a product, manufacturer, or holder of an approved BLA, including withdrawal of the product from the market. In addition, changes to the manufacturing process or facility generally require prior FDA approval before being implemented and other types of changes to the approved product, such as adding new indications and additional labeling claims, are also subject to further FDA review and approval.

U.S. Patent Term Restoration and Marketing Exclusivity

Depending upon the timing, duration and specifics of the FDA approval of the use of our product candidates, some of our U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, commonly referred to as the Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent restoration term of up to five years as compensation for patent term lost during product development and the FDA regulatory review process. However, patent term restoration cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date. The patent term restoration period is generally one-half the time between the effective date of an IND and the submission date of a BLA plus the time between the submission date of a BLA and the

approval of that application, except that the review period is reduced by any time during which the applicant failed to exercise due diligence. Only one patent applicable to an approved biological product is eligible for the extension and the application for the extension must be submitted prior to the expiration of the patent within a 60 day period from the date the product is first approved for commercial marketing. The U.S. PTO, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration. In the future, we may intend to apply for restoration of patent term for one of our currently owned or licensed patents to add patent life beyond its current expiration date, depending on the expected length of the clinical trials and other factors involved in the filing of the relevant BLA. However, there can be no assurance that any such extension will be granted to us.

Biosimilars and Exclusivity

The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, or collectively the Affordable Care Act, signed into law on March 23, 2010, includes a subtitle called the Biologics Price Competition and Innovation Act of 2009, or BPCIA, which created an abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA-licensed reference biological product. To date, only one biosimilar has been licensed under the BPCIA, although numerous biosimilars have been approved in Europe. The FDA has issued several guidance documents outlining an approach to review and approval of biosimilars.

Biosimilarity, which requires that there be no clinically meaningful differences between the biological product and the reference product in terms of safety, purity, and potency, can be shown through analytical studies, animal studies, and a clinical trials or studies. Interchangeability requires that a product is biosimilar to the reference product and the product must demonstrate that it can be expected to produce the same clinical results as the reference product in any given patient and, for products that are administered multiple times to an individual, the biologic and the reference biologic may be alternated or switched after one has been previously administered without increasing safety risks or risks of diminished efficacy relative to exclusive use of the reference biologic. However, complexities associated with the larger, and often more complex, structures of biological products, as well as the processes by which such products are manufactured, pose significant hurdles to implementation of the abbreviated approval pathway that are still being worked out by the FDA.

Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date that the reference product was first licensed by the FDA. In addition, the approval of a biosimilar product may not be made effective by the FDA until 12 years from the date on which the reference product was first licensed. "First licensure" typically means the initial date the particular product at issue was licensed in the United States. Date of first licensure does not include the date of licensure of (and a new period of exclusivity is not available for) a biological product if the licensure is for a supplement for the biological product or for a subsequent application by the same sponsor or manufacturer of the biological product (or licensor, predecessor in interest, or other related entity) for a change (not including a modification to the structure of the biological product) that results in a new indication, route of administration, dosing schedule, dosage form, delivery system, delivery device or strength, or for a modification to the structure of the biological product that does not result in a change in safety, purity, or potency. Therefore, one must determine whether a new product includes a modification to the structure of a previously licensed product that results in a change in safety, purity, or potency to assess whether the licensure of the new product is a first licensure that triggers its own period of exclusivity. Whether a subsequent application, if approved, warrants exclusivity as the "first licensure" of a biological product is determined on a case-by-case basis with data submitted by the sponsor.

During the 12-year period of exclusivity, another company may still market a competing version of the reference product if the FDA approves a full BLA for the competing product containing the sponsor's own preclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity and potency of their product. The BPCIA also created certain exclusivity periods for biosimilars approved as interchangeable products. At this juncture, it is unclear whether products deemed "interchangeable" by the FDA will, in fact, be readily substituted by pharmacies, which are governed by state pharmacy law.

A biological product can also obtain pediatric market exclusivity in the United States. Pediatric exclusivity, if granted, adds six months to existing exclusivity periods and patent terms. This six-month exclusivity, which runs from the end of other exclusivity protection or patent term, may be granted based on the voluntary completion of a pediatric study in accordance with an FDA-issued "Written Request" for such a study.

The BPCIA is complex and only beginning to be interpreted and implemented by the FDA. In addition, recent government proposals have sought to reduce the 12-year reference product exclusivity period. Other aspects of the BPCIA, some of which may impact the BPCIA exclusivity provisions, have also been the subject of recent litigation. As a result, the ultimate impact, implementation, and meaning of the BPCIA is subject to significant uncertainty.

Additional Regulation

In addition to the foregoing, state and federal laws regarding environmental protection and hazardous substances, including the Occupational Safety and Health Act, the Resource Conservancy and Recovery Act and the Toxic Substances Control Act, affect our business. These and other laws govern our use, handling and disposal of various biological, chemical and radioactive substances used in, and wastes generated by, our operations. If our operations result in contamination of the environment or expose individuals to hazardous substances, we could be liable for damages and governmental fines. We believe that we are in material compliance with applicable environmental laws and that continued compliance therewith will not have a material adverse effect on our business. We cannot predict, however, how changes in these laws may affect our future operations.

U.S. Foreign Corrupt Practices Act

The U.S. Foreign Corrupt Practices Act, to which we are subject, prohibits corporations and individuals from engaging in certain activities to obtain or retain business or to influence a person working in an official capacity. It is illegal to pay, offer to pay or authorize the payment of anything of value to any foreign government official, government staff member, political party or political candidate in an attempt to obtain or retain business or to otherwise influence a person working in an official capacity.

Government Regulation Outside of the United States

In addition to regulations in the United States, we will be subject to a variety of regulations in other jurisdictions governing, among other things, clinical studies and any commercial sales and distribution of our products. Because biologically sourced raw materials are subject to unique contamination risks, their use may be restricted in some countries.

Whether or not we obtain FDA approval for a product, we must obtain the requisite approvals from regulatory authorities in foreign countries prior to the commencement of clinical studies or marketing of the product in those countries. Certain countries outside of the United States have a similar process that requires the submission of a clinical study application much like the IND prior to the commencement of human clinical studies.

The requirements and process governing the conduct of clinical studies, product licensing, pricing and reimbursement vary from country to country. In all cases, the clinical studies are conducted in accordance with GCP and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki.

Similar to the United States, the various phases of pre-clinical and clinical research in the European Union are subject to significant regulatory controls. Although the EU Clinical Trials Directive 2001/20/EC has sought to harmonize the EU clinical trials regulatory framework, setting out common rules for the control and authorization of clinical trials in the EU, the EU Member States have transposed and applied the provisions of the Directive differently. This has led to significant variations in the Member State regimes. To improve the current system, a new Regulation No. 536/2014 on clinical trials on medicinal product candidates for human use, which will repeal Directive 2001/20/EC, was adopted on April 16, 2014 and published in the European Official Journal on May 27, 2014. The new Regulation aims at harmonizing and streamlining the clinical trials authorization process, simplifying adverse event reporting procedures, improving the supervision of clinical trials, and increasing their transparency. The new Regulation entered into force on June 16, 2014 but will apply not earlier than May 28, 2016. Until then the Clinical Trials Directive 2001/20/EC will continue to apply. In addition, the transitional provisions of the new Regulation offer, under certain conditions, the clinical trial sponsors the possibility to choose between the requirements of the Directive and the Regulation for a limited amount of time.

Under the current regime, before a clinical trial can be initiated it must be approved in each of the EU Member States where the trial is to be conducted by two distinct bodies: the National Competent Authority, or NCA, and one or more Ethics Committees, or ECs. Under the current regime all suspected unexpected serious adverse reactions, or SUSARs, to the investigational product that occur during the clinical trial have to be reported to the NCA and ECs of the Member State where they occurred.

In the EU, gene therapy medicinal products can only be commercialized after obtaining a Community Marketing Authorization, or Community MA. The Community MA is issued by the European Commission through the so-called Centralized Procedure, based on the opinion of the Committee for Medicinal Products for Human Use, or CHMP, of the European Medicines Agency, or EMA, and which is valid throughout the entire territory of the EU. The Centralized Procedure is mandatory for certain types of products, such as biotechnology medicinal products, orphan medicinal products, and medicinal products containing a new active substance indicated for the treatment of AIDS, cancer, neurodegenerative disorders, diabetes, auto-immune and viral diseases. The Centralized Procedure is also mandatory for so-called Advance Therapy Medicinal Products (or ATMPs). ATMPs comprise gene therapy, somatic cell and tissue engineered products. The Centralized Procedure is optional for products containing a new active substance not yet authorized in the EU as of November 20, 2005, or for products that constitute a significant therapeutic, scientific or technical innovation or which are in the interest of public health in the EU.

Under the Centralized Procedure, the CHMP serves as the scientific committee that renders opinions about the safety, efficacy and quality of human products on behalf of the EMA. The CHMP is composed of experts nominated by each Member State's national drug authority, with one of them appointed to act as Rapporteur for the co-ordination of the evaluation with the possible assistance of a further member of the Committee acting as a Co-Rapporteur. The CHMP has 210 days to adopt an opinion as to whether a marketing authorization should be granted. The process usually takes longer as additional information is requested, which triggers clock-stops in the procedural timelines. Based on the CHMP's opinion the European Commission will adopt a decision on the granting of the marketing authorization. In case of ATMPs, the EMA's Committee for Advanced Therapies, a multidisciplinary committee of experts on ATMPs, will prepare a draft opinion that will be submitted to the CHMP before the latter adopts its final opinion. Under the above described procedure, before granting the MA, the EMA makes an assessment of the risk-benefit balance of the product on the basis of scientific criteria concerning its quality, safety and efficacy.

In the EU, new products authorized for marketing (i.e., reference products) qualify for eight years of data exclusivity and an additional two years of market exclusivity upon marketing authorization. The data exclusivity period prevents generic applicants from relying on the preclinical and clinical trial data contained in the dossier of the reference product when applying for a generic marketing authorization in the EU during a period of eight years from the date on which the reference product was first authorized in the EU. The market exclusivity period prevents a successful generic applicant from commercializing its product in the EU until ten years have elapsed from the initial authorization of the reference product in the EU. The ten-year market exclusivity period can be extended to a maximum of eleven 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.

The EU also provides other opportunities for market exclusivity. For example, products receiving orphan designation in the EU can receive ten years of market exclusivity, during which time no similar medicinal

product for the same indication may be placed on the market. An orphan product can also obtain an additional two years of market exclusivity in the EU for pediatric studies.

The criteria for designating an "orphan medicinal product" in the European Union are similar in principle to those in the United States. Under Article 3 of Regulation (EC) 141/2000, a medicinal product may be designated as orphan if (1) it is intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition; (2) either (a) such condition affects no more than five in 10,000 persons in the European Union when the application is made, or (b) the product, without the benefits derived from orphan status, would not generate sufficient return in the European Union, or if such a method exists, the product will be of significant benefit to those affected by the condition, as defined in Regulation (EC) 847/2000. Orphan medicinal products are eligible for financial incentives such as reduction of fees or fee waivers and are, upon grant of a marketing authorization, entitled to ten years of market exclusivity for the approved therapeutic indication. The application for orphan drug designation must be submitted before the application for marketing authorization. The applicant will receive a fee reduction for the marketing authorization application if the orphan drug designation has been granted, but not if the designation is still pending at the time the marketing authorization is submitted. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

The 10-year market exclusivity may be reduced to six years if, at the end of the fifth year, it is established that the product no longer meets the criteria for orphan designation, for example, if the product is sufficiently profitable not to justify maintenance of market exclusivity. Additionally, marketing authorization may be granted to a similar product for the same indication at any time if:

- The second applicant can establish that its product, although similar, is safer, more effective or otherwise clinically superior;
- The applicant consents to a second orphan medicinal product application; or
- The applicant cannot supply enough orphan medicinal product.

If we fail to comply with applicable foreign regulatory requirements, we may be subject to, among other things, fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

Other Healthcare Laws

In addition to FDA restrictions on marketing of pharmaceutical and biological products, other U.S. federal and state healthcare regulatory laws restrict business practices in the pharmaceutical industry, which include, but are not limited to, state and federal anti-kickback, false claims, data privacy and security, and physician payment transparency laws.

The federal Anti-Kickback Statute prohibits, among other things, any person or entity from knowingly and willfully offering, paying, soliciting, receiving or providing any remuneration, directly or indirectly, overtly or covertly, to induce or in return for purchasing, leasing, ordering, or arranging for or recommending the purchase, lease, or order of any item or service reimbursable, in whole or in part, under Medicare, Medicaid or other federal healthcare programs. The term "remuneration" has been broadly interpreted to include anything of value. The Anti-Kickback Statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on one hand and prescribers, purchasers, and formulary managers on the other. Although there are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution, the exceptions and safe harbors are drawn narrowly. Practices that involve remuneration that may be alleged to be intended to induce prescribing, purchases, or recommendations may be subject to scrutiny if they do not meet the requirements of a statutory or regulatory exception or safe harbor. Failure to meet all of the requirements of a particular applicable statutory exception or regulatory safe harbor does not make the conduct per se illegal under the Anti-Kickback Statute. Instead, the legality of the arrangement will be evaluated on a case-by-case basis based on a cumulative review of all its facts and circumstances. Several courts have interpreted the statute's

intent requirement to mean that if any one purpose of an arrangement involving remuneration is to induce referrals of federal healthcare covered business, the statute has been violated.

Additionally, the intent standard under the Anti-Kickback Statute was amended by the Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act of 2010, collectively the Affordable Care Act, to a stricter standard such that 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, the Affordable Care Act codified case law that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal civil False Claims Act. The majority of states also have anti-kickback laws, which establish similar prohibitions and in some cases may apply to items or services reimbursed by any third-party payor, including commercial insurers.

The federal false claims and civil monetary penalties laws, including the civil False Claims Act, prohibit any person or entity from, among other things, knowingly presenting, or causing to be presented, a false, fictitious or fraudulent claim for payment to, or approval by, the federal government or knowingly making, using, or causing to be made or used a false record or statement material to a false or fraudulent claim to the federal government. A claim includes "any request or demand" for money or property presented to the U.S. government. Actions under the civil False Claims Act may be brought by the Attorney General or as a qui tam action by a private individual in the name of the government. Violations of the civil False Claims Act can result in very significant monetary penalties and treble damages. Several pharmaceutical and other healthcare companies have been prosecuted under these laws for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. Other companies have been prosecuted for causing false claims to be submitted because of the companies' marketing of products for unapproved (e.g., off-label) uses. In addition, the civil monetary penalties statute imposes penalties against any person who is determined to have presented or caused to be presented a claim to a federal health program that the person knows or should know is for an item or service that was not provided as claimed or is false or fraudulent. Many states also have similar fraud and abuse statutes or regulations that apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor. Given the significant size of actual and potential settlements, it is expected that the government authorities will continue to devote substantial resources to investigating healthcare providers' and manufacturers' compliance with applicable fraud and abuse laws.

The federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, created additional federal criminal statutes that prohibit, among other actions, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including private third-party payors, knowingly and willfully embezzling or stealing from a healthcare benefit program, willfully obstructing a criminal investigation of a healthcare offense, and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. Similar to the U.S. federal Anti-Kickback Statute, the Affordable Care Act broadened the reach of certain criminal healthcare fraud statutes created under HIPAA by amending the intent requirement such that 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, there has been a recent trend of increased federal and state regulation of payments made to physicians and certain other healthcare providers. The Affordable Care Act imposed, among other things, new annual reporting requirements through the Physician Payment Sunshine Act for covered manufacturers for certain payments and "transfers of value" provided to physicians and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members. Failure to submit timely, accurately and completely the required information for all payments, transfers of value and ownership or investment interests may result in civil monetary penalties of up to an aggregate of \$150,000 per year and up to an aggregate of \$1 million per year for "knowing failures." Covered manufacturers were required to begin collecting data on August 1, 2013 and submit reports on aggregate payment data to the government for the first reporting period (August 1, 2013 – December 31, 2013) by March 31, 2014, and were required to report detailed payment data for the first reporting period and submit legal attestation to the completeness and accuracy of such data by June 30, 2014. Thereafter, covered manufacturers must submit reports by the 90th day of each subsequent calendar year.

In addition, certain states require implementation of compliance programs and compliance with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government, impose restrictions on marketing practices, or tracking and reporting of gifts, compensation and other remuneration or items of value provided to physicians and other healthcare professionals and entities.

We may also be subject to data privacy and security regulation by both the federal government and the states in which we conduct our business. HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, and their respective implementing regulations, including the Final HIPAA Omnibus Rule published on January 25, 2013, impose specified requirements relating to the privacy, security and transmission of individually identifiable health information held by covered entities and their business associates. Among other things, HITECH makes HIPAA's privacy and security standards directly applicable to "business associates," defined as independent contractors or agents of covered entities that create, receive, maintain or transmit protected health information in connection with providing a service for or on behalf of a covered entity. HITECH also increased the civil and criminal penalties that may be imposed against covered entities, business associates and possibly other persons, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorney's fees and costs associated with pursuing federal civil actions. In addition, state laws govern the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same requirements, thus complicating compliance efforts.

If our operations are found to be in violation of any of such laws or any other governmental regulations that apply to us, we may be subject to penalties, including, without limitation, administrative, civil and criminal penalties, damages, fines, disgorgement, contractual damages, reputational harm, diminished profits and future earnings, the curtailment or restructuring of our operations, exclusion from participation in federal and state healthcare programs and individual imprisonment, any of which could adversely affect our ability to operate our business and our financial results.

To the extent that any of our product candidates, once approved, are sold in a foreign country, we may be subject to similar foreign laws and regulations, which may include, for instance, applicable post-marketing requirements, including safety surveillance, anti-fraud and abuse laws, and implementation of corporate compliance programs and reporting of payments or other transfers of value to healthcare professionals.

Coverage and Reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of any pharmaceutical or biological product for which we obtain regulatory approval. 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. Patients are unlikely to use our products unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of our products. Sales of any products for which we receive regulatory approval for commercial sale will therefore depend, in part, on the availability of coverage and adequate reimbursement from third-party payors. Third-party payors include government authorities, managed care providers, private health insurers and other organizations.

The process for determining whether a third-party payor will provide coverage for a pharmaceutical or biological product typically is separate from the process for setting the price of such product or for establishing the reimbursement rate that the payor will pay for the product once coverage is approved. 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 FDA-approved products for a particular indication. A decision by a third-party payor not to cover our product candidates could reduce physician utilization of our products once approved and have a material adverse effect on our sales, results of operations and financial condition. Moreover, a third-party payor's decision to provide coverage for a pharmaceutical or biological product does not imply that an adequate reimbursement rate will be approved. Adequate third-party reimbursement may not be available to enable us to maintain price levels

sufficient to realize an appropriate return on our investment in product development. Additionally, coverage and reimbursement for new products can differ significantly from payor to payor. One third-party payor's decision to cover a particular medical product or service does not ensure that other payors will also provide coverage for the medical product or service, or will provide coverage at an adequate reimbursement rate. As a result, the coverage determination process will require us to provide scientific and clinical support for the use of our products to each payor separately and will be a time-consuming process.

The containment of healthcare costs has become a priority of federal, state and foreign governments, and the prices of pharmaceutical or biological products have been a focus in this effort. Third-party payors are increasingly challenging the prices charged for medical products and services, examining the medical necessity and reviewing the cost-effectiveness of pharmaceutical products, biological products, medical devices and medical services, in addition to questioning safety and efficacy. If these third-party payors do not consider our products to be cost-effective compared to other available therapies, they may not cover our products after FDA approval or, if they do, the level of payment may not be sufficient to allow us to sell our products at a profit.

Healthcare Reform

A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and other third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medical products. By way of example, in the United States, the Medicare Prescription Drug Improvement and Modernization Act of 2003, or MMA, changed the way Medicare covers and pays for pharmaceutical products. The legislation expanded Medicare coverage for outpatient drug purchases by those covered by Medicare under a new Part D and introduced a new reimbursement methodology based on average sales prices for Medicare Part B physician-administered drugs. As a result of this legislation and the expansion of federal coverage of pharmaceutical products, there is additional pressure to contain and reduce costs. While the MMA applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own reimbursement rates, and any reduction in reimbursement that results from the MMA may result in a similar reduction in payments from private payors. These cost reduction initiatives and other provisions of the MMA could decrease the coverage and reimbursement that we receive for any approved products, and could seriously harm our business.

In addition, in March 2010, the Affordable Care Act was enacted, which, among other things, increased the minimum Medicaid rebates owed by most manufacturers under the Medicaid Drug Rebate Program, introduced 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, extended the Medicaid Drug Rebate Program to utilization of prescriptions of individuals enrolled in Medicaid managed care plans, imposed mandatory discounts for certain Medicare Part D beneficiaries as a condition for manufacturers' outpatient drugs coverage under Medicare Part D, and subjected drug manufacturers to new annual fees based on pharmaceutical companies' share of sales to federal healthcare programs.

On August 2, 2011, the Budget Control Act of 2011 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 included aggregate reductions of Medicare payments to providers of up to 2% per fiscal year, which went into effect on April 1, 2013 and will stay in effect through 2024 unless additional Congressional action is taken. On January 2, 2013, the American Taxpayer Relief Act was signed into law, which, among other things, further reduced Medicare payments to several providers, including hospitals and imaging centers.

We expect that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for our products once approved or additional pricing pressures.

Employees

As of February 29, 2016, we had 55 full-time employees, 38 of whom were primarily engaged in research and development activities and 24 of whom have an M.D. or Ph.D. degree.

Facilities

Our headquarters are located in Cambridge, Massachusetts, where we lease approximately 15,200 square feet of office and laboratory space. Our lease expires in January 2020, and we have an option to extend it through January 2025.

In January 2016, we entered into a ten-year agreement to lease approximately 65,000 square feet of office and laboratory space in Cambridge, which we expect to occupy as our headquarters near the end of 2016. We believe that this new office and laboratory space is sufficient to meet our needs for the foreseeable future and that suitable additional space will be available as and when needed.

Legal Proceedings

We are not currently a party to any material legal proceedings.

Certain of the intellectual property rights licensed to us by Caribou are subject to a patent interference proceeding between UC/Vienna and Dr. Emmanuelle Charpentier, on the one hand, and the Broad Institute, MIT and Harvard on the other hand. See the section entitled "Intellectual Property—Caribou Biosciences In-Licensed Intellectual Property—University of California, Berkeley and University of Vienna IP" appearing elsewhere in this prospectus for more information regarding this patent interference proceeding.

MANAGEMENT

Executive Officers and Directors

The following table sets forth the name, age and position of each of our executive officers and directors, as of February 29, 2016:

Name	Age	Position
Nessan Bermingham, Ph.D.	43	Founder, President, Chief Executive Officer and Director
Thomas M. Barnes, Ph.D.	56	Chief Scientific Officer
John M. Leonard, M.D.	58	Chief Medical Officer and Director
David V. Morrissey, Ph.D.	57	Chief Technology Officer
José E. Rivera, J.D.	50	Chief Operating Officer and Chief Legal Officer
Sapna Srivastava, Ph.D.	45	Chief Financial and Strategy Officer
Caroline Dorsa(1)	56	Director
Jean-François Formela, M.D.(1)	59	Director
Carl L. Gordon, Ph.D.(1)	51	Director
Rachel Haurwitz, Ph.D.	30	Director

(1) Member of the audit committee, compensation committee and nominating and corporate governance committee

Nessan Bermingham, Ph.D., has served as our President, Chief Executive Officer and director since he founded the company in May 2014. Prior to founding Intellia, from 2002 to 2007 and 2012 to 2014 Dr. Bermingham held various positions at Atlas Venture, an early stage venture capital firm focused on investments in biological and drug discovery technologies, most recently as venture partner. From 2007 to 2008, he was a partner at Omega Fund Management, a direct secondary healthcare fund, and from 2009 to 2013, he served as the founder and managing partner of Bio Equity Capital LLC, a healthcare focused special situations firm. Dr. Bermingham was the founding Chief Executive Officer of Tal Medical, a clinical stage medical device company, and sits on the independent advisory board of Merck Serono and sits on the board of directors of Harbor Antibodies. Dr. Bermingham received his B.S. from Queen's University in Belfast, Northern Ireland, a Ph.D. in molecular biology from Imperial College London and was a Howard Hughes Associate Fellow at Baylor College of Medicine. We believe that Dr. Bermingham's detailed knowledge of our company and his over 15 years in the life sciences industry, provide a valuable contribution to our board of directors.

Thomas M. Barnes, Ph.D., has served as our Chief Scientific Officer since October 2014. Prior to joining Intellia, from 2013 to 2014, Dr. Barnes served as Principal at Barnes Consulting, a consulting company he founded, and from April 2009 to 2013, he was Vice President of Discovery at Eleven Biotherapeutics Inc., a biotechnology company. From 2008 to 2009, Dr. Barnes was the chief executive officer of Tengri Therapeutics, Inc., a biotechnology company. From 2008 to 2009, Dr. Barnes was the chief executive officer of the drug repositioning division of Ore Pharmaceuticals, Inc., a biopharmaceutical company. Prior to that Dr. Barnes was at Millennium Pharmaceuticals, a biotechnology company in Cambridge, Massachusetts, which is now a wholly owned subsidiary of Takeda Pharmaceutical Company Limited, where he held positions of increasing responsibility, including Director, Genomic Pharmacology from 1997 to 2004. Dr. Barnes received his B.Sc. in genetics from the University of Sydney in Australia, a Ph.D. in genetics from Cambridge University and completed research fellowships at Harvard Medical School and McGill University.

John M. Leonard, M.D., has served as our Chief Medical Officer since July 2014. Prior to joining Intellia, Dr. Leonard was Chief Scientific Officer and Senior Vice President of Research & Development at AbbVie, Inc., or AbbVie, a biopharmaceutical company, from its spin-out from Abbott Laboratories in January 2013 until retiring at the end of 2013. Prior to the formation of AbbVie, from 2008 to 2012, he was Global Head of Pharmaceutical R&D at Abbott Laboratories, or Abbott, a pharmaceuticals and health care products company. Dr. Leonard has over 30 years of combined experience in medicine, research and management serving in various

roles at Abbott beginning in 1992. In addition to the board of directors of Intellia, Dr. Leonard has served on the boards of Quintiles Transnational Holdings Inc., a biopharmaceutical development and commercial outsourcing service, since February 2015, Chimerix, Inc. a biopharmaceutical company, since June 2014 and Vitae Pharmaceuticals, Inc., a biotechnology company, since July 2015. He received a B.A. in biochemistry from the University of Wisconsin at Madison and an M.D. from Johns Hopkins University. Dr. Leonard completed his residency in internal medicine at Stanford University School of Medicine followed by a postdoctoral fellowship in molecular virology at the National Institute of Allergy and Infectious Diseases at the National Institutes of Health. We believe that Dr. Leonard's extensive experience in drug development and the biopharmaceutical industry provides him with the qualifications and skills to serve as a director of our company.

David V. Morrissey, Ph.D., has served as our Chief Technology Officer since July 2014. Prior to joining Intellia, Dr. Morrissey was an executive director at the Novartis Institutes for Biomedical Research, Inc., a biopharmaceutical company, from 2007 to 2014 where he helped establish and head its RNAi therapeutics unit. Prior to Novartis, Dr. Morrissey was the Senior Director of Antiviral Therapeutics at Sirna Therapeutics, Inc. a biotechnology company, from 2005 to 2007. He received his B.S. in biology from Clark University, an M.S. in microbiology from The University of Connecticut, a Ph.D. in biology from Wesleyan University and completed his postdoctoral fellowship at Bristol-Myers Squibb.

José E. Rivera, J.D., has served as our Chief Operating Officer and Chief Legal Officer since April 2015. He joined Intellia in July 2014 as our General Counsel and Chief Talent Officer. Prior to joining Intellia, Mr. Rivera was the Vice President, Chief Ethics and Compliance Officer at AbbVie from its spin-out from Abbott in January 2013 until September 2013. Prior to that, from 1996 to 2012, Mr. Rivera led various legal groups at Abbott, including patents and trademarks, intellectual property litigation, and regulatory legal and general litigation. Mr. Rivera received his B.A. in economics from Boston College and his J.D. from Harvard Law School.

Sapna Srivastava, Ph.D., has served as Chief Financial and Strategy Officer since April 2015. Prior to joining Intellia, from 2012 to 2015, Dr. Srivastava served as an independent strategy advisor to various therapeutic-focused biotechnology companies and co-founded a neuroscience-focused biotechnology company. Prior to that, from 2010 to 2012, she served as a senior analyst and team leader of the biotechnology group at Goldman Sachs, and from 2004 to 2009, she served as a senior biotechnology analyst at Morgan Stanley. She also served as a principal and senior biotechnology analyst at ThinkEquity Partners, LLC from 2003 to 2004. She started her career at J.P. Morgan in 1999. Dr. Srivastava received her B.Sc. from the University of Bombay in India and a Ph.D. in neuroscience from New York University Medical Center.

Caroline Dorsa has served as a member of our board of directors since December 2015. Since 2010, Ms. Dorsa has served as a director with Biogen Inc. Ms. Dorsa served as the Executive Vice President and Chief Financial Officer of Public Service Enterprise Group Incorporated, a diversified energy company, from April 2009 to October 2015 and served on its board of directors from 2003 to April 2009. From February 2008 to April 2009, she served as Senior Vice President, Global Human Health, Strategy and Integration at Merck & Co., Inc., a pharmaceutical company. From November 2007 to January 2008, Ms. Dorsa served as Senior Vice President and Chief Financial Officer of Gilead Sciences, Inc., a life sciences company. From February 2007 to November 2007, she served as Senior Vice President and Chief Financial Officer of Avaya, Inc., a telecommunications company. From 1987 to January 2007, Ms. Dorsa held various financial and operational positions at Merck & Co., Inc., including Vice President and Treasurer, Executive Director of U.S. Customer Marketing and Executive Director of U.S. Pricing and Strategic Planning. Ms. Dorsa received her B.A. in history from Colgate University and her M.B.A. from Columbia University. We believe Ms. Dorsa's operational, financial and accounting expertise and knowledge of the pharmaceutical industry provide her with the qualifications and skills to serve as a director of our company.

Jean-Francois Formela, M.D., has served as a member of our board of directors since our founding in May 2014. Dr. Formela is currently a partner in the life sciences group of Atlas Venture and has served in such capacity since joining Atlas Venture in 1993. Since September 2010, Dr. Formela has served as a director of Egalet Corporation, a publicly-traded biopharmaceutical company, of which he was a co-founder, and where he

served as chairman of the board from March 2012 to June 2015. Dr. Formela has served on the boards of RaNA Therapeutics, Inc. and Spero Therapeutics, Inc., since 2011 and 2014, respectively. He was also a founder and previously served as chairman of the board of each these companies. He also serves on the board of directors of the following privately held companies: F-star Biotechnology Limited, Navitor Pharmaceuticals, Inc. and Ataxion Therapeutics, Inc. Within the last five years, Dr. Formela has also served on the boards of directors of the following public companies: Horizon Pharma, Inc., ARCA biopharma, Inc. and Achillion Pharmaceuticals, Inc. Prior to joining Atlas Venture, Dr. Formela served as a senior director of medical marketing and scientific affairs at Schering-Plough Corporation, a pharmaceutical company which merged with Merck & Co., Inc. Dr. Formela began his career as a medical doctor and practiced emergency medicine at Necker University Hospital in Paris. Dr. Formela is a member of the Massachusetts General Hospital Research Advisory Council. He received his M.D. from the Paris University School of Medicine and his M.B.A. from Columbia University. We believe Dr. Formela's experience in the life sciences industry, as well as his practice of medicine, provides him with the qualifications and skills to serve as a director of our company.

Carl L. Gordon, Ph.D., has been a member of our board of directors since August of 2015. Dr. Gordon co-founded OrbiMed Advisors LLC, or OrbiMed, a private equity fund focused on life sciences companies, in 1998 and, since that time, has served as a General Partner and Co-Head of Private Equity. Prior to co-founding OrbiMed, Dr. Gordon was a senior biotechnology analyst at Mehta and Isaly, a pharmaceutical consulting firm and predecessor to OrbiMed, from 1995 to 1997. From 1993 to 1995, Dr. Gordon was a fellow at The Rockefeller University. He received his Ph.D. in Molecular Biology from the Massachusetts Institute of Technology and a bachelor's degree from Harvard College. As a venture capitalist focused on life science companies Dr. Gordon sits on numerous boards, including Acerta Pharma, LLC, ACIR Biosciences, Inc., Adimab, LLC, Alector, LLC, Armo Biosciences, Inc., Arsanis Biosciences, Inc., Good Start Genetics, Inc., Igenica, Inc., Oxford Oncology, Inc., Selecta Biosciences, Inc., Singulex, Inc., and True North Therapeutics, Inc. In the last five years, he has also served on the boards of Acceleron Pharma, Inc., Amarin Corporation plc, and Pacira Pharmaceuticals, Inc. We believe that Dr. Gordon's financial and operational experience in the biotechnology industry as well as his expertise in molecular biology and financial credentials provide him with the qualifications and skills to serve as a director of our company.

Rachel Haurwitz, Ph.D., has been a member of our board of directors since the company's founding in May 2014. Dr. Haurwitz is the President, Chief Executive Officer and a member of the board of directors of Caribou Biosciences which she co-founded in 2012. Dr. Haurwitz received an A.B. in biological science from Harvard College and a Ph.D. in molecular and cell biology from the University of California, Berkeley. We believe that Dr. Haurwitz's experience in CRISPR/Cas9 development and research provides her with the qualifications and skills to serve as a director of our company.

Composition of Our Board of Directors

As of February 29, 2016, our board of directors consisted of six members, each of whom are members pursuant to the board composition provisions of our certificate of incorporation and agreements with our stockholders. These board composition provisions will terminate upon the completion of this offering. Upon the termination of these provisions, there will be no further contractual obligations regarding the election of our directors. Our nominating and corporate governance committee and our board of directors may therefore consider a broad range of factors relating to the qualifications and background of nominees. Our nominating and corporate governance committee's and our board of directors' priority in selecting board members is identification of persons who will further the interests of our stockholders through their established record of professional accomplishment, the ability to contribute positively to the collaborative culture among board members, knowledge of our business, understanding of the competitive landscape, professional and personal experiences and expertise relevant to our growth strategy. Our directors hold office until their successors have been elected and qualified or until the earlier of their resignation or removal. Our amended and restated certificate of incorporation that will become effective upon the closing of this offering and amended and restated bylaws that will become effective upon the effectiveness of the registration statement of which this prospectus is a part also provide that our directors may be removed only for cause by the affirmative vote of the holders of at

least 75% of the votes that all our stockholders would be entitled to cast in an annual election of directors, 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.

Director Independence

Our board of directors has determined that all members of the board of directors, except Drs. Bermingham, Leonard and Haurwitz, are independent directors, including for purposes of the rules of The NASDAQ Global Market and the Securities and Exchange Commission, or SEC. In making such independence determination, our board of directors considered the relationships that each non-employee director has with us and all other facts and circumstances that our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director. In considering the independence of the directors listed above, our board of directors considered the association of our directors with the holders of more than 5% of our common stock. Upon the completion of this offering, we expect that the composition and functioning of our board of directors and each of our committees will comply with all applicable requirements of The NASDAQ Global Market and the rules and regulations of the SEC. There are no family relationships among any of our directors or executive officers. Drs. Bermingham and Leonard are not independent directors under these rules because they are executive officers of the Company and Dr. Haurwitz is not an independent director under these rules because of her affiliation with Caribou.

Staggered Board

In accordance with the terms of our amended and restated certificate of incorporation that will become effective upon the closing of this offering and amended and restated bylaws that will become effective upon the effectiveness of the registration statement of which this prospectus is a part, our board of directors will be divided into three staggered classes of directors and each will be assigned to one of the three classes. At each annual meeting of the stockholders, a class of directors will be elected for a three-year term to succeed the directors of the same class whose terms are then expiring. The terms of the directors will expire upon the election and qualification of successor directors at the annual meeting of stockholders to be held during the years 2017 for Class I directors, 2018 for Class II directors.

- Our Class I directors will be Drs. Bermingham and Formela;
- · Our Class II directors will be Drs. Gordon and Haurwitz; and
- Our Class III directors will be Ms. Dorsa and Dr. Leonard.

Our amended and restated certificate of incorporation that will become effective upon the closing of this offering and amended and restated by-laws that will become effective upon the effectiveness of the registration statement of which this prospectus is a part provide that the number of our directors shall be fixed from time to time by a resolution of the majority of our board of directors.

The division of our board of directors into three classes with staggered three-year terms may delay or prevent stockholder efforts to effect a change of our management or a change in control.

Board Leadership Structure and Board's Role in Risk Oversight

Currently, the role of chairman of the board is separated from the role of Chief Executive Officer, and we plan to keep these roles separated following the completion of this offering. We believe that separating these positions allows our Chief Executive Officer to focus on our day-to-day business, while allowing a chairman of the board to lead the board of directors in its fundamental role of providing advice to and independent oversight of management. Our board of directors recognizes the time, effort and energy that the Chief Executive Officer is required to devote to his position in the current business environment, as well as the commitment required to serve as our chairman, particularly as the board of directors' oversight responsibilities continue to grow. While our amended and restated by-laws and corporate governance guidelines do not require that our chairman and Chief Executive Officer positions be separate, our board of directors believes that having separate positions is the

appropriate leadership structure for us at this time and demonstrates our commitment to good corporate governance.

Risk is inherent with every business, and how well a business manages risk can ultimately determine its success. We face a number of risks, including risks relating to our financial condition, development and commercialization activities, operations, strategic direction and intellectual property as more fully discussed in the section entitled "Risk Factors" appearing elsewhere in this prospectus. Management is responsible for the day-to-day management of risks we face, while our board of directors, as a whole and through its committees, has responsibility for the oversight of risk management. In its risk oversight role, our board of directors has the responsibility to satisfy itself that the risk management processes designed and implemented by management are adequate and functioning as designed.

The role of the board of directors in overseeing the management of our risks is conducted primarily through committees of the board of directors, as disclosed in the descriptions of each of the committees below and in the charters of each of the committees. The full board of directors (or the appropriate board committee in the case of risks that are under the purview of a particular committee) discusses with management our major risk exposures, their potential impact on us, and the steps we take to manage them. When a board committee is responsible for evaluating and overseeing the management of a particular risk or risks, the chairman of the relevant committee reports on the discussion to the full board of directors during the committee reports portion of the next board meeting. This enables the board of directors and its committees to coordinate the risk oversight role, particularly with respect to risk interrelationships.

Committees of Our Board of Directors

Our board of directors has established an audit committee, a compensation committee and a nominating and corporate governance committee, each of which will operate pursuant to a charter to be adopted by our board of directors and will be effective upon the effectiveness of the registration statement of which this prospectus is a part. Upon the effectiveness of the registration statement of which this prospectus is a part. Upon the effectiveness of the registration statement of which this prospectus will comply with all applicable requirements of the Sarbanes-Oxley Act of 2002, NASDAQ and SEC rules and regulations.

Audit Committee

Ms. Dorsa, Dr. Formela and Dr. Gordon will serve on the audit committee, which will be chaired by Ms. Dorsa. Our board of directors has determined that Ms. Dorsa, Dr. Formela and Dr. Gordon are "independent" for audit committee purposes as that term is defined in the rules of the SEC and the applicable NASDAQ rules, and each has sufficient knowledge in financial and auditing matters to serve on the audit committee. Our board of directors has designated Ms. Dorsa as an "audit committee financial expert," as defined under the applicable rules of the SEC. The audit committee's responsibilities include:

- appointing, approving the compensation of, and assessing the independence of our independent registered public accounting firm;
- pre-approving auditing and permissible non-audit services, and the terms of such services, to be provided by our independent registered public accounting firm;
- reviewing the overall audit plan with our independent registered public accounting firm and members of management responsible for preparing our financial statements;
- reviewing and discussing with management and our independent registered public accounting firm our annual and quarterly financial statements and related disclosures as well as critical accounting policies and practices used by us;
- coordinating the oversight and reviewing the adequacy of our internal control over financial reporting;
- · establishing policies and procedures for the receipt and retention of accounting-related complaints and concerns;

- recommending based upon the audit committee's review and discussions with management and our independent registered public accounting firm whether our audited financial statements shall be included in our Annual Report on Form 10-K;
- monitoring the integrity of our financial statements and our compliance with legal and regulatory requirements as they relate to our financial statements and accounting matters;
- preparing the audit committee report required by SEC rules to be included in our annual proxy statement;
- · reviewing all related person transactions for potential conflict of interest situations and approving all such transactions; and
- reviewing quarterly earnings releases.

Compensation Committee

Ms. Dorsa, Dr. Formela and Dr. Gordon will serve on the compensation committee, which will be chaired by Dr. Formela. Our board of directors has determined that each member of the compensation committee is "independent" as defined in the applicable NASDAQ rules. The compensation committee's responsibilities include:

- annually reviewing and recommending to the board of directors the corporate goals and objectives relevant to the compensation of our Chief Executive Officer;
- evaluating the performance of our Chief Executive Officer in light of such corporate goals and objectives and based on such evaluation:
 (i) recommending to the board of directors the cash compensation of our Chief Executive Officer and (ii) reviewing and approving grants and awards to our Chief Executive Officer under equity-based plans;
- · reviewing and recommending to the board of directors the cash compensation of our other executive officers;
- reviewing and establishing our overall management compensation, philosophy and policy;
- overseeing and administering our compensation and similar plans;
- evaluating and assessing potential and current compensation advisors in accordance with the independence standards identified in the applicable NASDAQ rules;
- retaining and approving the compensation of any compensation advisors;
- reviewing and approving our policies and procedures for the grant of equity-based awards;
- reviewing and recommending to the board of directors the compensation of our directors;
- preparing the compensation committee report required by SEC rules, if and when required, to be included in our annual proxy statement; and
- reviewing and approving the retention or termination of any consulting firm or outside advisor to assist in the evaluation of compensation matters.

Nominating and Corporate Governance Committee

Ms. Dorsa, Dr. Formela and Dr. Gordon will serve on the nominating and corporate governance committee, which will be chaired by Dr. Gordon. Our board of directors has determined that each member of the nominating and corporate governance committee is "independent" as defined in the applicable NASDAQ rules. The nominating and corporate governance committee's responsibilities include:

- developing and recommending to the board of directors criteria for board and committee membership;
- establishing procedures for identifying and evaluating board of director candidates, including nominees recommended by stockholders;

- reviewing the composition of the board of directors to ensure that it is composed of members containing the appropriate skills and expertise to advise us;
- identifying individuals qualified to become members of the board of directors;
- recommending to the board of directors the persons to be nominated for election as directors and to each of the board's committees;
- · developing and recommending to the board of directors a code of business conduct and ethics and a set of corporate governance guidelines; and
- · overseeing the evaluation of our board of directors and management.

Our board of directors may from time to time establish other committees.

Compensation Committee Interlocks and Insider Participation

None of the members of our compensation committee has at any time during the prior three years been one of our officers or employees. None of our executive officers currently serves, or in the past fiscal year has served, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on our board of directors or compensation committee.

Corporate Governance

Prior to the effectiveness of the registration statement of which this prospectus is a part, we will adopt 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 the effectiveness of the registration statement of which this prospectus is a part, a current copy of the code will be posted on the Corporate Governance section of our website, which is located at www.intelliatx.com. 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

Executive Compensation Overview

Our executive compensation program has reflected our growth and development-oriented corporate culture. To date, the compensation of our Chief Executive Officer and our other executive officers identified in the Summary Compensation Table below, who we refer to as the named executive officers, has primarily consisted of a combination of base salary, bonuses and long-term incentive compensation in the form of restricted stock awards. Our named executive officers, like all full-time employees, are eligible to participate in our health and welfare benefit plans. As we transition from a private company to a publicly traded company, we will evaluate our compensation values and philosophy and compensation plans and arrangements as circumstances require. At a minimum, we expect to review executive compensation annually with input from a compensation consultant. As part of this review process, we expect the board of directors and the compensation committee to apply our values and philosophy, while considering the compensation levels needed to ensure our executive compensation program remains competitive. We will also review whether we are meeting our retention objectives and the potential cost of replacing a key employee.

Summary Compensation Table

The following table presents information regarding the total compensation awarded to, earned by, and paid to our named executive officers for services rendered to us in all capacities for the years indicated.

Name and Principal Position		Salary (\$)	Bonus (\$)(1)	Stock Awards (\$)(2)	All Other Compensation (\$)(3)	Total (\$)
Nessan Bermingham, Ph.D.(4)	2015	383,333	180,000			563,333
Founder, President and Chief Executive Officer	2014	151,668	175,000	320,368	—	647,036
Sapna Srivastava, Ph.D.(5)	2015	220,000	73,200	221,689	25,630	540,519
Chief Financial and Strategy Officer						
José E. Rivera, J.D.(6)	2015	325,000	123,750		47,445	496,195
Chief Operating Officer and Chief Legal Officer	2014	150,000	81,250	52,719	11,006	294,975

(1) The amounts reflect the discretionary bonus paid in the subsequent year for performance during the year indicated.

(2) Amounts reflect the grant date fair value of equity-based awards granted in the year in accordance with Financial Accounting Standards Board, Accounting Standards Codification Topic 718, or ASC 718. Such grant-date fair value does not take into account any estimated forfeitures related to service-vesting conditions. These amounts do not correspond to the actual value that may be recognized by the named executive officers upon vesting of the applicable awards.

(3) Amounts exclude medical, group life insurance and certain other benefits received by the named executive officers that are available generally to all of our salaried employees on the same terms. The amounts reported represent travel and lodging expenses related to travel between the applicable named executive officer's home office and our headquarters in Massachusetts. For 2015, such amounts include (i) transportation expenses of \$16,322 for Dr. Srivastava and \$21,414 for Mr. Rivera, (ii) lodging expenses of \$9,234 for Dr. Srivastava and \$25,180 for Mr. Rivera and (iii) meals expense of \$74 for Dr. Srivastava and \$851 for Mr. Rivera.

(4) Dr. Bermingham commenced employment with us on December 1, 2014. His annualized base salary for 2014 was \$350,000. The amount reported for 2014 also includes amounts paid to Dr. Bermingham pursuant to a consulting agreement with us, dated July 31, 2014, pursuant to which he was paid \$29,167 per month from July 2014 through November 2014 for consulting services provided to us.

(5) Dr. Srivastava commenced employment with us on April 6, 2015. Her annualized base salary for 2015 was \$300,000.

(6) Mr. Rivera commenced employment with us on October 1, 2014. His annualized base salary for 2014 was \$300,000. The amount reported for 2014 also includes amounts paid to Mr. Rivera pursuant to a consulting agreement with us, dated July 31, 2014, pursuant to which he was paid \$25,000 per month from July 2014 through November 2014 for consulting services provided to us.

Employment Arrangements with our Named Executive Officers

We have an offer letter agreement with each of our named executive officers in connection with their employment with us. These offer letters provide for "at will" employment.

Nessan Bermingham, Ph.D. On December 15, 2014, we entered into a letter agreement with Dr. Bermingham for the position of Chief Executive Officer and President. Dr. Bermingham currently receives an annual base salary of \$450,000, which is subject to review and adjustment in accordance with company policy. Dr. Bermingham is also eligible for an annual discretionary bonus of up to 40% of his base salary, payable at the discretion of the board of directors. Dr. Bermingham is eligible to participate in employee benefit plans generally available to our executive employees, subject to the terms of those plans.

Sapna Srivastava, Ph.D. On April 6, 2015, we entered into a letter agreement with Dr. Srivastava for the position of Chief Financial and Strategy Officer. Dr. Srivastava currently receives an annual base salary of \$300,000, which is subject to review and adjustment in accordance with company policy. Dr. Srivastava is also eligible for an annual discretionary bonus of up to 33% of her base salary, payable at the discretion of the board of directors. Dr. Srivastava is eligible to participate in employee benefit plans generally available to our executive employees, subject to the terms of those plans.

José E. Rivera, J.D. On September 30, 2014, we entered into a letter agreement with Mr. Rivera for the position of General Counsel and Chief Talent Officer. Mr. Rivera currently receives an annual base salary of \$375,000, which is subject to review and adjustment in accordance with company policy. Mr. Rivera is also eligible for an annual discretionary bonus of up to 33% of his base salary, payable at the discretion of the board of directors. Mr. Rivera is eligible to participate in employee benefit plans generally available to our executive employees, subject to the terms of those plans.

Employee Confidentiality, Non-Competition, Non-Solicitation and Assignment Agreements

Each of our named executive officers has entered into a standard form agreement with respect to confidential information and assignment of inventions. Among other things, this agreement obligates each named executive officer to refrain from disclosing any of our proprietary information received during the course of employment and to assign to us any inventions conceived or developed during the course of employment. Such agreement also provides that during the period of the named executive officer's employment and for six months thereafter, the named executive officer will not compete with us and will not solicit our employees, consultants, customers or suppliers.

Outstanding Equity Awards at 2015 Fiscal Year-End

The following table sets forth information concerning outstanding equity awards held by each of our named executive officers as of December 31, 2015. All equity awards in the table below were issued upon conversion of awards made by Intellia Therapeutics, LLC prior to the Reorganization.

	Stock A	wards
Name	Number of Shares That Have Not Vested (#)	Market Value of Shares of Stock That Have Not Yet Vested (\$)(1)
<u>Name</u> Nessan Bermingham, Ph.D.	383,848(2)	
Sapna Srivastava, Ph.D.	270,353(3)	
José E. Rivera, J.D.	287,886(4)	

(1) There was no public market for our common stock on December 31, 2015. We have estimated the market value of the unvested stock award based on an assumed initial public offering price of \$ per share, the midpoint of the range listed on the cover of this prospectus.

(2) Represents a restricted stock award for 594,345 shares of our common stock. This restricted stock award vests as follows: 25% of the shares vested and became nonforfeitable on July 31, 2015, and the remainder of the shares vest and become nonforfeitable in substantially equal monthly installments over the following 36 months, subject to Dr. Bermingham's continued service to us.

- (3) This restricted stock award vests as follows: 25% of the shares will vest and become nonforfeitable on April 6, 2016 and the remainder of the shares vest and become nonforfeitable in substantially equal monthly installments over the following 36 months, subject to Dr. Srivastava's continued service to us.
- (4) Represents a restricted stock award for 445,758 shares of our common stock. This restricted stock award vests as follows: 25% of the shares vested and became nonforfeitable on July 31, 2015, and the remainder of the shares vest and become nonforfeitable in substantially equal monthly installments over the following 36 months, subject to Mr. Rivera's continued service to us. This restricted stock award is held by Rivak Capital LLC. Mr. Rivera is a member and manager of Rivak Capital LLC.

Compensation Risk Assessment

We believe that although a portion of the compensation provided to our executive officers and other employees is performance-based, our executive compensation program does not encourage excessive or unnecessary risk taking. This is primarily due to the fact that our compensation programs are designed to encourage our executive officers and other employees to remain focused on both short-term and long-term strategic goals. As a result, we do not believe that our compensation programs are reasonably likely to have a material adverse effect on us.

Employee Benefit and Equity Compensation Plans

2015 Stock Plan

Our 2015 Plan was approved by our board of directors and stockholders in August 2015 and was most recently amended in February 2016 to increase the number of shares reserved for issuance. We reserved an aggregate of 9,644,591 shares of our common stock for the issuance of awards under the 2015 Plan. This number is subject to adjustment in the event of a subdivision of outstanding stock, a stock dividend, a combination or consolidation of stock, a reclassification, or any other increase or decrease in the number of issued shares of common stock. Effective upon the closing of this offering, our 2015 Plan will be restated as our 2015 Restated Plan. The shares of common stock underlying any awards that are canceled or reacquired by us or are withheld by us for payment of the purchase price, exercise price or withholding taxes under the 2015 Plan are added back to the shares of common stock available for issuance under the 2015 Plan. Upon the closing of this offering, such shares will be added to the shares of common stock available for issuance under the 2015 Plan.

The 2015 Plan is administered by our board of directors. The administrator has full authority and discretion to take any actions it deems necessary or advisable for the administration of the 2015 Plan.

Our employees, outside directors and consultants are eligible to receive awards under the 2015 Plan.

The 2015 Plan provides that upon the effectiveness of a "sale event," as defined in the 2015 Plan, an acquirer or successor entity may assume, continue or substitute outstanding awards under the 2015 Plan. To the extent that awards granted under the 2015 Plan are not assumed or continued or substituted by the successor entity, upon the effective time of the sale event, the 2015 Plan and all outstanding awards thereunder shall terminate. In the event of such termination, except to the extent 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 the discretion of the administrator or to the extent specified in the relevant award certificate. In addition, in connection with the termination of the 2015 Plan upon a sale event, we may make or provide for a cash payment to participants holding vested and exercisable options and 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.

Our board of directors may amend or discontinue the 2015 Plan and the administrator 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 2015 Plan require the approval of our stockholders.

Amended and Restated 2015 Stock Option and Incentive Plan

Our 2015 Restated Plan was adopted by our board of directors on January 19, 2016 and approved by our stockholders on , 2016 and will become effective on the date immediately prior to the date on which the registration statement of which this prospectus is part is declared effective by the SEC. The 2015 Restated Plan will amend and restate the 2015 Plan. The 2015 Restated 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).

We have initially reserved 12,000,000 shares of our common stock for the issuance of awards under the 2015 Restated Plan, or the Initial Limit. The 2015 Restated 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, 2017, 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 limited in the 2015 Restated 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 2015 Restated 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 2015 Restated Plan will be added back to the shares of common stock available for issuance under the 2015 Restated Plan.

Stock options and stock appreciation rights with respect to no more than the Initial Limit may be granted to any one individual in any one calendar year. The maximum number of shares that may be issued as incentive stock options may not exceed the Initial Limit cumulatively increased on January 1, 2017 and on each January 1 thereafter by the lesser of the Annual Increase or 12,000,000 shares. The value of all awards made under the 2015 Restated 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 2015 Restated 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 2015 Restated Plan. Persons eligible to participate in the 2015 Restated Plan will be those full or part-time officers, employees, non-employee directors and other key persons (including consultants) as selected from time to time by our compensation committee in its discretion.

The 2015 Restated 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 2015 Restated 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 2015 Restated Plan to participants, subject to the achievement of certain performance goals.

Our compensation committee may grant awards of restricted stock, restricted stock units, performance share awards or cash-based awards under the 2015 Restated Plan that are intended to qualify as "performance-based compensation" under Section 162(m) of the Code. Such awards will only 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, funds from operations or similar measure, sales or revenue, development, 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. From and after the time that we become subject to Section 162(m) of the Code, the maximum award that is intended to qualify as "performance-based compensation" under Section 162(m) of the Code that may be made to certain of our officers during any one calendar year period is 2,500,000 shares of common stock with respect to a share-based award and \$5.0 million with respect to a cash-based award.

The 2015 Restated Plan provides that upon the effectiveness of a "sale event," as defined in the 2015 Restated Plan, an acquirer or successor entity may assume, continue or substitute outstanding awards under the 2015 Restated Plan. To the extent that awards granted under the 2015 Restated Plan are not assumed or continued or substituted by the successor entity, upon the effective time of the sale event, the 2015 Restated 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 2015 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 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 2015 Restated 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 2015 Restated Plan require the approval of our stockholders.

No awards may be granted under the 2015 Restated Plan after the date that is ten years from the date of stockholder approval of the 2015 Restated Plan. No awards under the 2015 Restated Plan have been made prior to the date hereof.

2016 Employee Stock Purchase Plan

Our 2016 Employee Stock Purchase Plan, or ESPP, was adopted by our board of directors on January 19, 2016 and approved by our stockholders on , 2016 and will become effective on the date immediately prior to the date on which the registration statement of which this prospectus is part is declared effective by the SEC. 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 750,000 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, 2017 and each January 1 thereafter through January 1, 2026, by (i) 1% of the outstanding number of shares of our common stock on the immediately preceding December 31 or (ii) such lesser 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 30 days 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. 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 10% 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.

Senior Executive Cash Incentive Bonus Plan

Our Senior Executive Cash Incentive Bonus Plan, or the Bonus Plan, was adopted by our board of directors on January 19, 2016. The Bonus Plan provides for cash bonus payments based upon the attainment of performance targets established by our compensation committee. The payment targets will be related to financial and operational measures or objectives with respect to our company, or Corporate Performance Goals, as well as individual performance objectives.

Our compensation committee may select Corporate Performance Goals from among the following: cash flow (including, but not limited to, operating cash flow and free cash flow); revenue; corporate revenue; 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; funds from operations or similar measure, sales or revenue, developmental, clinical or regulatory milestones, acquisitions or strategic transactions, including licenses, collaborations, joint ventures or promotion arrangements; operating income (loss); return on capital, assets, equity, or investment; total stockholder returns; return on sales; gross or net profit levels; productivity; expense efficiency; margins; operating efficiency; customer satisfaction; working capital; earnings (loss) per share stock; sales or market shares; number of customers, number of new customers or customer references; operating income and/or net annual recurring revenue, any of which may be measured in absolute terms or compared to any incremental increase, in terms of growth, compared to another company or companies or to results of a peer group, against the market as a whole and/or as compared to applicable market indices and/or measured on a pre-tax or post-tax basis (if applicable).

Each executive officer who is selected to participate in the Bonus Plan will have a target bonus opportunity set for each performance period. The bonus formulas will be adopted in each performance period by the compensation committee and communicated to each executive. The Corporate Performance Goals will be measured at the end of each performance period after our financial reports have been published or such other appropriate time as the compensation committee determines. If the Corporate Performance Goals and individual performance objectives are met, payments will be made as soon as practicable following the end of each performance period. The Bonus Plan also permits the compensation committee to approve additional bonuses to executive officers in its sole discretion.

401(k) Plan

We maintain a tax-qualified retirement plan that provides eligible employees with an opportunity to save for retirement on a tax-advantaged basis. All participants' interests in their contributions are 100% vested when contributed. Pre-tax contributions are allocated to each participant's individual account and are then invested in selected investment alternatives according to the participants' directions. The retirement plan is intended to qualify under Section 401(a) of the Code. We do not currently make discretionary contributions or matching contributions to our 401(k) plan.

DIRECTOR COMPENSATION

The following table presents the total compensation for each person who served as a non-employee member of our board of directors during the year ended December 31, 2015. Other than as set forth in the table and described more fully below, we did not pay any compensation, make any equity awards or non-equity awards to or pay any other compensation to any of the non-employee members of our board of directors in 2015. We reimburse non-employee members of our board of directors for reasonable travel expenses. Dr. Nessan Bermingham, our Founder, President and Chief Executive Officer, Dr. John M. Leonard, our Chief Medical Officer, Dr. Jean-François Formela, Dr. Carl Gordon, Dr. Rachel Haurwitz and Dr. Andrew May did not receive any compensation for their respective service as members of our board of directors during fiscal year 2015. Dr. Bermingham's compensation for service as an employee is presented in the "Summary Compensation Table."

	Fees Ea	rned or Paid			
AT.	ir	1 Cash	. 1	Equity	Total
Name		(\$)	Awa	rds (\$)(1)	(\$)
Caroline Dorsa	\$	2,877	\$	77,544	\$80,421

(1) Amount reflects the grant date fair value of an option award granted in 2015 in accordance with ASC 718. Such grant-date fair value does not take into account any estimated forfeitures related to service-vesting conditions. These amounts do not correspond to the actual value that may be recognized by the named director upon vesting of the applicable awards. As of December 31, 2015, Ms. Dorsa held an option to purchase 28,200 shares of our common stock, which vests over a three-year period.

Non-Employee Director Compensation Policy

Our board of directors has adopted a non-employee director compensation policy, effective as of the completion of this offering, that is designed to enable us to attract and retain, on a long-term basis, highly qualified non-employee directors. 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:

Chairman

		Chairman
	Member	Additional
	Annual	Annual
	Fee	Fee
Board of Directors	\$35,000	\$ 25,000
Audit Committee	7,500	7,500
Compensation Committee	5,000	5,000
Nominating and Corporate Governance Committee	3,500	3,500

In addition, each non-employee director serving on our board of directors upon completion of this offering and each non-employee director elected or appointed to our board of directors following the completing of this offering will be granted a non-qualified stock option to purchase stock on the date of the effectiveness of the registration statement of which this prospectus is a part or on the date of such director's election or appointment to the board of directors, which will vest as to 33 1/3 % of the total award one year after the date of grant and thereafter in substantially equal quarterly installments during the three years following the grant date, subject to continued service through such date. On the date of each annual meeting of stockholders of our company, each non-employee director will be granted a non-qualified stock option to purchase upon the earlier to occur of the first anniversary of the grant date or the date of the next annual meeting of stockholders following the date of grant, subject to continued service as a director through such date.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Other than the compensation agreements and other arrangements described under "Executive and Director Compensation" in this prospectus and the transactions described below, since our inception on May 7, 2014, there has not been and there is not currently proposed, any transaction or series of similar transactions to which we were, or will be, a party in which the amount involved exceeded, or will exceed, \$120,000 and in which any director, executive officer, holder of five percent or more of any class of our capital stock or any member of the immediate family of, or entities affiliated with, any of the foregoing persons, had, or will have, a direct or indirect material interest.

License Agreement and Services Agreement with Caribou Biosciences, Inc.

In July 2014 we entered into a license agreement with Caribou Biosciences, Inc., or Caribou. We also entered into a related services agreement with Caribou in July 2014. See the section entitled "Business—Intellectual Property—Caribou Biosciences In-Licensed Intellectual Property" appearing elsewhere in this prospectus for more information. Rachel Haurwitz, a member of our board of directors, and Andrew May, a former member of our board of directors, are executive officers and stockholders of Caribou. Dr. Haurwitz is the President and Chief Executive Officer and a member of the board of Caribou. Dr. May currently serves as the Chief Scientific Officer of Caribou. Caribou Therapeutics Holdco, LLC, a holding company owned and managed by Caribou, is a greater than 5% stockholder in our company. Pursuant to the terms of the license agreement with Caribou we hold an exclusive, worldwide, royalty-free license, or the Caribou license, for the use of any CRISPR/Cas9-related patents and applications that Caribou had developed and filed, as well as any CRISPR/Cas9-related intellectual property developed by Caribou between July 16, 2014 and the time period specified in the license agreement in the field of human therapeutics, other than anti-fungal and anti-microbial uses. Pursuant to the services agreement entered into with Caribou in parallel with the license agreement, we are also receiving research and development services from Caribou until November 2016.

In relation to our founding, on July 16, 2014, Intellia Therapeutics, LLC, our former sole stockholder and holding company parent, issued junior preferred units to Caribou Therapeutics Holdco, LLC. We also issued time-vested common units and incentive units to each of Drs. Haurwitz and May. Each of them then contributed all of their units to Caribou Therapeutics Holdco, LLC. All of these units held by Caribou Therapeutics Holdco, LLC were exchanged in the Reorganization for shares of junior preferred stock, shares of founder stock and shares of common stock. We also agreed to pay Caribou \$5.0 million in service fees over the term of the services agreement and agreed to pay a percentage of Caribou's patent prosecution, filing and maintenance costs for such licensed intellectual property. As of December 31, 2015, we have paid \$3.5 million to Caribou pursuant to the services agreement and \$1.1 million for our portion of the patent prosecution, filing and maintenance costs pursuant to the license agreement.

License and Collaborative Research Agreement with Novartis Institutes for BioMedical Research, Inc.

In December 2014, we entered into a collaboration and license agreement, or the Novartis agreement, with Novartis Institutes for BioMedical Research, Inc., or Novartis, for the research of new CRISPR/Cas9-based therapies using CAR T cells and HSCs. We received a \$10.0 million non-refundable upfront technology access payment from Novartis in January 2015 and are entitled to an additional \$40.0 million, in aggregate, in additional technology access fees and research payments during the five-year collaboration term. In addition, we are eligible to receive up to \$230.3 million in development, regulatory and sales-based milestone payments and mid single-digit royalties, in each case, on a per-product basis. See the section entitled "Business—Strategic Collaborations—Novartis Institutes for BioMedical Research, Inc." appearing elsewhere in this prospectus for more information.

Novartis is a greater-than-5% stockholder in our company. Prior to our entry into the Novartis agreement, in September 2014, we entered into an agreement with Novartis for the exclusive right to negotiate a transaction involving our grant to Novartis of certain rights to our CRISPR/Cas9 technology. Pursuant to the exclusivity agreement, we agreed to issue to Novartis preferred units in exchange for a fee. We issued Novartis preferred

units, which converted into 4,761,905 shares of our Class A-1 preferred stock and 2,666,666 shares of our Class A-2 preferred stock in the Reorganization. Our preferred units were issued to Novartis pursuant to the terms of the September 2014 Unit Purchase Agreement described below.

Private Placements of Securities

Class A/Junior Preferred Unit Financing of Intellia Therapeutics, LLC

In July 2014, Intellia Therapeutics, LLC entered into an Equity Contribution and Unit Purchase Agreement among Atlas and Caribou, pursuant to which:

- Atlas contributed to Intellia Therapeutics, LLC \$2,899,999 in cash and 1,000 shares of our common stock that were purchased for \$100,000 in June 2014 in exchange for 2,857,142 Class A preferred units; and
- In exchange for 8,110,599 junior preferred units, Caribou, through its wholly owned, subsidiary, Caribou Therapeutics Holdco, LLC, contributed to us all
 of its membership interests of Intellia, LLC. Intellia, LLC was a holding company that was the original party to the license agreement with Caribou and
 otherwise had no other assets or operations prior to being merged with and into us in July 2014. See the section entitled "License Agreement and Services
 Agreement with Caribou Biosciences, Inc." for more information.

Class A-1 Preferred Unit Financing of Intellia Therapeutics, LLC

In September 2014, in connection with our Class A-1/A-2 preferred unit financing, we entered into a unit purchase agreement, or the Class A-1/A-2 purchase agreement, pursuant to which we agreed to issue and sell to investors an aggregate of (i) 5,714,287 Class A-1 preferred units at a purchase price of \$1.05 for aggregate consideration of \$6,000,001 and (ii) 3,999,999 Class A-2 preferred units at a purchase price of \$1.50 for aggregate consideration of \$5,999,999 at a subsequent closing. In December 2014, we amended the Class A-1/A-2 purchase agreement to provide for the issuance of the Class A-2 units at two subsequent closings.

The table below sets forth the aggregate number of Class A-1 preferred units sold to our directors, executive officers or holders of more than 5% of our capital stock at the time of such issuance, or an affiliate or immediate family member thereof under the Class A-1/A-2 purchase agreement:

Name	Class A-1 Preferred Units	Total Purchase Price
Atlas Venture Fund IX, LP	952,382	\$ 1,000,001
Novartis Institutes for BioMedical Research, Inc	4,761,905	\$ 5,000,000

Class A-2 Preferred Unit Financing of Intellia Therapeutics, LLC

The first subsequent closing under the Class A-1/A-2 purchase agreement, as amended, occurred in December 2014. The second subsequent closing under the Class A-1/A-2 purchase agreement, as amended, occurred in January 2015. The table below sets forth the number of Class A-2 preferred units sold to our directors, executive officers or holders of more than 5% of our capital stock at the time of such issuance, or an affiliate or immediate family member thereof:

Name	Class A-2 Preferred Units	Total Purchase Price
Atlas Venture Fund IX, LP	1,333,333	\$ 2,000,000
Novartis Institutes for BioMedical Research, Inc	2,666,666	\$ 3,999,999

Series B Preferred Stock Financing

In August 2015, Intellia Therapeutics, Inc. entered into a Series B Preferred Stock Purchase Agreement pursuant to which we issued and sold an aggregate of 13,336,601 shares of our Series B preferred stock at a price per share of \$5.25, for an aggregate purchase price of \$70.0 million. The following table sets forth the number of shares of our Series B Preferred Stock that we issued to our 5% stockholders and their affiliates in this transaction:

Name	Shares of Series B Preferred Stock	Total Purchase Price
Atlas Venture Fund IX, LP	761,905	\$ 4,000,001
Entities affiliated with Fidelity Management & Research LLC	2,857,143	\$15,000,001
Novartis Institutes for BioMedical Research, Inc	761,905	\$ 4,000,001
Entities affiliated with OrbiMed Advisors LLC	3,730,618	\$19,585,745

Investors' Rights Agreement

In connection with our Series B Preferred Stock financing, on August 20, 2015, we entered into an investors' rights agreement with the holders of our Junior, Series A-1, Series A-2 and Series B Preferred Stock and certain key holders of our common stock. This agreement provides these holders with certain rights relating to the registration of their shares under the Securities Act. For a more detailed description of these registration rights, see the section titled "Description of Capital Stock—Registration Rights."

This agreement also establishes certain "information and observer" rights and rights of first offer, and sets forth certain covenants relating to insurance, employee agreements, employee stock, indemnification, and related matters. On the closing of this offering, all provisions relating to these rights and covenants will terminate.

Consulting Arrangement

From inception through September 30, 2014, we received consulting and management services from Atlas Venture Advisors, Inc., or Atlas Venture Advisors, which through its affiliate, Atlas Venture Fund IX, has a greater than 5% ownership interest in us. We have paid Atlas Venture Advisors \$0.3 million for these services, including the reimbursement of expenses. We did not and do not have a written agreement in place with Atlas Venture Advisors with respect to the provision of consulting and management services, nor did or do we have a written agreement in place for the use of Atlas Venture Advisors' premises. From time to time and at our request, partners and associates of Atlas Venture Advisors provided us with certain strategic and ordinary course business operations consulting services at fees mutually agreed upon in advance by us and Atlas Venture Advisors. For example, prior to becoming a consultant and then employee of our company, Atlas Venture Advisors provided us with the services of Nessan Bermingham, who is our Founder, President and Chief Executive Officer and who provided scientific leadership, business development and executive services. We paid these consulting and management services fees to Atlas Venture Advisors pursuant to invoices that Atlas Venture Advisors submitted to us from time to time. The consulting and management services fees paid to Atlas Venture Advisors were based upon customary rates for such services and did not exceed 5% of the consolidated gross revenue of Atlas Venture Advisors during any of the past three fiscal years.

Indemnification Agreements

We have entered into agreements to indemnify our directors and executive officers. These agreements will, among other things, require us to indemnify these individuals for certain expenses (including attorneys' fees), judgments, fines and settlement amounts reasonably incurred by such person in any action or proceeding, including any action by or in our right, on account of any services undertaken by such person on behalf of our company or that person's status as a member of our board of directors to the maximum extent allowed under Delaware law.

Policies for Approval of Related Party Transactions

Our board of directors reviews and approves transactions with directors, officers and holders of five percent 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 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.

PRINCIPAL STOCKHOLDERS

The following table sets forth certain information known to us regarding beneficial ownership of our capital stock as of February 29, 2016, as adjusted to reflect the sale of common stock offered by us in this offering, for:

- each person or group of affiliated persons known by us to be the beneficial owner of more than five percent of our capital stock;
- each of our named executive officers;
- each of our directors; and
- all of our executive officers and directors as a group.

To the extent that the underwriters sell more than shares in this offering, the underwriters have the option to purchase up to an additional shares at the initial public offering price less the underwriting discount.

Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities. Under those rules, beneficial ownership includes any shares as to which the individual or entity has sole or shared voting power or investment power. Except as noted by footnote, and subject to community property laws where applicable, we believe, based on the information provided to us, that the persons and entities named in the table below have sole voting and investment power with respect to all common stock shown as beneficially owned by them.

The percentage of beneficial ownership prior to this offering in the table below is based on 44,269,269 shares of common stock deemed to be outstanding as of February 29, 2016, assuming the conversion of all outstanding shares of our preferred stock upon the closing of this offering, and the percentage of beneficial ownership at this offering in the table below is based on shares of common stock assumed to be outstanding after the closing of the offering. All of our preferred stock convert into shares of common stock on a one-for-1.0992035 basis. The information in the table below assumes no exercise of the underwriters' option to purchase additional shares.

	Shares Beneficially Owned Prior to Offering		Shares Beneficially Owned After Offering	
Name and Address of Beneficial Owner(1)	Number	Percentage	Number	Percentage
5% Stockholders:				
Atlas Venture Fund IX, L.P.(2)	7,530,641	17.0%		
Caribou Therapeutics Holdco, LLC(3)	9,509,540	21.5%		
Entities affiliated with Fidelity Management & Research Company(4)	3,140,577	7.1%		
Novartis Institutes for BioMedical Research, Inc.(5)	9,002,998	20.3%		
Entities affiliated with OrbiMed Advisors LLC(6)	4,100,707	9.3%		
Named Executive Officers and Directors:				
Nessan Bermingham, Ph.D.(7)	1,337,277	3.0%		
Caroline Dorsa	_			
Jean-François Formela, M.D.(8)	_			
Carl L. Gordon, Ph.D., CFA(9)	4,100,707	9.3%		
Rachel E. Haurwitz, Ph.D.(10)	9,509,540	21.5%		
John M. Leonard, Ph.D.(11)	891,518	2.0%		
José E. Rivera, J.D.(12)	445,758	1.0%		
All executive officers and directors as a group (10 persons)	17,149,497	38.7%		

(1) Unless otherwise indicated, the address for each beneficial owner is c/o Intellia Therapeutics, Inc., 130 Brookline Street, Suite 201, Cambridge, MA 02139.

(2) Consists of (i) 1,040,107 shares of common stock issuable upon conversion of shares of Founder Stock, which are fully vested, (ii) 4,187,442 shares of common stock issuable upon conversion of shares of Series A-1 Preferred Stock, (iii) 1,465,604 shares of common stock issuable upon conversion of shares of Series A-2 Preferred Stock, and (iv) 837,488 shares of common stock issuable upon

conversion of shares of Series B Preferred Stock. All shares are held directly by Atlas Venture Fund IX, L.P., or Atlas Venture Fund IX. Atlas Venture Associates IX, L.P., or AVA IX LP, is the general partner of Atlas Venture Fund IX, and Atlas Venture Associates IX, LLC, or AVA IX LLC, is the general partner of AVA IX LP. Peter Barrett, Bruce Booth, Jean-Francois Formela, Jeff Fagnan, Chris Lynch and Ryan Moore are the members of AVA IX LLC and collectively make investment decisions on behalf of Atlas Venture Fund IX, is each a director of AVA IX LLC. Dr. Formela is also a member of our board of directors. Dr. Formela disclaims beneficial ownership of such shares, except to the extent of his proportionate pecuniary interest therein, if any. The address for Atlas Venture Fund IX, is 25 First Street, Suite 303, Cambridge, MA 02141.

- (3) Consists of (i) an aggregate of 297,171 shares of restricted common stock and 297,171 shares of common stock issuable upon conversion of shares of Founder Stock, all of which was subsequently transferred to Caribou Therapeutics Holdco, LLC, or Caribou Holdco (See the section entitled "Certain Relationships and Related Party Transactions—License Agreement and Services Agreement with Caribou Biosciences, Inc." for additional information) and all of which are subject to vesting requirements, and (ii) 8,915,198 shares of common stock issuable upon conversion of shares of Junior Preferred Stock. Rachel Haurwitz, a greater than 5% stockholder of Caribou, is the President, Chief Executive Officer and a director of Caribou. Caribou Holdco is a wholly-owned subsidiary of Caribou, and Dr. Haurwitz may be deemed to share voting and dispositive power with respect to the shares held by Caribou Holdco. Dr. Haurwitz is a member of our board of directors. Dr. Haurwitz disclaims beneficial ownership of such shares, except to the extent of her pecuniary interest therein, if any. The address for Caribou Therapeutics Holdco, LLC, or Caribou Holdco, is 2929 7th Street, Suite 120, Berkeley, CA 94710.
- (4) Consists of (i) 559,289 shares of common stock issuable upon conversion of Series B Preferred Stock held by Fidelity Select Portfolios: Biotechnology Portfolio, (ii) 133,680 shares of common stock issuable upon conversion of Series B Preferred Stock held by Fidelity Advisor Series VII: Fidelity Advisor Biotechnology Fund, (iii) 31,227 shares of common stock issuable upon conversion of Series B Preferred Stock held by Pyramis Lifecycle Blue Chip Growth Commingled Pool, (iv) 696,998 shares of common stock issuable upon conversion of Series B Preferred Stock held by Fidelity Blue Chip Growth Commingled Pool, (vi) 218,208 shares of common stock issuable upon conversion of Series B Preferred Stock held by Fidelity Blue Chip Growth Common stock issuable upon conversion of Series B Preferred Stock held by Fidelity Mt. Vernon Street Trust: Fidelity Securities Fund: Fidelity Get, Sisuable upon conversion of Series B Preferred Stock held by Fidelity Mt. Vernon Street Trust: Fidelity Series Growth Company Fund, (vii) 664,530 shares of common stock issuable upon conversion of Series B Preferred Stock held by Fidelity Growth Company Fund, (vii) 196,642 shares of common stock issuable upon conversion of Series B Preferred Stock held by Fidelity Growth Company Fund, (vii) 196,642 shares of common stock issuable upon conversion of Series B Preferred Stock held by Fidelity Growth Company Fund, (vii) 196,642 shares of common stock issuable upon conversion of Series B Preferred Stock held by Fidelity Growth Company Fund, (ix) 199,682 shares of common stock issuable upon conversion of Series B Preferred Stock held by Fidelity Mt. Vernon Street: Fidelity Growth Company Fund, (ix) 197,07 shares of common stock issuable upon conversion of Series B Preferred Stock held by Fidelity Mutagement and Research LLC, or FMR LLC. Advised Shares of FMR LLC. Members of the family of Edward C. Johnson 3d, including Abigail P. Johnson, are the predominant owners, directly or through trusts, of Series B voting common shares of FMR LLC, repre
- (5) Consists of (i) 5,234,302 shares of common stock issuable upon conversion of shares of Series A-1 Preferred Stock, (ii) 2,931,208 shares of common stock issuable upon conversion of shares of Series A-2 Preferred Stock, and (iii) 837,488 shares of common stock issuable upon conversion of shares of Series B Preferred Stock. All shares are held by Novartis Institutes for BioMedical Research, Inc., or Novartis. Novartis is an indirect wholly-owned subsidiary of, and controlled by, Novartis AG. The address for Novartis is 250 Massachusetts Avenue, Cambridge, MA 02139.
- (6) Consists of (i) 3,140,581 shares of common stock issuable upon the conversion of shares of Series B Preferred Stock, held by OrbiMed Private Investments V, LP, or OPI V, and (ii) 960,126 shares of common stock issuable upon the conversion of shares of Series B Preferred Stock, held by OrbiMed Global Healthcare Master Fund, L.P., or OGH. OrbiMed Global Healthcare GP LLC, or GP V, is the general partner of OPI V, and OrbiMed Global Healthcare GP LLC, or OGH GP, is the general partner of OGH. OrbiMed Advisors, is the managing member of each of GP V and OGH GP. Samuel D. Isaly is the managing member of an owner of a controlling interest in OrbiMed Advisors. By virtue of such relationships, GP V, OrbiMed Advisors and Mr. Isaly may be deemed to have voting and investment power with respect to the shares held by OPI V and as a result may be deemed to have beneficial ownership of such shares. Dr. Carl L. Gordon, one of our board members, is a member of OrbiMed Advisors. Each of GP V, OGH GP, OrbiMed Advisors, Mr. Isaly and Dr. Gordon disclaims beneficial ownership of the shares held by OPI V and OGH, respectively, except to the extent of its or his pecuniary interest therein, if any. The address for these entities is 601 Lexington Avenue, 54th floor, New York, New York 10022.

- (7) Consists of (i) 594,345 shares of common stock, which are subject to vesting requirements, and (ii) 742,932 shares of common stock issuable upon conversion of shares of Founder Stock, which are subject to vesting requirements.
- (8) See note (2) above.
- (9) Consists of the shares listed in footnote (6) above. Dr. Gordon is a member of OrbiMed Advisors, which is the managing member of the general partner of OPI V, and the general partner of OGH, and as such Dr. Gordon may be deemed to share voting and investment power with respect to the shares held by such entities. Dr. Gordon disclaims beneficial ownership of these shares except to the extent of this pecuniary interest therein if any. Dr. Gordon's business address is 601 Lexington Avenue, 54th floor, New York, New York 10022.
- (10) Consists of the shares listed in footnote (3) above. Dr. Haurwitz is the President, Chief Executive Officer, a director and greater than 5% stockholder of Caribou, the parent of Caribou Holdco. As such, Dr. Haurwitz may be deemed to share voting and dispositive power with respect to all shares held by such entity. Dr. Haurwitz disclaims beneficial ownership of such shares except to the extent of any pecuniary interest therein. Dr. Haurwitz's business address is 2929 7th Street, Suite 120, Berkeley, CA 94710.
- (11) Consists of 891,518 shares of common stock, which are subject to vesting requirements.
- (12) Consists of 445,758 shares of common stock, which are subject to vesting requirements. All shares are held by Rivak Capital LLC, or Rivak. Mr. Rivera is a member and manager of Rivak and has voting and dispositive power over the shares. The address for Rivak is 13450 N. Reigate Lane, Green Oaks, IL 60048.

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 120,000,000 shares of common stock, par value \$0.0001 per share, and 5,000,000 shares of preferred stock, par value \$0.0001 per share, all of which shares of preferred stock will be undesignated.

As of February 29, 2016, 44,269,269 shares of our common stock were outstanding and held by 70 stockholders of record. This amount assumes the conversion of all outstanding shares of our preferred stock into common stock, which will occur immediately prior to the closing of this offering.

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

Immediately prior to 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 5,000,000 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 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 investor rights agreement between us, holders of our preferred stock and certain holders our common stock. The investor 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 completion of this offering, the holders of shares of our preferred stock upon closing of this offering, are entitled to demand registration rights. Under the terms of the investor rights agreement, we will be required, upon the written request of holders of these securities that would result in an aggregate offering price of at least \$10.0 million, to file a registration statement and use commercially reasonable efforts to effect the registration of all or a portion of these shares for public resale. We are required to effect only two registrations pursuant to this provision of the investor rights agreement.

Short-Form Registration Rights

Upon the completion of this offering, the holders of shares of our common stock, including those issuable upon the conversion of shares of our preferred stock upon closing of this offering, are also entitled to 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 20% in interest of these holders to sell registrable securities at an aggregate price of at least \$4.0 million, we will be required to use commercially reasonable efforts to effect a registration of such shares. We are required to effect only two registrations in any twelve month period pursuant to this provision of the investor rights agreement.

Piggyback Registration Rights

Upon the completion of this offering, the holders of shares of our common stock, including those issuable upon the conversion of shares of our preferred stock upon closing of this offering, are entitled to piggyback registration rights. 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 investor 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 75% 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, limitation of liability and the amendment of our bylaws and certificate of incorporation must be approved by not less than 75% of the outstanding shares entitled to vote on the amendment, and not less than 75% 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, subject to any limitations set forth in the bylaws; and may also be amended by the affirmative vote of at least 75% of the outstanding shares entitled to vote on 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 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.

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 "ITTX."

Transfer Agent and Registrar

The transfer agent and registrar for our common stock will be Computershare Trust Company N.A.

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 February 29, 2016, upon the completion of this offering, shares of our common stock will be outstanding, assuming 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, and shares of our common stock are restricted shares of common stock subject to time-based vesting terms.

Rule 144

In general, a person who has beneficially owned restricted stock for at least six months would be entitled to sell their securities provided that (i) such person is not deemed to have been one of our affiliates at the time of, or at any time during the 90 days preceding, a sale and (ii) we are subject to the Securities Exchange Act of 1934, as amended, or the Exchange Act, periodic reporting requirements for at least 90 days before the sale. Persons who have beneficially owned restricted shares for at least six months but who are our affiliates at the time of, or any time during the 90 days preceding, a sale, would be subject to additional restrictions, by which such person would be entitled to sell within any three-month period only a number of securities that does not exceed the greater of either of the following:

- 1% of the number of shares then outstanding, which will equal approximately underwriters' option to purchase additional shares, based on the number of shares outstanding as of February 29, 2016; 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;

provided, in each case, that we are subject to the Exchange Act periodic reporting requirements for at least 90 days before the sale. Such sales both by affiliates and by non-affiliates must also comply with the manner of sale, current public information and notice provisions of Rule 144.

Rule 701

Rule 701 under the Securities Act, as in effect on the date of this prospectus, permits resales of shares in reliance upon Rule 144 but without compliance with certain restrictions of Rule 144, including the holding period requirement. Most of our employees, executive officers or directors who purchased shares under a written compensatory plan or contract may be entitled to rely on the resale provisions of Rule 701, but all holders of Rule 701 shares are required to wait until 90 days after the date of this prospectus before selling their shares. 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 and executive officers and certain of our 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. As of will cover approximately shares.

CERTAIN MATERIAL U.S. FEDERAL INCOME 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. 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 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 generally 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 discussion below under the section titled "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

In general, a non-U.S. holder 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 10% 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, 2016. 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

Under the terms and subject to the conditions contained in an underwriting agreement dated , 2016, we have agreed to sell to the underwriters named below, for whom Credit Suisse Securities (USA) LLC, Jefferies LLC and Leerink Partners LLC are acting as representatives, the following respective numbers of shares of common stock:

Underwriter	Number of Shares
Credit Suisse Securities (USA) LLC	
Jefferies LLC	
Leerink Partners LLC	
Wedbush Securities Inc.	
Total	

The underwriting agreement provides that the underwriters are obligated to purchase all the shares of common stock in the offering if any are purchased, other than those shares covered by the over-allotment option described below. The underwriting agreement also provides that if an underwriter defaults, the purchase commitments of non-defaulting underwriters may be increased or the offering may be terminated.

We have granted to the underwriters a 30-day option to purchase on a pro rata basis up to additional shares at the initial public offering price less the underwriting discounts and commissions. The option may be exercised only to cover any over-allotments of common stock.

The underwriters propose to offer the shares of common stock initially at the public offering price on the cover of this prospectus and to selling group members at that price less a selling concession of \$ per share. The underwriters may allow a discount of \$ per share on sales to other broker-dealers. After the initial public offering the representatives may change the public offering price and concession and discount to other broker-dealers.

The following table summarizes the compensation we will pay:

	Per S	Per Share		otal
	Without Over- allotment	With Over- allotment	Without Over- allotment	With Over- <u>allotment</u>
Underwriting discounts and commissions paid by us	\$	\$	\$	\$

We estimate that our out-of-pocket expenses for this offering (not including any underwriting discounts and commissions) will be approximately \$ We have agreed to reimburse the underwriters for expenses of approximately \$ related to the clearance of this offering with the Financial Industry Regulatory Authority.

The underwriters have informed us that they do not expect sales to accounts over which the underwriters have discretionary authority to exceed 5% of the shares of common stock being offered.

We have agreed that we will not offer, sell, contract to sell, pledge or otherwise dispose of, directly or indirectly, or file with the Securities and Exchange Commission a registration statement under the Securities Act relating to, any shares of our common stock or securities convertible into or exchangeable or exercisable for any shares of our common stock, or publicly disclose the intention to make any offer, sale, pledge, disposition or filing, without the prior written consent of Credit Suisse Securities (USA) LLC, Jefferies LLC and Leerink Partners LLC for a period of 180 days after the date of this prospectus. The restrictions described in this paragraph do not apply in certain circumstances, including grants of employee stock options pursuant to our existing plans or issuances pursuant to the exercise of such employee options.

Our officers and directors and other stockholders and optionholders have agreed that they will not offer, sell, contract to sell, pledge or otherwise dispose of, directly or indirectly, any shares of our common stock or securities convertible into or exchangeable or exercisable for any shares of our common stock, enter into a transaction that would have the same effect, or enter into any swap, hedge or other arrangement that transfers, in whole or in part, any of the economic consequences of ownership of our common stock, whether any of these transactions are to be settled by delivery of our common stock or other securities, in cash or otherwise, or publicly disclose the intention to make any offer, sale, pledge or disposition, or to enter into any transaction, swap, hedge or other arrangement, without, in each case, the prior written consent of Credit Suisse Securities (USA) LLC, Jefferies LLC and Leerink Partners LLC for a period of 180 days after the date of this prospectus.

The underwriters have reserved for sale at the initial public offering price up to shares of the common stock for employees, directors and other persons associated with us who have expressed an interest in purchasing common stock in this offering. The number of shares available for sale to the general public in the offering will be reduced to the extent these persons purchase the reserved shares. Any reserved shares not so purchased will be offered by the underwriters to the general public on the same terms as the other shares.

We have agreed to indemnify the underwriters against liabilities under the Securities Act, or contribute to payments that the underwriters may be required to make in that respect.

We have applied to list the shares of our common stock on The NASDAQ Global Market under the symbol "ITTX."

Prior to the 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 determining the initial public offering price, we and the representatives expect to consider a number of factors including:

- the information set forth in this prospectus and otherwise available to the underwriters;
- our prospects and the history and prospects for the industry in which we compete;
- an assessment of our management;
- our prospects for future earnings;
- the recent market prices of, and demand for, publicly traded common stock of generally comparable companies;
- the general condition of the securities markets at the time of the offering; and
- other factors deemed relevant by the underwriters and us.

Neither we nor the underwriters can assure investors that an active trading market will develop for our common stock, or that shares of our common stock will trade in the public market at or above the initial public offering price.

In connection with the offering the underwriters may engage in stabilizing transactions, over-allotment transactions, syndicate covering transactions, penalty bids and passive market making in accordance with Regulation M under the Exchange Act.

- Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum.
- Over-allotment transactions involve sales by the underwriters of shares in excess of the number of shares the underwriters are obligated to purchase, creating a syndicate short position. The short position may be either a covered short position or a naked short position. In a covered short position, the number of shares over-allotted by the underwriters is not greater than the number of shares that they may purchase in the over-allotment option. In a naked short position, the number of shares involved is greater than the number of shares in the over-allotment option. The underwriters may close out any covered short position by either exercising their over-allotment option and/or purchasing shares in the open market.

- Syndicate covering transactions involve purchases of the common stock in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of shares to close out the 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 over-allotment option. If the underwriters sell more shares than could be covered by the over-allotment option, a naked short position, the position can only be closed out by buying shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there could be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.
- Penalty bids permit the representative to reclaim a selling concession from a syndicate member when the common stock originally sold by the syndicate
 member is purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.
- In passive market making, market makers in the common stock who are underwriters or prospective underwriters may, subject to limitations, make bids for or purchases of our common stock until the time, if any, at which a stabilizing bid is made.

These stabilizing transactions, syndicate covering transactions and penalty bids 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 the 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. These transactions may be effected on The NASDAQ Global Market or otherwise and, if commenced, may be discontinued at any time.

A prospectus in electronic format may be made available on the websites maintained by one or more of the underwriters, or selling group members, if any, participating in this offering and one or more of the underwriters participating in this offering may distribute prospectuses electronically. The representatives may agree to allocate a number of shares to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the underwriters and selling group members that will make Internet distributions on the same basis as other allocations.

Other Relationships

Certain of the underwriters and their affiliates may provide from time to time in the future certain commercial banking, financial advisory, investment banking and other services for us and such affiliates in the ordinary course of their business, for which they may receive customary fees and commissions. In addition, from time to time, certain of the underwriters and their affiliates may effect transactions for their own account or the account of customers, and hold on behalf of themselves or their customers, long or short positions in our debt or equity securities or loans, and may do so in the future. The underwriters are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage activities. We have entered into an agreement with Wedbush Securities Inc., an underwriter in this offering, for advisory services pursuant to which Wedbush Securities Inc. will receive an agreed-upon fee not to exceed 0.35% of the net proceeds from this offering. In addition, Leerink Partners LLC, an underwriter in this offering, was the placement agent in our Series B financing in August 2015. Affiliates of Leerink Partners LLC were also investors in our Series B financing.

Selling Restrictions

Notice to Investors in the European Economic Area

In relation to each Member State of the European Economic Area that has implemented the Prospectus Directive, or each, a Relevant Member State, each underwriter represents and agrees that with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State, or the Relevant Implementation Date, it has not made and will not make an offer of our common stock to the public in that Relevant Member State prior to the publication of a prospectus in relation to our common stock that has been

approved by the competent authority in that Relevant Member State or, where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State, all in accordance with the Prospectus Directive, except that it may, with effect from and including the Relevant Implementation Date, make an offer of our common stock to the public in that Relevant Member State at any time:

- to any legal entity that is a qualified investor as defined in the Prospectus Directive;
- to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the PD Amending Directive, 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive) subject to obtaining the prior consent of the manager for any such offer; or
- in any other circumstances falling within Article 3(2) of the Prospectus Directive;

provided that no such offer of our common stock shall require the publication by the issuer or any underwriter of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an "offer to the public" in relation to any shares of our common stock in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and our common stock to be offered so as to enable an investor to decide to purchase or subscribe our common stock, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Member State and the expression Prospectus Directive means Directive 2003/71/EC (and amendments thereto, including Directive 2010/73/EU, to the extent implemented in each Relevant Member State) and includes any relevant implementing measure in each Relevant Member State.

Notice to Investors in the United Kingdom

Each underwriter:

- has only communicated or caused to be communicated and will only communicate or cause to be communicated any invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000, or the FSMA) in connection with the sale or issue of common stock in circumstances in which section 21 of the FSMA does not apply to such underwriter; and
- has complied with, and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the shares of common stock in, from, or otherwise involving the United Kingdom.

This prospectus is directed solely at persons who (i) are outside the United Kingdom or (ii) have professional experience in matters relating to investments or (iii) are persons falling within Article 49(2)(a) to (d) of the FSMA (Financial Promotion) Order 2005 (all such persons together being referred to as "relevant persons"). This prospectus must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this prospectus relates is available only to relevant persons and will be engaged in with relevant persons only.

LEGAL MATTERS

The validity of the shares of common stock offered by this prospectus will be passed upon for us by Goodwin Procter LLP, Boston, Massachusetts. Certain legal matters related to this offering will be passed upon for the underwriters by Latham & Watkins LLP, Boston, Massachusetts.

EXPERTS

The consolidated financial statements as of December 31, 2014 and 2015, and for the period from May 7, 2014 (inception) to December 31, 2014 and the year ended December 31, 2015, included in this prospectus, have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report appearing herein. Such consolidated financial statements have been so included in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

CHANGE IN INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We dismissed PricewaterhouseCoopers LLP, or PwC, as our independent registered public accounting firm on November 11, 2015 effective as of that date. Our board of directors participated in and approved our change in independent registered public accounting firm. PwC issued their audit report, dated September 4, 2015, on our consolidated financial statements as of December 31, 2014 and for the period from May 7, 2014 (inception) to December 31, 2014. The report of PwC on our consolidated financial statements as of December 31, 2014 and for the period from May 7, 2014 (inception) to December 31, 2014 contained no adverse opinion or disclaimer of opinion and was not qualified or modified as to audit scope, accounting principle or uncertainty. During the period from May 7, 2014 (inception) to December 31, 2014 and the subsequent interim period through November 11, 2015, (i) there were no disagreements (as that term is used in Item 304(a)(1)(iv) of Regulation S-K and the related instructions) with PwC on any matter of accounting principles or practices, financial statement disclosure, or audited consolidated financial statements for the period from May 7, 2014 (inception) to December 31, 2014, and their report on our audited consolidated financial statements for the period from May 7, 2014 (inception) to December 31, 2014 and their report on audited consolidated financial statements for the period from May 7, 2014 (inception) to December 31, 2014, and (ii) there were no "reportable events" as such term is defined in Item 304(a)(1)(v) of Regulation S-K.

We provided PwC with a copy of the disclosures set forth under the heading "Change in Independent Registered Public Accounting Firm" included in this prospectus and requested that PwC furnish a letter addressed to the Securities and Exchange Commission stating whether or not PwC agrees with statements related to them made by us in the disclosures above. PwC has furnished such letter dated December 22, 2015, a copy of which is filed as Exhibit 16.1 to the registration statement of which this prospectus forms a part.

We engaged Deloitte & Touche LLP, or Deloitte, as our independent registered public accounting firm on November 17, 2015. The decision to change our independent registered public accounting firm was approved by our board of directors. During the period from May 7, 2014 (inception) to December 31, 2014 and the subsequent period preceding our engagement of Deloitte as our independent registered public accounting firm on November 17, 2015, neither we nor anyone acting on our behalf consulted with Deloitte regarding: (1) the application of accounting principles to a specific completed or contemplated transaction; or the type of audit opinion that might be rendered on our consolidated financial statements and Deloitte did not provide any written report or oral advice that Deloitte concluded was an important factor considered by us in reaching a decision as to any such accounting, auditing or financial reporting issue; or (2) any matter that was either the subject of a disagreement, as that term is defined in S-K 304(a)(1)(iv) and the related instructions to S-K 304, or a reportable event, as that term is defined in S-K 304(a)(1)(v).

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 (File Number 333-) 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.intelliatx.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.

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Report of Independent Registered Public Accounting Firm Consolidated Balance Sheets Consolidated Statements of Operations Consolidated Statements of Convertible Preferred Stock and Stockholders' Equity (Deficit) Consolidated Statements of Cash Flows Notes to Consolidated Financial Statements

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Intellia Therapeutics, Inc. Cambridge, Massachusetts

We have audited the accompanying consolidated balance sheets of Intellia Therapeutics, Inc. (successor to Intellia Therapeutics, LLC) and subsidiaries (the "Company") as of December 31, 2014 and 2015, and the related consolidated statements of operations, convertible preferred stock and stockholders' equity (deficit), and cash flows for the period from May 7, 2014 (inception) to December 31, 2014 and the year ended December 31, 2015. 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. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, 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, such consolidated financial statements present fairly, in all material respects, the financial position of Intellia Therapeutics, Inc. and subsidiaries as of December 31, 2014 and 2015, and the results of their operations and their cash flows for the period from May 7, 2014 (inception) to December 31, 2014 and the year ended December 31, 2015, in conformity with accounting principles generally accepted in the United States of America.

/s/ Deloitte & Touche LLP

Boston, Massachusetts March 16, 2016

INTELLIA THERAPEUTICS, INC. (SUCCESSOR TO INTELLIA THERAPEUTICS, LLC) CONSOLIDATED BALANCE SHEETS (in thousands, except unit, share and per share data)

		ember 31, December 31, 2014 2015		Pro Forma December 3 2015 (unaudited		
ASSETS						
Current assets:						
Cash and cash equivalents	\$	9,845	\$	75,816	\$	75,816
Accounts receivable		—		1,000		1,000
Prepaid expenses and other current assets		285		810		810
Total current assets		10,130		77,626		77,626
Property and equipment, net		308		2,708		2,708
Other assets		256		1,805		1,805
Total assets	\$	10,694	\$	82,139	\$	82,139
LIABILITIES AND STOCKHOLDERS' EQUITY (I	DEFICIT))				
Current liabilities:						
Accounts payable	\$	199	\$	1,360	\$	1,360
Accrued expenses		2,156		2,788		2,788
Current portion of deferred revenue		_		6,547		6,547
Total current liabilities		2,355		10,695		10,695
Deferred revenue, net of current portion		_		3,765		3,765
Other long-term liabilities		773		323		323
Commitments and contingencies (Note 6)						
Convertible preferred stock (Series B, Series A-2, Series A-1, Junior and Founder), \$0.0001 par value; no						
shares authorized, issued or outstanding as of December 31, 2014 and 36,500,000 shares authorized and						
36,316,628 shares issued and outstanding as of December 31, 2015; aggregate liquidation preference of						
\$95,946 as of December 31, 2015; no shares issued and outstanding, pro forma as of December 31,						
2015 (unaudited)		—		88,557		—
Stockholders' equity (deficit)						
Preferred units (Class A-2, Class A-1 and Junior), no par value; 19,348,694 and no units issued and						
outstanding as of December 31, 2014 and 2015, respectively; aggregate liquidation preference of						
\$21,516 as of December 31, 2014;		16,448		—		—
Common units, no par value; 2,298,000 units and no units issued and outstanding as of December 31,						
2014 and 2015, respectively;		607		-		-
Incentive units, no par value; 2,649,457 and no units issued and outstanding as of December 31, 2014 and						
2015, respectively;		50		—		—
Common stock, \$0.0001 par value; no shares authorized, issued or outstanding as of December 31, 2014						
and 50,000,000 shares authorized and 4,349,919 shares issued and outstanding as of December 31,						
2015; 44,269,269 shares issued and outstanding, pro forma as of December 31, 2015 (unaudited)		-				4
Additional paid-in capital		-		735		89,288
Accumulated deficit		(9,539)		(21,936)		(21,936)
Total stockholders' equity (deficit)		7,566		(21,201)		67,356
Total liabilities and stockholders' equity (deficit)	\$	10,694	\$	82,139	\$	82,139

The accompanying notes are an integral part of these consolidated financial statements.

INTELLIA THERAPEUTICS, INC. (SUCCESSOR TO INTELLIA THERAPEUTICS, LLC) CONSOLIDATED STATEMENTS OF OPERATIONS (in thousands, except per unit and per share data)

	Ma (inc	riod from by 7, 2014 reption) to rember 31, 2014	D	Year Ended ecember 31, 2015
Collaboration revenue	\$		\$	6,044
Operating expenses:				
Research and development		1,105		11,170
In-process research and development		6,055		
General and administrative		2,379		8,283
Total operating expenses		9,539		19,453
Loss before income taxes		(9,539)		(13,409)
Benefit from income taxes				1,012
Net loss	\$	(9,539)	\$	(12,397)
Net loss per common unit, basic and diluted	\$	(11.55)	\$	_
Net loss per share attributable to common stockholders, basic and diluted	\$		\$	(30.09)
Weighted average common units outstanding, basic and diluted		826		
Weighted average shares outstanding, basic and diluted				412
Pro forma net loss per share, basic and diluted (unaudited)			\$	(0.41)
Pro forma weighted average shares outstanding, basic and diluted (unaudited)				30,030

The accompanying notes are an integral part of these consolidated financial statements.

INTELLIA THERAPEUTICS, INC. (SUCCESSOR TO INTELLIA THERAPEUTICS, LLC) CONSOLIDATED STATEMENTS OF CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY (DEFICIT) (in thousands, except unit and share data)

	Series A-1, S and Junior 1		Comn	non	Com	mon	Incen	tive	Additional	Accumulated	Total Stockholders'	Conver Preferred	
	Units	Amount	Units	Amount	Shares	Amount	Units	Amount	Paid-In Capital	Deficit	Equity	Shares	Amount
Balance at May 7, 2014 (inception)	_	\$ _	_	\$ _	_	\$ —	_	\$ _	\$	\$ _	\$ _	_	\$ _
Issuance of Junior Preferred Units in connection with the Caribou agreements	8,110,599	4.055	_		_	_	_	_	_		4.055		
Issuance of Class A-1 and Class A-2 Preferred Units, net of issuance costs of \$258	11,238,095	12,393	_	_	_	_	_	_	_	_	12,393	_	
Issuance of common			946,237	349	_	_	_		_	_	349		_
Equity-based compensation	_	_	1,351,763	258	_	_	2,649,457	50	_	_	308	_	_
Net loss										(9,539)	(9,539)		
Balance at December 31, 2014	19,348,694	16,448	2,298,000	607			2,649,457	50	_	(9,539)	7,566	_	_
Issuance of Class A-2 Preferred Units net of issuance costs of \$16	1,333,333	1.984	2,250,000	007			2,010,107	50		(0,000)	1,984		
Allocation from Novartis collaboration to carrying value of Preferred Shares		2,644	_	_	_	_	_	_	_	_	2,644	_	_
Tax provision associated with intraperiod tax allocation		(1,012)	_	_	_	_	_	_	_	_	(1,012)		_
Effect of Reorganization Issuance of Series B	(20,682,027)	(20,064)	(2,298,000)	(607)	2,912,284	_	(2,649,457)	(50)	50	_	(20,671)	22,980,027	20,671
Preferred Shares, net of issuance costs of \$2,754	_	_	_	_	_	_		_	_	_		13,336,601	67,263
Equity-based compensation Net loss		_		_	1,437,635	_		_	685	(12,397)	685 (12,397)		623
Balance at December 31, 2015		\$		\$	4,349,919	\$		<u>\$ </u>	\$ 735	\$ (21,936)		36,316,628	\$ 88,557

The accompanying notes are an integral part of these consolidated financial statements.

INTELLIA THERAPEUTICS, INC. (SUCCESSOR TO INTELLIA THERAPEUTICS, LLC) CONSOLIDATED STATEMENTS OF CASH FLOWS (amounts in thousands)

	Ma (ince Dece	iod from y 7, 2014 eption) to ember 31, 2014	ar Ended ember 31, 2015
Cash flows from operating activities:			
Net loss	\$	(9,539)	\$ (12,397)
Adjustments to reconcile net loss to net cash used in operating activities:			
Acquired in-process research and development		6,055	
Depreciation and amortization expense		3	328
Loss on disposal of property and equipment			9
Equity-based compensation expense		308	1,308
Benefit from intraperiod tax allocation			(1,012)
Changes in operating assets and liabilities:			
Prepaid expenses and other current assets		(285)	(525)
Accounts payable		163	335
Accrued expenses		1,056	805
Deferred revenue		(250)	9,312
Other assets		(256)	(76)
Other long-term liabilities		173	 150
Net cash used in operating activities		(2,322)	 (1,763)
Cash flows from investing activities:			
Purchases of property and equipment		(275)	(2,554)
Acquisition of in-process research and development		(300)	
Net cash used in investing activities		(575)	 (2,554)
Cash flows from financing activities:			
Payments to acquire in-process research and development			(1,100)
Proceeds from sale of Class A-1 preferred units, Class A-2 preferred units and Series B preferred stock		12,651	74,661
Payment of preferred unit and preferred stock issuance costs		(258)	(2,671)
Proceeds from sale of common units		349	
Payment of proposed public offering costs		—	(602)
Net cash provided by financing activities		12,742	70,288
Net increase in cash and cash equivalents		9,845	 65,971
Cash and cash equivalents at beginning of period			9,845
Cash and cash equivalents at end of period	\$	9,845	\$ 75,816
Supplemental disclosure of noncash investing and financing activities:			
Purchases of property and equipment unpaid at period end	\$	36	\$ 219
Financing costs incurred but unpaid at period end		—	970
Noncash portion of acquired in-process research and development		4,055	_
Acquisition of in-process research and development unpaid at period end		1,700	600

The accompanying notes are an integral part of these consolidated financial statements.

1. Nature of the Business

Intellia Therapeutics was formed in May 2014 in the state of Delaware as AZRN, Inc. and amended its certificate of incorporation in July 2014 to change its name from AZRN, Inc. to Intellia Therapeutics, Inc. In July 2014, Intellia Therapeutics, LLC was formed as the parent company of Intellia Therapeutics, Inc. In August 2015, the Company completed a series of transactions pursuant to which Intellia Therapeutics, LLC merged with and into its C corporation subsidiary, Intellia Therapeutics, Inc., with Intellia Therapeutics, Inc. continuing to exist as the surviving corporation (the "Reorganization"). In connection with the Reorganization, all of the outstanding common and preferred unitholders of Intellia Therapeutics, LLC received shares of preferred stock of Intellia Therapeutics, Inc., and holders of incentive units in Intellia Therapeutics, LLC received shares of restricted common stock in Intellia Therapeutics, Inc. There was no impact on the consolidated financial statements as a result of the Reorganization except for the reclassification of members' equity to stockholders' equity or temporary equity.

Intellia Therapeutics, LLC (collectively referred to with its wholly owned, controlled subsidiary, Intellia Therapeutics, Inc., as "Intellia" or the "Company") is a gene editing company focused on developing potentially curative therapeutics utilizing a recently developed biological tool known as CRISPR/Cas9.

The Company is subject to risks and uncertainties common to early stage companies in the biotechnology industry, including, but not limited to, development by competitors of more advanced or effective therapies, dependence on key executives, protection of and dependence on proprietary technology, compliance with government regulations and ability to secure additional capital to fund operations. Programs currently under development will require significant additional research and development efforts, including preclinical and clinical testing and regulatory approval prior to commercialization. These efforts require significant amounts of additional capital, adequate personnel and infrastructure and extensive compliance-reporting capabilities. Even if the Company's product development efforts are successful, it is uncertain when, if ever, the Company will realize significant revenue from product sales.

The accompanying financial statements have been prepared on a basis that assumes the Company will continue as a going concern and contemplates the realization of assets and satisfaction of liabilities and commitments in the ordinary course of business. Through December 31, 2015, the Company has funded its operations with proceeds from the sale of capital stock and with payments received under its collaboration arrangement with Novartis Institutes for BioMedical Research, Inc. ("Novartis"). Since its inception, the Company has incurred recurring losses, including net losses of \$9.5 million for the period from May 7, 2014 (inception) to December 31, 2014 and \$12.4 million for the year ended December 31, 2015. The Company expects to continue to generate operating losses in the foreseeable future.

The Company expects that its cash and cash equivalents of \$75.8 million as of December 31, 2015 will be sufficient to fund its operations for at least the next twelve months. The future of the Company beyond that point is largely dependent on its ability to finance its operations through additional capital raising transactions and collaborations. Although the Company has been successful in raising capital in the past, there is no assurance that additional funding will be available on acceptable terms, if at all. The Company may seek additional funding through sales of equity or convertible debt securities or additional collaboration agreements. The terms of any financing may adversely affect the holdings or the rights of the Company's security holders. Debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting the Company's ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. The Company may not be able to enter into additional collaboration arrangements. The Company's inability to raise capital as and when needed could have a negative impact on its financial condition and ability to pursue its business strategies. The Company could be forced to curtail the development of a product candidate, reduce or delay its development program or one or more of its other development programs, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase its

expenditures and undertake development or commercialization activities at its own expense, which could adversely affect its business prospects.

2. Summary of Significant Accounting Policies

Basis of Presentation

The consolidated financial statements prior to the Reorganization include the accounts of Intellia Therapeutics, LLC and its wholly owned, controlled subsidiary, Intellia Therapeutics, Inc. The consolidated financial statements following the Reorganization include the accounts of Intellia Therapeutics, Inc. and its wholly owned, controlled subsidiary, Intellia Securities Corp. All intercompany balances and transactions have been eliminated in consolidation. The only item comprising comprehensive loss is net loss.

Unaudited Pro Forma Information

On September 4, 2015, the Company's board of directors authorized the Company to file a confidential draft registration statement with the Securities and Exchange Commission to sell shares of its common stock to the public. Upon the closing of an initial public offering, all of the Company's outstanding shares of preferred stock will automatically convert into shares of common stock. The unaudited pro forma consolidated balance sheet information as of December 31, 2015 reflects the conversion of all outstanding shares of preferred stock into common stock upon the closing of an initial public offering.

For purposes of calculating pro forma basic and diluted loss per share, all shares of preferred stock outstanding as of December 31, 2015 have been treated as if they had been converted to common stock on May 7, 2014 (inception) or on the issuance date of the preferred stock, if later.

Use of Estimates

The preparation of the Company's consolidated financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates, judgments and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities as of the date of the consolidated financial statements and the reported amounts of expenses during the reporting periods. Significant estimates and assumptions reflected in these consolidated financial statements include, but are not limited to, revenue recognition, the recognition of research and development expenses and the valuation of common and incentive units. Estimates are periodically reviewed in light of changes in circumstances, facts and experiences. Actual results may differ materially from management's estimates, judgments and assumptions.

Subsequent Events

The Company considers events or transactions that occur after the balance sheet date but before the financial statements are issued to provide additional evidence relative to certain estimates or to identify matters that require additional disclosure. The Company evaluated all events and transactions through March 16, 2016, the date the consolidated financial statements as of December 31, 2014 and 2015 were issued.

Fair Value Measurements

The Company classifies fair value based measurements using a three-level hierarchy that prioritizes the inputs used to measure fair value. This hierarchy requires entities to maximize the use of observable inputs and minimize the use of unobservable inputs. The three levels of inputs used to measure fair value are as follows: Level 1, quoted market prices in active markets for identical assets or liabilities; Level 2, observable inputs other than quoted market prices included in Level 1 such as quoted market prices for markets that are not active or other inputs that are observable or can be corroborated by observable market data; and Level 3, unobservable

inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities, including certain pricing models, discounted cash flow methodologies and similar techniques that use significant unobservable inputs.

The Company's financial instruments consisted primarily of cash equivalents, accounts receivable and accounts payable. As of December 31, 2015, the Company's financial assets recognized at fair value consisted of the following:

		Fair Value as of December 31, 2015			
	Total	Level 1	Level 2	Level 3	
		(in thousands)			
Cash equivalents	\$30,000	\$30,000	\$ —	\$ —	
Total	\$30,000	\$30,000	<u>\$ —</u>	\$ —	

Cash Equivalents

The Company considers all highly liquid investments with maturities of three months or less when purchased to be cash equivalents. As of December 31, 2015, cash equivalents consisted of interest-bearing money market accounts.

Concentrations of Credit Risk

The Company's cash and cash equivalents may potentially be subject to concentrations of credit risk. The Company generally maintains balances in various operating accounts in excess of federally insured limits with financial institutions that management believes to be of high credit quality.

Property and Equipment

The Company records property and equipment at cost and recognizes depreciation and amortization using the straight-line method over the following estimated useful lives of the respective assets:

Asset Category	Useful Life
Laboratory equipment	5 years
Office furniture and equipment	5 years
Computer equipment	3 years
Leasehold improvements	5 years or term of respective lease, if shorter

Expenditures for repairs and maintenance of assets are expensed as incurred. Upon retirement or sale, the cost of assets disposed and the corresponding accumulated depreciation are removed from the related accounts and any resulting gain or loss is reflected in the results of operations.

Impairment of Long-Lived Assets

The Company tests long-lived assets to be held and used, including property and equipment, for impairment whenever events or changes in circumstances indicate that the carrying amount of assets or asset group may not be fully recoverable. Factors that the Company considers in deciding when to perform an impairment review include significant underperformance of the business in relation to expectations, significant negative industry or economic trends and significant changes or planned changes in the use of the assets.

Evaluation of recoverability of the asset or asset group is based on an estimate of undiscounted future cash flows resulting from the use of the asset or asset group and its eventual disposition. In the event that such cash flows are not expected to be sufficient to recover the carrying amount of the asset or asset group, the assets are

written down to their estimated fair values. The impairment loss would be based on the excess of the carrying value of the impaired asset over its fair value, determined based on discounted cash flows. To date, the Company has not recorded any impairment losses on long-lived assets.

Deferred Issuance Costs

Deferred issuance costs, which consist of direct incremental legal and professional accounting fees relating to the proposed public offering, are capitalized. The deferred issuance costs will be offset against public offering proceeds upon the consummation of the offering. In the event the offering is terminated, deferred issuance costs will be expensed. As of December 31, 2015, the Company capitalized \$1.5 million of deferred issuance costs related to the proposed public offering, which are included in other long-term assets on the consolidated balance sheet.

Income Taxes

Intellia Therapeutics, LLC was a Delaware limited liability company for federal and state income tax purposes; therefore, the Company's taxable losses were allocated to the members in accordance with the LLC operating agreement. Accordingly, no federal or state income tax was assessed to Intellia Therapeutics, LLC; however Intellia Therapeutics, Inc. is subject to federal, state and local income taxes and is included in the consolidated tax position for all periods presented. Accordingly, the Reorganization and change in tax status of the reporting entity did not have an impact on the consolidated tax provision.

The Company accounts for income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences attributable to differences between carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax reporting purposes and for operating loss and tax credit carryforwards. Changes in deferred tax assets and liabilities are recorded in the provision for income taxes.

The Company's deferred tax assets and liabilities are measured using enacted tax rates expected to apply in the years in which these temporary differences are expected to be recovered or settled. A valuation allowance is recorded to reduce deferred tax assets if it is determined that it is more likely than not that all or a portion of the deferred tax asset will not be realized. The Company considers many factors when assessing the likelihood of future realization of deferred tax assets, including recent earnings results, expectations of future taxable income, carryforward periods available and other relevant factors. The Company records changes in the required valuation allowance in the period that the determination is made.

The Company assesses its income tax positions and records tax benefits for all years subject to examination based upon management's evaluation of the facts, circumstances and information available as of the reporting date. For those tax positions where it is more likely than not that a tax benefit will be sustained, the Company records the largest amount of tax benefit with a greater than 50.0% likelihood of being realized upon ultimate settlement with a taxing authority having full knowledge of all relevant information. For those income tax positions where it is not more likely than not that a tax benefit will be sustained, the Company does not recognize a tax benefit in the financial statements. The Company records interest and penalties related to uncertain tax positions, if applicable, as a component of income tax expense.

Convertible Preferred Stock

The Company classifies stock that is redeemable in circumstances outside of the Company's control outside of permanent equity. The Company records convertible preferred stock at fair value upon issuance, net of any issuance costs or discounts. No accretion has been recognized as the contingent events that could give rise to redemption are not deemed probable.

Revenue Recognition

The Company recognizes revenue for each unit of accounting when all of the following criteria are met: persuasive evidence of an arrangement exists; delivery has occurred or services have been rendered; the seller's price to the buyer is fixed or determinable; and collectability is reasonably assured.

The terms of the Company's collaboration and license agreement contain multiple deliverables, which include licenses to CRISPR/Cas9-based therapeutic products directed to specific targets, referred to as exclusive licenses, as well as research and development activities to be performed by the Company on behalf of the collaboration partner related to the licensed targets. Payments that the Company may receive under these types of agreements include non-refundable technology access fees, payments for research activities, payments based upon the achievement of specified milestones and royalties on any resulting net product sales.

Multiple-Element Arrangements

The Company's collaboration and license agreement represents a multiple-element arrangement. The Company evaluates its collaborative agreements for proper classification in its statements of operations and comprehensive loss based on the nature of the underlying activity. The Company generally reflects as revenue amounts due under its collaborative agreements related to reimbursement of development activities as the Company is generally the principal under the arrangement.

The Company evaluates multiple-element arrangements to determine (i) the deliverables included in the arrangement and (ii) whether the individual deliverables represent separate units of accounting or whether they must be accounted for as a combined unit of accounting. When deliverables are separable, consideration received is allocated to the separate units of accounting based on the relative selling price method and the appropriate revenue recognition principles are applied to each unit. When the Company determines that an arrangement should be accounted for as a single unit of accounting, the Company must determine the period over which the performance obligations will be performed and revenue will be recognized. This evaluation requires the Company to make judgments about the individual deliverables and whether such deliverables are separable from the other aspects of the contractual relationship. Deliverables are considered separate units of accounting provided that (i) the delivered item has value to the customer on a standalone basis and (ii) if the arrangement includes a general right of return with respect to the delivered item, delivery or performance of the undelivered item is considered probable and substantially in the Company's control. In assessing whether an item has standalone value, the Company considers factors such as the research, development, manufacturing and commercialization capabilities of the collaboration partner and the availability of the associated expertise in the general marketplace. In addition, the Company considers whether the collaboration partner can use any other deliverable for its intended purpose without the receipt of the remaining deliverable, whether the value of the deliverable is dependent on the undelivered item, and whether there are other vendors that can provide the undelivered items.

The consideration received under the arrangement that is fixed or determinable is then allocated among the separate units of accounting based on the relative selling prices of the separate units of accounting. The Company determines the selling price of a unit of accounting within each arrangement using vendor-specific objective evidence of selling price, if available; third-party evidence of selling price if vendor-specific objective evidence is not available; or best estimate of selling price, if neither vendor-specific objective evidence nor third-party evidence is available. Determining the best estimate of selling price for a unit of accounting, the Company considers applicable market conditions and relevant entity-specific factors, including factors that were contemplated in negotiating the agreement with the customer and estimated costs. The Company validates the best estimate of selling price for units of accounting by evaluating whether changes in the key assumptions used to determine the best estimate of selling price will have a significant effect on the allocation of arrangement consideration between multiple units of accounting.

The Company recognizes arrangement consideration allocated to each unit of accounting when all of the revenue recognition criteria are satisfied for that particular unit of accounting. In the event that a deliverable does not represent a separate unit of accounting, the Company recognizes revenue from the combined unit of accounting over the contractual or estimated performance period for the undelivered items, which is typically the term of the Company's research and development obligations. If there is no discernible pattern of performance or objectively measurable performance measures do not exist, then the Company recognizes revenue under the arrangement on a straight-line basis over the period the Company is expected to complete its performance obligations. Conversely, if the pattern of performance over which the service is provided to the customer can be determined and objectively measurable performance measures exist, then the Company recognizes revenue under the arrangement using the proportional performance method. Revenue recognized is limited to the lesser of the cumulative amount of revenue earned, as determined using the straight-line method or proportional performance method, as applicable, as of the period ending date.

Significant management judgment is required in determining the level of effort required under an arrangement and the period over which the Company is expected to complete its performance obligations under an arrangement. Steering committee services that are not inconsequential or perfunctory and that are determined to be performance obligations are combined with other research services or performance obligations required under an arrangement, if any, in determining the level of effort required in an arrangement and the period over which the Company expects to complete its aggregate performance obligations.

Milestone Revenue

The Company's collaboration and license agreement includes contingent milestone payments related to specific development, regulatory and sales-based milestones. Development and regulatory milestones are typically payable when a product candidate initiates or advances in clinical trial phases, upon submission for marketing approval with regulatory authorities, and upon receipt of actual marketing approvals for a therapeutic or for additional indications. Sales-based milestones are typically payable when annual sales reach specified levels.

The Company evaluates whether each milestone is substantive and at risk to both parties on the basis of the contingent nature of the milestone. This evaluation includes an assessment of whether: (i) the consideration is commensurate with either the Company's performance to achieve the milestone or the enhancement of the value of the delivered item as a result of a specific outcome resulting from the Company's performance to achieve the milestone, (ii) the consideration relates solely to past performance, and (iii) the consideration is reasonable relative to all of the deliverables and payment terms within the arrangement. The Company evaluates factors such as the scientific, clinical, regulatory, commercial and other risks that must be overcome to achieve the particular milestone and the level of effort and investment required to achieve the particular milestone is substantive. There is considerable judgment involved in determining whether a milestone satisfies all of the criteria required to conclude that a milestone is substantive. The Company will recognize revenue in its entirety upon successful accomplishment of any substantive milestones, assuming all other revenue recognition criteria are met. Milestones that are not considered substantive are recognized as earned if there are no remaining performance obligations or over the remaining period of performance, with a cumulative catch-up being recognized for the elapsed portion of the period of performance, assuming all other revenue recognition criteria are met.

Non-refundable research, development and regulatory milestones that are expected to be achieved as a result of the Company's efforts during the period of its performance obligations under the collaboration and license agreements may be considered to be substantive and are recognized as revenue upon the achievement of the milestone, assuming all other revenue recognition criteria are met. If not considered to be substantive, revenue from achievement of milestones is initially deferred and recognized over the remaining term of its performance obligations. Milestones that are not considered substantive because the Company does not contribute effort to their achievement are recognized as revenue upon achievement, assuming all other revenue recognition criteria are met, as there are no undelivered elements remaining and no continuing performance obligations on the Company's part.

Amounts received prior to satisfying the revenue recognition criteria listed above are recorded as deferred revenue in the accompanying balance sheets. Although the Company follows detailed guidelines in measuring revenue, certain judgments affect the application of the Company's revenue policy. For example, in connection with its existing collaboration agreement, the Company has recorded on its balance sheet short-term and long-term deferred revenue based on its best estimate of when such revenue will be recognized. However, this estimate is based on the Company's current research plan and, if its research plan should change in the future, the Company may recognize a different amount of deferred revenue over the following 12-month period.

The estimate of deferred revenue also reflects management's estimate of the periods of the Company's involvement in its collaboration. The Company's primary performance obligations under this collaboration consist of research and development services. In certain instances, the timing of satisfying these obligations can be difficult to estimate. Accordingly, the Company's estimates may change in the future. Such changes to estimates would result in a change in prospective revenue recognition amounts. If these estimates and judgments change over the course of any of the Company's collaborative agreements, it may affect the timing and amount of revenue that the Company will recognize and record in future periods.

Research and Development Expenses

Research and development costs are expensed as incurred. Research and development expenses consist of salaries, equity-based compensation and benefits of employees, lab supplies and materials, facilities expenses, overhead expenses, fees paid to subcontractors and contract research organizations and other external expenses.

The Company records payments made for research and development services prior to the services being rendered as prepaid expense on the consolidated balance sheet and expenses them as the services are provided. Contracts for multi-year research and development services are recorded on a straight-line basis over each annual contractual period based on the total contractual fee when the services rendered are expected to be substantially equivalent over the term of the arrangement. The cost of obtaining licenses for certain technology or intellectual property is recorded to research and development expense when incurred if the licensed technology or intellectual property has not yet reached technological feasibility and has no alternative future use.

Equity-Based Compensation

The Company measures employee equity-based compensation based on the grant date fair value of the equity awards and recognizes equity-based compensation expense, net of estimated forfeitures, on a straight-line basis over the requisite service period of the awards, which is generally the vesting period of the respective award. Compensation expense is recognized for only the portion of awards that are expected to vest. In developing a forfeiture rate estimate, the Company has considered its historical experience to estimate pre-vesting forfeitures for service-based awards. The Company estimates forfeitures at the time of grant and revises those estimates in subsequent periods if actual forfeitures differ from those estimates.

The Company measures equity awards granted to consultants and non-employees based on the fair value of the award on the date of grant. Compensation expense is recognized over the period during which services are rendered by such consultants and non-employees until completed. At the end of each financial reporting period prior to completion of the service, the fair value of these awards is remeasured using the then-current fair value of the common or incentive units.

The Company classifies equity-based compensation expense in its consolidated statement of operations in the same manner in which the award recipient's salary and related costs are classified or in which the award recipient's service payments are classified.

Earnings (Loss) per Unit or Share

The Company calculates basic earnings (loss) per common unit by dividing income (loss) allocable to common unitholders by the weighted average number of common units outstanding, calculates basic earnings

(loss) per incentive unit by dividing income (loss) allocable to incentive unitholders by the weighted average number of incentive units outstanding and calculates basic earnings (loss) per share by dividing income (loss) allocable to common stockholders by the weighted average number of common shares outstanding. During periods of income, the Company allocates to participating securities a proportional share of income determined by dividing total weighted average participating securities by the sum of the total weighted average common shares and participating securities (the "two-class method"). The Company's preferred units, preferred stock, common units, common stock, incentive units and restricted common stock have rights to earnings and to participate in distributions of the Company and are therefore considered to be participating securities. Participating securities have the effect of diluting both basic and diluted earnings per share during periods of income. During periods of loss, the Company allocates no loss to preferred units or preferred stock because they have no contractual obligation to share in the losses of the Company. The Company computes diluted earnings (loss) per share after giving consideration to the dilutive effect of preferred units, preferred stock, common units, common stock, incentive units and restricted common stock that are outstanding during the period, except where such units would be anti-dilutive.

Segment Information

The Company manages its operations as a single segment for the purposes of assessing performance and making operating decisions. The Company's one business segment is the development of gene editing-based therapies. All of the Company's assets are held in the United States. To date, all of the Company's revenue has been generated in the United States from a single arrangement.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*, which supersedes existing revenue recognition guidance. The standard's core principle is that a company will recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. The standard defines a five-step process to achieve this principle and will require companies to use more judgment and make more estimates than under the current guidance. The Company expects that these judgments and estimates will include identifying performance obligations in the customer contract, estimating the amount of variable consideration to include in the transaction price and allocating the transaction price to each separate performance obligation. ASU 2014-09 also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts. In July 2015, the FASB voted to delay the effective date of this standard such that ASU 2014-09 will be effective for the Company for annual periods beginning after December 15, 2017 and for interim periods within those fiscal years. Early adoption of the standard is permitted for annual periods beginning after December 15, 2016. The Company is evaluating the impact that the adoption of ASU 2014-09 will have on its consolidated financial statements.

In August 2014, the FASB issued ASU No. 2014-15, *Disclosure of Uncertainties About an Entity's Ability to Continue as a Going Concern*. ASU 2014-15 amends Accounting Standards Codification ("ASC") 205-40, *Presentation of Financial Statements*—*Going Concern*, by providing guidance on determining when and how reporting entities must disclose going-concern uncertainties in their financial statements, including requiring management to perform interim and annual assessments of an entity's ability to continue as a going concern within one year of the date of issuance of the entity's financial statements and providing certain disclosures if there is substantial doubt about the entity's ability to continue as a going concern. ASU 2014-15 will be effective for the Company for annual periods ending after December 15, 2016 and interim periods within annual periods beginning after December 15, 2016. The Company is evaluating the potential impact of this ASU on its consolidated financial statements but believes its adoption will have no impact on its financial position, results of operations or cash flows.

In February 2015, the FASB issued ASU No. 2015-02, *Consolidation (Topic 810)—Amendments to the Consolidation Analysis*. ASU 2015-02 modifies the existing consolidation guidance in ASC 810, *Consolidation*, by significantly changing the consolidation analysis reporting organizations are required to complete in determining whether to consolidate certain legal entities. ASU 2015-02 requires either a retrospective or modified retrospective approach to adoption and will be effective for the Company for annual periods beginning after December 15, 2015 and for interim periods within those fiscal years. The Company is evaluating the impact of the adoption of ASU 2015-02 on its consolidated financial statements but believes its adoption will have no material impact on its financial position, results of operations or cash flows.

In April 2015, the FASB issued ASU No. 2015-05, *Customer's Accounting for Fees Paid in a Cloud Computing Arrangement*. ASU 2015-05 amends ASC 350-40, *Internal-Use Software*, by providing customers with guidance on determining whether a cloud computing arrangement contains a software license that should be accounted for as internal-use software. ASU 2015-05 will be effective for the Company for annual periods beginning after December 15, 2016. The Company is evaluating the impact that this ASU may have on its consolidated financial statements, if any.

In November 2015, the FASB issued ASU No. 2015-17, *Balance Sheet Classification of Deferred Taxes*. ASU 2015-17 amends ASC 740, *Income Taxes*, by requiring entities to present deferred tax assets and deferred tax liabilities as noncurrent in a classified balance sheet. ASU 2015-17 would be effective for annual periods beginning after December 15, 2016 and interim periods within those fiscal years. Early adoption is permitted. The Company elected to early adopt this guidance on a prospective basis beginning with its year ending as of December 31, 2015; however there was no material impact to its financial position as the Company carries a full valuation allowance.

In February 2016, the FASB issued ASU 2016-02, *Leases*. ASU 2016-02 amends ASC 840, *Leases*, by introducing a lessee model that requires balance sheet recognition of most leases. The Company is the lessee under certain leases that are accounted for as operating leases. The proposed changes would require that substantially all of the Company's operating leases be recognized as assets and liabilities on the Company's balance sheet. ASU 2016-02 will be effective for public companies for annual periods beginning after December 15, 2018 and interim periods within those fiscal years and for private companies for annual periods beginning after December 15, 2019 and interim periods within fiscal years beginning after December 15, 2020. The Company is evaluating the impact that the adoption of ASU 2016-02 will have on its consolidated financial statements.

3. Property and Equipment, net

Property and equipment, net consisted of the following:

	Decen	nber 31,	
	2014	2015	
	(in the	ousands)	
Laboratory equipment	\$ 36	\$2,518	
Office furniture and equipment	123	245	
Computer equipment	77	121	
Leasehold improvements	75	155	
Property and equipment	311	3,039	
Less: Accumulated depreciation and amortization	(3)	(331)	
Property and equipment, net	\$308	\$2,708	

Depreciation and amortization expense was \$3,000 for the period from May 7, 2014 (inception) to December 31, 2014 and \$0.3 million for the year ended December 31, 2015.



4. Accrued Expenses

Accrued expenses consisted of the following:

	Decem	ıber 31,
	2014	2015
	(in the	usands)
Employee compensation	\$ 458	\$1,281
In-process research and development obligation	1,100	600
Research and development and professional expenses	598	907
	\$2,156	\$2,788

In July 2014, the Company entered into agreements with Caribou Biosciences, Inc. ("Caribou"), under which the Company received a license for certain patents and limited research and development services from Caribou. The in-process research and development obligation represents the portion of the Company's obligation under these agreements that is attributable to the license. Refer to Note 6, *Commitments and Contingencies*, for additional information regarding these agreements.

5. Income Taxes

The Company did not record income tax benefits for the operating losses incurred during the periods presented due to its uncertainty of realizing a tax benefit from the deferred tax assets.

Intraperiod tax allocation rules require the allocation of the provision for income taxes between continuing operations and other categories of earnings, such as items credited directly to members' equity. In periods in which the Company has a year-to-date pre-tax loss from continuing operations and has pre-tax income in other categories of earnings, the Company must allocate the income tax provision to the other categories of earnings. The Company then records a related income tax benefit in continuing operations.

During the year ended December 31, 2015, the Company allocated \$2.6 million from the \$30.0 million total fixed amount of consideration under the collaboration agreement with Novartis to the carrying value of the Class A-1 and A-2 Preferred Units to record those units based on their fair value at date of issuance. As a result of this allocation, during the year ended December 31, 2015, the Company recorded an income tax provision of \$1.0 million within members' equity as well as a corresponding income tax benefit of \$1.0 million within continuing operations. Refer to Note 8, *Collaboration*, for additional information regarding this difference in value.

A reconciliation of the federal statutory income tax rate and the Company's effective income tax rate is as follows:

	Period from May 7, 2014 (inception) to December 31, 2014	Year Ended December 31, 2015
Federal statutory income tax rate	(34.0)%	(34.0)%
State income taxes	(4.5)	(4.4)
Intraperiod tax allocation	—	(6.7)
Permanent items	1.1	3.3
Research and development tax credits	(0.6)	(1.8)
Change in valuation allowance	38.0	36.0
Effective income tax rate	%	(7.6)%

The Company's net deferred tax assets (liabilities) consisted of the following:

	2014	ember 31, 2015 housands)
Deferred tax assets:	x - 1	,
Intangibles, including acquired in-process research and development	\$ 2,264	\$ 2,151
Capitalized start-up costs	745	830
Net operating loss carryforwards	495	4,653
Research and development credit carryforwards	59	418
Accruals and allowances	61	211
Gross deferred tax assets	3,624	8,263
Deferred tax asset valuation allowance	(3,624)	(7,452)
Total deferred tax assets		811
Deferred tax liabilities:		
Deferred revenue	—	(811)
Total deferred tax liabilities		(811)
Net deferred tax asset (liability)	\$	\$ —

As of December 31, 2015, the Company had federal and state net operating loss carryforwards of \$12.5 million and \$9.4 million, respectively, which begin to expire in 2034. As of December 31, 2015, the Company had federal and state research and development tax credits carryforwards of approximately \$0.3 million and \$0.2 million, which begin to expire in 2034 and 2029, respectively.

The Company evaluated the expected realizability of its net deferred tax assets as of December 31, 2014 and 2015 and determined that there was significant negative evidence due to its net operating loss position and insufficient positive evidence to support the realizability of these net deferred tax assets. The Company concluded it is more likely than not that its net deferred tax assets would not be realized in the future; therefore, the Company has provided a full valuation allowance against its net deferred tax asset balance as of December 31, 2014 and 2015. The valuation allowance increased by \$3.6 million in 2014 and \$3.8 million in 2015.

Utilization of the net operating loss and research and development credit carryforwards may be subject to a substantial annual limitation under Section 382 of the Internal Revenue Code of 1986, as amended, due to ownership changes that have occurred previously or that could occur in the future. These ownership changes may limit the amount of net operating loss and research and development credit carryforwards that can be utilized annually to offset future taxable income and tax expense, respectively. The Company has not yet conducted a study to assess whether a change of control, as defined in Section 382, has occurred or whether there have been multiple changes in control since inception.

As of December 31, 2015, the Company had not recorded any unrecognized tax benefits. The Company files income tax returns in the United States federal tax jurisdiction and Massachusetts and various other state tax jurisdictions. The Company is subject to examination by the Internal Revenue Service and Massachusetts taxing authorities. There are currently no pending tax examinations.

6. Commitments and Contingencies

Commitments

Caribou Agreement

In July 2014, the Company entered into a license agreement with Caribou for an exclusive, worldwide, royalty-free license for human therapeutic, prophylactic, and palliative uses, except for anti-fungal and anti-microbial uses, of any CRISPR/Cas9-related patents and applications owned, controlled or licensed by Caribou, as well as companion diagnostics to the Company's products or product candidates. This license agreement also includes any CRISPR/Cas9-related intellectual property developed by Caribou between July 16, 2014 and, at least, July 16, 2016 for the Company's field of use.

Pursuant to a services agreement entered into with Caribou contemporaneously with the Caribou license agreement, the Company is also receiving two years of research and development services from Caribou. Under the services agreement's research plan, Caribou primarily focuses on the improvement and further development of the CRISPR/Cas9 system and its components.

In exchange for 8,110,599 of the Company's Junior Preferred Units, Caribou, through its wholly owned subsidiary, Caribou Therapeutics Holdco, LLC, contributed to the Company all of its membership interests of Intellia, LLC. Intellia, LLC was a holding company that was the original party to the license agreement with Caribou and otherwise had no other assets or operations prior to being merged with and into the Company in July 2014. In addition, the Company is paying Caribou \$5.0 million over the term of the two-year services agreement and agreed to pay 30.0% of Caribou's patent prosecution, filing, and maintenance costs for such licensed intellectual property under the license agreement, amounting to \$1.1 million paid through December 31, 2015. The Company granted Caribou an exclusive, royalty-free, worldwide license to any CRISPR/Cas9 patents and know-how for research, development and commercialization activities in Caribou's retained field of use owned or developed by the Company between July 16, 2014 and, at least, July 16, 2016.

For the period from May 7, 2014 (inception) through December 31, 2014, the Company recorded \$6.1 million as in-process research and development expense within the statement of operations, which represents the fair value of the license received from Caribou. The \$6.1 million expense includes \$4.1 million associated with the fair value of the Junior Preferred Units issued to Caribou and \$2.0 million in committed cash payments under the services agreement, which were determined to be allocable to the value of the licenses received. The remaining \$3.0 million in committed cash payments related to the services agreement are being recorded as research and development expense as the services are provided. For the period from May 7, 2014 (inception) through December 31, 2014 and for the year ended December 31, 2015, the Company recorded \$0.3 million and \$1.5 million, respectively, in research and development expense for services provided under the Caribou services agreement. The Company had prepaid research and development expenses recorded of \$0.2 million and \$0.4 million related to the services agreement as of December 31, 2014 and 2015, respectively.

The Company accounted for the license from Caribou as an acquisition of in-process research and development assets and recorded the entire amount as inprocess research and development expense as the Company did not acquire any employees, manufacturing or other facilities, developed processes or clinical stage assets as part of its agreement with Caribou.

Property Leases

In October 2014, the Company entered into an agreement to lease office and laboratory space in Cambridge, Massachusetts under an operating lease agreement with a term through January 2020, with an option to extend the term of the lease for an additional five-year period. Upon the execution of this lease, the Company provided a \$0.3 million security deposit. The Company has recorded this security deposit in other assets on the consolidated balance sheets. In addition, in 2015, the Company entered into a two-year agreement to lease additional laboratory space and a one-year agreement to lease a corporate apartment.

The Company recognizes rent expense, inclusive of escalation charges, on a straight-line basis over the initial term of the lease agreements. The Company recorded rent expense of \$0.1 million during the period from May 7, 2014 (inception) to December 31, 2014 and \$1.2 million during the year ended December 31, 2015.

In January 2016, the Company entered into a ten-year agreement to lease office and laboratory space in Cambridge, Massachusetts under an operating lease agreement, with an option to terminate the lease at the end of the sixth year and an option to extend the term of the lease for an additional three years. Upon the execution of this lease, the Company provided a \$2.2 million security deposit. The Company's contractual commitments under the committed first six years of this lease total \$28.3 million. Payments under the contract are expected to begin in late 2016 when the Company is projected to gain access to the space.

The Company's contractual commitments under the Caribou agreements and property leases as of December 31, 2015 are as follows:

Year Ending December 31,		l Payments Caribou	Property Leases		Total mitments
2016	¢	1,500	(in thousands) \$ 945	¢	D 44E
2016	Э	1,500		Ф	2,445
2017		_	1,025		1,025
2018		—	843		843
2019		—	869		869
2020		—	73		73
Thereafter		—	—		
	\$	1,500	\$ 3,755	\$	5,255

This table does not include (i) the property lease the Company entered into subsequent to December 31, 2015 or (ii) the Company's obligation to pay 30.0% of Caribou's patent prosecution, filing, and maintenance costs for licensed intellectual property as such costs cannot be reliably estimated until incurred.

Contingencies

In connection with the July 2014 intellectual property license with Caribou, the Company gained access to sublicensed intellectual property from various academic and professional institutions. Under these sublicenses, the Company may be obligated to pay development and regulatory milestones of up to \$6.4 million, sales-based milestones of up to \$20.0 million and up to mid single-digit royalties on net sales of any products covered by issued patents to these entities in certain circumstances.

Under the Caribou license agreement, the Company sublicenses a patent family that is currently subject to interference proceedings declared by the Patent Trial and Appeal Board of the United States Patent and Trademark Office. If the Company's sublicensed patent family does not prevail in these proceedings, claims could be asserted against the Company during development or commercialization of a product that relies on this technology. Defense of any such claims would involve substantial litigation expense, and any successful claim of infringement against the Company could require the Company to pay substantial damages.

7. Preferred Units and Preferred Stock

The Company had issued Class A-2, Class A-1 and Junior preferred units (collectively, the "Preferred Units"), which converted to Series A-2, Series A-1 and Junior preferred stock upon the Reorganization. In August 2015, the Company issued Series B preferred stock (with the Series A-2, Series A-1 and Junior preferred stock, collectively referred to as the "Preferred Stock"). The Preferred Units were classified within members' equity.

In July 2014, the Company issued 2,857,142 Class A-1 Preferred Units at an issuance price of \$1.05 for gross proceeds of \$3.0 million, net of issuance costs of \$0.2 million.

In July 2014, the Company issued 8,110,599 Junior Preferred Units with an aggregate fair value of \$4.1 million in exchange for all of Caribou's membership interest in Intellia, LLC. Intellia, LLC was a holding company that was the original party to the license agreement with Caribou and otherwise had no other assets or operations prior to being merged with and into the Company in July 2014. Refer to Note 6, *Commitments and Contingencies*, for additional information regarding these licenses. The fair value per unit of the Junior Preferred Units as of the date of issuance was determined by the Company relying in part on the results of a third-party valuation prepared using the option-pricing method to determine the Company's enterprise value.

In September 2014, the Company issued an additional 5,714,287 Class A-1 Preferred Units at an issuance price of \$1.05 per unit, for gross proceeds of \$6.0 million, net of issuance costs of \$0.2 million. Of these units, 4.8 million units were issued and sold to Novartis in contemplation of a future collaboration arrangement. These preferred units were subsequently determined to have a fair value of \$1.51 per unit as of their date of issuance; therefore, a portion of the upfront consideration received under the collaboration arrangement was allocated to the carrying value of these preferred units when received during the year ended December 31, 2015. The fair value per unit of the Class A-1 Preferred Units as of the date of issuance was determined by the Company relying in part on the results of a third-party valuation prepared using the probability-weighted expected return method ("PWERM"), which used a combination of market approaches and an income approach to determine the Company's enterprise value.

In December 2014, the Company issued 2,666,666 Class A-2 Preferred Units to Novartis at an issuance price of \$1.50 per unit for gross proceeds of \$4.0 million, net of insignificant issuance costs, in contemplation of the collaboration and license arrangement entered into with Novartis at the same time. These preferred units were subsequently determined to have a fair value of \$1.67 per unit as of their date of issuance; therefore, a portion of the upfront consideration received under the collaboration arrangement was allocated to the carrying value of these preferred units when received in 2015. The fair value per unit of the Class A-2 Preferred Units as of the date of issuance was determined by the Company relying in part on the results of a third-party valuation prepared using the PWERM, which used a combination of market approaches and an income approach to determine the Company's enterprise value.

In January 2015, the Company issued 1,333,333 Class A-2 Preferred Units at an issuance price of \$1.50 per unit for gross proceeds of \$2.0 million, net of insignificant issuance costs.

Preferred Units consisted of the following as of December 31, 2014:

	Preferred Units Issued and Outstanding	Carrying Value (in th	Liquidation <u>Preference</u> ousands)
Class A-2 Preferred Units	2,666,666	\$ 3,986	\$ 4,000
Class A-1 Preferred Units	8,571,429	8,407	9,000
Junior Preferred Units	8,110,599	4,055	8,516
	19,348,694	\$16,448	\$ 21,516

The Preferred Units had no conversion or redemption rights; therefore, the Company determined that these securities qualified for classification as permanent equity.

Reorganization with Intellia Therapeutics, Inc.

On August 20, 2015, the Company completed a series of transactions pursuant to which Intellia Therapeutics, LLC, the former sole stockholder and holding company parent, merged with and into Intellia Therapeutics, Inc., and Intellia Therapeutics, Inc. continued to exist as the surviving corporation. In connection with the Reorganization:

- holders of Intellia Therapeutics, LLC's outstanding Class A-2 Preferred Units received one share of Intellia Therapeutics, Inc. Series A-2 Preferred Stock for each Class A-2 Preferred Unit held immediately prior to the Reorganization, with an aggregate of 3,999,999 shares of Intellia Therapeutics, Inc. Series A-2 Preferred Stock issued in the Reorganization;
- holders of Intellia Therapeutics, LLC's outstanding Class A-1 Preferred Units received one share of Intellia Therapeutics, Inc. Series A-1 Preferred Stock for each Class A-1 Preferred Unit held immediately prior to the Reorganization, with an aggregate of 8,571,429 shares of Intellia Therapeutics, Inc. Series A-1 Preferred Stock issued in the Reorganization;
- holders of Intellia Therapeutics, LLC's outstanding Junior Preferred Units received one share of Intellia Therapeutics, Inc. Junior Preferred Stock for each Junior Preferred Unit held immediately prior to the Reorganization, with an aggregate of 8,110,599 shares of Intellia Therapeutics, Inc. Junior Preferred Stock issued in the Reorganization;
- holders of Intellia Therapeutics, LLC's outstanding Common Units received one share of Intellia Therapeutics, Inc. Founder Stock for each Common Unit held immediately prior to the Reorganization, with an aggregate of 2,298,000 shares of Intellia Therapeutics, Inc. Founder Stock issued in the Reorganization; and
- holders of Intellia Therapeutics, LLC's outstanding Incentive Units received restricted shares of Intellia Therapeutics, Inc. Common Stock in an amount
 equal in value to the value of such Incentive Units as determined by the applicable provisions of the Intellia Therapeutics, LLC operating agreement in
 effect immediately prior to the Reorganization, with an aggregate of 4,349,919 shares of Intellia Therapeutics, Inc. restricted common stock issued in the
 Reorganization.

In evaluating this transaction, the Company considered that (i) although the number of shares and ownership interests held by each stockholder changed nominally, the fair value of each stockholder's interest remained unchanged as a result of the Reorganization, and (ii) the Reorganization occurred between a parent and wholly-owned subsidiary, where the parent, Intellia Therapeutics, LLC, had no substantive operations. Based on this evaluation, the Company determined that the Reorganization lacked economic substance and should be accounted for in a manner consistent with a common control transaction. Similarly, as there was no change in fair value between stockholders, individually or as a class, the Company determined that the exchange of shares occurring in the Reorganization should be accounted for as a modification of the equity securities and presented as a reclassification of the components of equity.

The Company's Series A-2 Preferred Stock, Series A-1 Preferred Stock, Junior Preferred Stock and Founder Stock are designated as Preferred Stock under its amended and restated certificate of incorporation. All outstanding shares of its Preferred Stock convert to shares of common stock on a one-for-1.0992035 basis.

The Preferred Stock issued in the Reorganization has the following rights and preferences:

Conversion—Prior to any automatic conversion of the Preferred Stock in connection with the closing of an initial public offering, each share of Preferred Stock is convertible at the option of the holder into the number of shares of common stock determined by dividing the respective "Original Issue Price" for such series of Preferred Stock by the applicable conversion price then in effect for such series of Preferred Stock. The conversion prices for each series of Preferred Stock are subject to adjustment in the event of certain dilutive issuances of common stock.

All shares of Preferred Stock are automatically convertible into common stock upon the earlier of (i) the closing of an underwritten public offering in which the public offering price is at least \$7.875 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) and the net proceeds raised equal or exceed \$60.0 million, (ii) in connection with any other underwritten public offering with the election of the holders of at least 67% of the outstanding shares of Preferred Stock, voting together as a single class on an as-converted to common stock basis, and (iii) the election of the holders of at least 67% of the outstanding shares of Preferred Stock, voting together as a single class on an as-converted to common stock basis, and the holders of at least a majority of the outstanding shares of Series B Preferred Stock, voting together as a single class on an as-converted to common stock basis.

Voting Rights—The holders of Preferred Stock are entitled to vote as a single class with the holders of common stock on all matters and are entitled to the number of votes equal to the number of whole shares of common stock into which the shares of the particular series of Preferred Stock are convertible. The holders of Series B Preferred Stock, voting together as a single class on an as-converted to common stock are entitled to elect one director to the Company's board of directors, the holders of Series A-1 Preferred Stock and Series A-2 Preferred Stock, voting together as a single class on an as-converted to common stock basis, are entitled to elect one director to the Company's board of directors, the holders of Series as a single class on an as-converted to common stock basis, are entitled to elect one director to the Company's board of directors and the holders of Preferred Stock and the holders of common stock, voting together as a single class on an as-converted to common stock basis, are entitled to elect one director to the Company's board of directors and the holders of Preferred Stock and the holders of common stock, voting together as a single class on an as-converted to common stock basis, are entitled to elect one director to the Company's board of directors and the holders of Preferred Stock and the holders of common stock, voting together as a single class on an as-converted to common stock basis, are entitled to elect one directors.

Dividends—The holders of Preferred Stock are entitled to receive non-cumulative dividends in preference to any dividends on common stock, in each case, only when and if declared by the Company's board of directors.

Liquidation Preference—In the event of any liquidation, dissolution or winding-up of the Company, including certain mergers or a disposition of all or substantially all of the assets of the Company (a "Deemed Liquidation Event") the Preferred Stock ranks senior to the Company's common stock and the holders of Preferred Stock shall be entitled to receive their original purchase price together with all accumulated but unpaid dividends prior to any distributions being made to common stock. Additionally, each class of Preferred Stock is successively more senior than the previous issued class of Preferred Stock, except for the Series A-1 Preferred Stock, which ranks *pari passu* with the Series A-2 Preferred Stock, and each holder of the more senior Preferred Stock shall be entitled to receive their original purchase price to any distributions made to the less senior Preferred Stock. The order of seniority is Series B, Series A-2 and Series A-1, Junior Preferred and Founder Stock. Upon completion of the payment of the original purchase price and declared but unpaid dividends to the holders of Preferred Stocks, all of the remaining assets shall be distributed among the holders of Preferred Stock and common stock pro rata based on the number of shares of common stock held by each, assuming full conversion of all outstanding shares of Preferred Stock.

The Preferred Stock has no redemption rights; however, because the holders of the Preferred Stock have the option to require redemption upon a Deemed Liquidation Event, which may be beyond the Company's control, the Preferred Stock has been classified as temporary equity. A Deemed Liquidation Event has not been deemed probable as of December 31, 2015.

Issuance of Series B Preferred Stock

In August 2015, the Company issued 13,336,601 shares of Series B Preferred Stock at an issuance price of \$5.25 per share for gross proceeds of \$70.0 million.

The rights and preferences of the Series B Preferred Stock are similar to those of the other series of Preferred Stock, except that, specifically, (1) the majority of the outstanding shares of Series B Preferred Stock, voting together as a single class on an as-converted to common stock basis, has the ability to control the election of the

holders of Preferred Stock to convert to common, (2) the Series B preferred stockholders, voting together as a single class on an as-converted to common stock basis, are entitled to elect one director to the Company's board of directors, and (3) the Series B preferred stockholders are entitled to first preference in the event of a liquidation.

Preferred Stock consisted of the following as of December 31, 2015:

	Preferred Shares Issued and Outstanding	Carrying Value (in th	Liquidation <u>Preference</u> ousands)
Series B Preferred Stock	13,336,601	\$67,263	\$ 70,017
Series A-2 Preferred Stock	3,999,999	6,249	6,000
Series A-1 Preferred Stock	8,571,429	9,750	9,000
Junior Preferred Stock	8,110,599	4,055	8,516
Founder Stock	2,298,000	1,240	2,413
	36,316,628	\$88,557	\$ 95,946

8. Collaboration

In December 2014, the Company entered into a strategic collaboration agreement with Novartis focused on the *ex vivo* development of new CRISPR/Cas9based therapies using chimeric antigen receptor T cells ("CAR T cells") and hematopoietic stem cells ("HSCs").

Under the terms of the collaboration, the Company and Novartis may research potential therapeutic, prophylactic and palliative applications of the CRISPR/Cas9 platform in HSCs and CAR T cells. Within the HSC therapeutic space, Novartis may obtain exclusive rights to a limited number of HSC targets, to be selected by Novartis in a series of selection windows, the last of which closes 90 days before the fifth anniversary of the effective date of the collaboration agreement. If Novartis does not exercise its selection rights within each selection window, any such rights will be deemed forfeited by Novartis. Novartis is required to use commercially reasonable efforts to research, develop or commercialize at least one HSC product directed to at least one of their selected HSC targets.

The Company also agreed to collaborate with Novartis on research activities for CAR T cell targets under a research plan agreed upon by both parties. After completion of the research and development activities contemplated by the CAR T cell program research plan, Novartis will assume sole responsibility for developing any products arising from that research plan and will be responsible for additional costs and expenses of developing, manufacturing and commercializing selected research targets. Novartis is required to use commercially reasonable efforts to research, develop or commercialize at least one CAR T cell product directed to at least one of their selected CAR T cell targets.

In the last two years of the collaboration term, Novartis will have the option to select a limited number of targets for research, development and commercialization of *in vivo* therapies. Novartis is required to use commercially reasonable efforts to research, develop or commercialize at least one *in vivo* product directed to each of their selected targets. Novartis' *in vivo* target selections are subject to certain restrictions, including that the targets may not have been already reserved by the Company or be subject to another agreement.

The Company received an upfront technology access payment from Novartis of \$10.0 million in January 2015 and is entitled to additional technology access fees of \$20.0 million and quarterly research payments of \$1.0 million, or up to \$20.0 million in the aggregate, during the five-year research term. The Company may also be eligible to receive payments for: (i) each additional HSC target selected by Novartis beyond its initial defined allocation, (ii) each *in vivo* target that Novartis selects and (iii) any exercise by Novartis

of certain license options under the agreement. The Company may be eligible to receive, on a per-product basis, regulatory milestone payments of up to \$80.3 million for one indication and \$130.3 million for two indications, royalties on net sales in the mid-single digits, and net sales milestone payments of up to \$100.0 million. Additionally, at the inception of the arrangement, Novartis invested \$9.0 million to purchase the Company's Class A-1 and Class A-2 Preferred Units. At date of issuance of the Class A-1 and A-2 Preferred Units in September and December 2014, the difference between the cash proceeds received from Novartis for the units and the \$11.6 million estimated fair value of those units at date of issuance was determined to be \$2.6 million.

The fixed portion of consideration under the collaboration arrangement was determined to be the \$30.0 million of total technology access fees, for which there are no contingent terms. From that amount, the Company allocated \$2.6 million to the preferred units purchased by Novartis to record those units based on their fair value at date of issuance. As a result, during the year ended December 31, 2015, the Company recorded an increase of \$2.6 million to the carrying value its Class A-1 and A-2 Preferred Units and a corresponding decrease to the deferred revenue initially recorded in connection with the collaboration agreement with Novartis.

The significant deliverables of this multiple-element revenue arrangement were determined to be licenses CAR T cell and HSC targets and the associated research activities for these programs. The Company further determined that the licenses and associated research activities and joint steering committee participation did not have standalone value due to the specialized nature of the services to be provided by the Company. Therefore, the deliverables are not separable, and, accordingly, the license and services are treated as a single unit of accounting.

Net of the \$2.6 million allocation, the fixed portion of consideration under the arrangement of \$27.4 million is being recognized as collaboration revenue over the five-year performance period of the arrangement. As consideration for reimbursement of research and development activities is received, the Company is recognizing as collaboration revenue the portion of those payments representing the percentage of the performance period then completed. The remaining consideration is being recognized over the remaining portion of the five-year performance period on a straight-line basis. During the year ended December 31, 2015, the Company recorded revenue of \$6.0 million related to the collaboration agreement with Novartis. As of December 31, 2015, deferred revenue under the Novartis arrangement was \$10.3 million. There was no deferred revenue related to this arrangement as of December 31, 2014.

Agreement Termination Rights

The collaboration term ends in December 2019. The agreement ends (i) upon the expiration of Novartis' payment obligations; or (ii) on the date of expiration of the last-to-expire patent right that is licensed to the Company or Novartis. Novartis may terminate the agreement, without cause, upon 90 days' written notice to the Company subject to certain conditions, including its payment of any accrued and future obligations as if the collaboration had continued through December 2019. Either party may terminate the agreement in the event of the other party's uncured material breach or insolvency.

9. Equity-Based Compensation

From inception through July 2015, the Company issued equity-based compensation awards in the form of common units or incentive units. In connection with the Reorganization, holders of the outstanding common units received one share of Intellia Therapeutics, Inc. Founder Stock, and holders of the outstanding incentive units received restricted shares of common stock of Intellia Therapeutics, Inc. There was no incremental compensation recognized from the conversion that occurred as a result of the Reorganization.

Each share of Founder Stock and each share of restricted common stock entitles the holder to one vote for each share of common stock into which each share is convertible on all matters submitted to a vote of the Company's stockholders. Founder stock and restricted stock holders are entitled to dividends when and if declared by the Board of Directors, subject to the preferential rights of other preferred stockholders.

These awards primarily vest as to 25% of the total units on the first anniversary of the vesting commencement date and then monthly, at the end of each subsequent month, over three years. The Company generally grants equity-based awards with service conditions only. As of December 31, 2015, the Company had reserved 1,918,819 shares for future grant. In February 2016, the Company increased the number of shares reserved for future grant by 2,600,000 shares.

Equity-Based Compensation

The Company recorded equity-based compensation expense in its consolidated statements of operations as follows:

	Period from May 7, 2014 (inception) to December 31, 2014	Year Ended December 31, 2015
	(in thousa	ads)
Research and development	\$ 83	\$ 1,061
General and administrative	225	247
	\$ 308	\$ 1,308

Founder Stock and Restricted Stock

Compensatory common and incentive units, and the corresponding Founder Stock and restricted stock issued in replacement of common and incentive units in the Reorganization, are valued at the fair value of the underlying security. The Company valued these awards by taking into consideration its most recently available valuation performed by management and the board of directors, considering the most recently available third-party valuations of the Company's securities as well as additional qualitative factors.

The following table summarizes the Company's compensatory Founder Stock (common unit) activity since inception:

	Number of Shares	Grant	ted Average Date Fair per Share
Unvested common units as of January 1, 2015	1,013,821	\$	0.37
Vested	(577,312)	\$	(0.37)
Unvested Founder Stock as of December 31, 2015	436,509	\$	0.37

The following table summarizes the Company's compensatory restricted stock (incentive unit) activity since inception:

	Number of Shares	Grant	ted Average t Date Fair per Share
Unvested incentive units as of January 1, 2015	2,649,457	\$	0.22
Issued	1,491,705	\$	0.79
Effect of Reorganization	262,827	\$	
Vested	(1,043,330)	\$	(0.21)
Forfeited	(54,070)	\$	(0.79)
Unvested restricted stock as of December 31, 2015	3,306,589	\$	0.46

The aggregate intrinsic value of Founder Stock awards that vested during each of the periods from May 7, 2014 (inception) to December 31, 2014 and the year ended December 31, 2015 was \$0.1 million and \$2.2 million, respectively. The aggregate intrinsic value of restricted stock awards that vested during the year ended December 31, 2015 was \$3.3 million.

As of December 31, 2015, there was \$3.5 million of unrecognized equity-based compensation related to Founder Stock and restricted stock that is expected to vest. These costs are expected to be recognized over a weighted average remaining vesting period of 3.0 years.

Stock Options

The Company uses the Black-Scholes option-pricing model to measure the fair value of stock option awards. Key assumptions used in this pricing model on the date of grant for options granted to employees are as follows:

	Year Ended December 31, 2015
Risk-free interest rate	1.5%
Expected life of options	6.0 years
Expected volatility of underlying stock	82.6%
Expected dividend yield	0.0%

There were no stock option awards granted in 2014.

The risk-free interest rate is based upon the U.S. Treasury yield curve in effect at the time of grant, with a term that approximates the expected life of the option. The Company calculates the expected life of options granted to employees using the simplified method as the Company has insufficient historical information to provide a basis for estimate. The Company determines the expected volatility based on the historical volatility of a peer group of comparable publicly traded companies with product candidates in similar stages of development to the Company's product candidates. The Company has not historically declared a dividend and does not anticipate declaring a dividend during the expected life of the options.

The following table summarizes the Company's stock option activity from inception through December 31, 2015:

	Number of Options	Weighted Average Exercise Price per Share	Weighted Average Remaining Contractual <u>Term</u> (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at December 31, 2014		\$ —	,	
Granted	775,853	3.55		
Outstanding at December 31, 2015	775,853	\$ 3.55	9.8	\$ 167
Exercisable at December 31, 2015		\$		\$

The weighted average grant date fair value of these awards was \$2.50 per share.

As of December 31, 2015, there was \$1.8 million of unrecognized stock-based compensation related to stock options that are expected to vest. The Company expects to recognize this expense over a weighted-average period of 3.7 years.

In February 2016, the Company granted 3,674,681 stock options at an exercise price per share of \$4.02.

10. Loss per Unit

Basic and diluted loss per common unit and per incentive unit were calculated as follows:

	Period from May 7, 2014 (inception) to December 31, 2014 (in thousands, except per unit data)	
Net loss	\$	(9,539)
Weighted average common units outstanding, basic and diluted		826
Net loss per common unit, basic and diluted	\$	(11.55)

The Company's Preferred Stock has the right to participate in earnings and distributions of the Company but are not obligated to share in losses. As a result, in periods of net loss, the Company allocated losses on a pro rata basis to the holders of its Common Units and Incentive Units.

Following the Reorganization, the Company calculates loss per share attributable to common stockholders based on its outstanding common stock.

Basic and diluted loss per share attributable to common stockholders is calculated as follows:

	Year Ended <u>December 31, 2015</u> (in thousands, except per share data)	
Net loss	\$	(12,397)
Weighted average shares outstanding, basic and diluted		412
Loss per share attributable to common stockholders, basic and diluted	\$	(30.09)

The following common stock equivalents have been excluded from the calculations of diluted loss per unit or share because their inclusion would have been antidilutive.

	Period from May 7, 2014 (inception) to December 31, 2014 (in t	Year Ended December 31, 2015 housands)
Preferred units	19,349	—
Convertible preferred stock	—	36,317
Unvested common units	1,014	—
Unvested incentive units	2,649	—
Unvested restricted stock	—	3,307
Stock options	—	776
	23,012	40,400

Unaudited Pro Forma Loss per Share

Pro forma net loss per share is calculated as follows:

	2014 (inception) to Decem		ar Ended xember 31, 2015 are	
Net loss	\$	(9,539)	\$	(12,397)
Weighted average common units outstanding, basic and diluted		826		_
Weighted average shares outstanding, basic and diluted		—		412
Pro forma adjustment for conversion of all units in the Reorganization and the subsequent assumed automatic conversion of all preferred stock into shares of common stock upon the				
closing of the proposed initial public offering		10,763		29,618
Pro forma weighted average shares outstanding, basic and diluted		11,589		30,030
Pro forma net loss per share, basic and diluted	\$	(0.82)	\$	(0.41)

11. Related Party Transactions

In July 2014, the Company issued Caribou 8,110,599 Junior Preferred Units. As a result of this and related transactions, Caribou owned 33.7% and 20.2% of the Company's fully diluted equity as of December 31, 2014 and December 31, 2015, respectively. Refer to Note 6, *Commitments and Contingencies*, for additional information regarding these agreements.

During the period from May 7, 2014 (inception) to December 31, 2014, the Company recognized \$6.1 million in in-process research and development expense and \$0.2 million in research and development expense and, as of December 31, 2014, had recorded current and non-current obligations of \$1.7 million related to the license and service agreements with Caribou. During the year ended December 31, 2015, the Company recognized \$1.5 million in research and development expense and, as of December 31, 2015, the Company recognized \$1.5 million in research and development expense and, as of December 31, 2015, had recorded current obligations of \$0.6 million related to the license and service agreements with Caribou. In addition, the Company recognized \$0.2 million and \$1.1 million in general and administrative expense during the period from May 7, 2014 (inception) to December 31, 2014 and the year ended December 31, 2015, respectively, related to the Company's obligation to pay 30.0% of Caribou's patent prosecution, filing, and maintenance costs under the intellectual property license agreement with Caribou.

In connection with its entry into a collaboration and license agreement and related equity transactions with Novartis, the Company issued Novartis 4,761,905 Class A-1 Preferred Units and 2,666,666 Class A-2 Preferred Units. As a result of these transactions, Novartis owned 28.9% of the Company's fully diluted equity as of December 31, 2014. In August 2015, Novartis acquired 761,905 shares of the Company's Series B Preferred Stock. As a result of this transaction, Novartis collectively owned 19.2% of the Company's fully diluted equity as of December 31, 2015. Refer to Note 8, *Collaboration*, for additional information regarding this collaboration agreement.

During the year ended December 31, 2015, the Company recognized \$6.0 million in collaboration revenue related to this collaboration. As of December 31, 2015, the Company had recorded accounts receivable of \$1.0 million and deferred revenue of \$10.3 million related to this collaboration.

From May 7, 2014 (inception) to September 2014, the Company received consulting and management services from Atlas Venture Advisors, Inc., which through its affiliate, Atlas, owned 18.5% of the Company's fully diluted equity as of December 31, 2014. The Company paid Atlas Venture Advisors, Inc., \$0.3 million for these services, including reimbursement of expenses, in the period from May 7, 2014 (inception) to December 31, 2014. No such services were provided in 2015.



PART II

Information Not Required in Prospectus

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth the fees and expenses, other than underwriting discounts and commissions, payable in connection with the registration of the common stock hereunder. All amounts are estimates except the SEC registration fee.

	Amount to be Paid
SEC registration fee	*
FINRA filing fee	*
NASDAQ Global Market listing fee	*
Printing and mailing	*
Legal fees and expenses	*
Accounting fees and expenses	*
Transfer agent and registrar fees and expenses	*
Miscellaneous	*
Total	\$ *

* To be filed by amendment.

Item 14. Indemnification of Directors and Officers.

Section 145 of the Delaware General Corporation Law (the "DGCL") authorizes a corporation to indemnify its directors and officers against liabilities arising out of actions, suits and proceedings to which they are made or threatened to be made a party by reason of the fact that they have served or are currently serving as a director or officer to a corporation. The indemnity may cover expenses (including attorneys' fees) judgments, fines and amounts paid in settlement actually and reasonably incurred by the director or officer in connection with any such action, suit or proceeding. Section 145 permits corporations to pay expenses (including attorneys' fees) incurred by directors and officers in advance of the final disposition of such action, suit or proceeding. In addition, Section 145 provides that a corporation has the power to purchase and maintain insurance on behalf of its directors and officers against them and incurred by them in their capacity as a director or officer, or arising out of their status as such, whether or not the corporation would have the power to indemnify the director or officer against such liability under Section 145.

We have adopted provisions in our certificate of incorporation to be in effect upon the closing of this offering and bylaws to be in effect upon the effectiveness of the registration statement of which this prospectus is a part that limit or eliminate the personal liability of our directors to the fullest extent permitted by the DGCL, as it now exists or may in the future be amended. Consequently, a director will not be personally liable to us or our stockholders for monetary damages or breach of fiduciary duty as a director, except for liability for:

- any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- any unlawful payments related to dividends or unlawful stock purchases, redemptions or other distributions; or
- any transaction from which the director derived an improper personal benefit.

These limitations of liability do not alter director liability under the federal securities laws and do not affect the availability of equitable remedies such as an injunction or rescission.

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In addition, our bylaws provide that:

- we will indemnify our directors, officers and, in the discretion of our board of directors, certain employees to the fullest extent permitted by the DGCL, as it now exists or may in the future be amended; and
- we will advance reasonable expenses, including attorneys' fees, to our directors and, in the discretion of our board of directors, to our officers and certain employees, in connection with legal proceedings relating to their service for or on behalf of us, subject to limited exceptions.

We have entered into indemnification agreements with each of our directors and intend to enter into such agreements with certain of our executive officers. These agreements provide that we will indemnify each of our directors, certain of our executive officers and, at times, their affiliates to the fullest extent permitted by Delaware law. We will advance expenses, including attorneys' fees (but excluding judgments, fines and settlement amounts), to each indemnified director, executive officer or affiliate in connection with any proceeding in which indemnification is available and we will indemnify our directors and officers for any action or proceeding arising out of that person's services as a director or officer brought on behalf of us or in furtherance of our rights. Additionally, certain of our directors or officers may have certain rights to indemnification, advancement of expenses or insurance provided by their affiliates or other third parties, which indemnification relates to and might apply to the same proceedings arising out of such director's or officers' services as a director referenced herein. Nonetheless, we have agreed in the indemnification agreements that our obligations to those same directors or officers are primary and any obligation of such affiliates or other third parties to advance expenses or to provide indemnification for the expenses or liabilities incurred by those directors are secondary.

We also maintain general liability insurance which covers certain liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers, including liabilities under the Securities Act of 1933, as amended (the "Securities Act").

The underwriting agreement filed as Exhibit 1.1 to this registration statement provides for indemnification of us and our directors and officers by the underwriters against certain liabilities under the Securities Act and the Securities Exchange Act of 1934.

Item 15. Recent Sales of Unregistered Securities.

The following list sets forth information regarding all unregistered securities sold by us in the past three years. No underwriters were involved in the sales and the certificates representing the securities sold and issued contain legends restricting transfer of the securities without registration under the Securities Act or an applicable exemption from registration.

(a) Reorganization

On August 20, 2015, Intellia Therapeutics, LLC, a Delaware limited liability company, merged with and into Intellia Therapeutics, Inc., a Delaware corporation. We refer to the series of transactions related to Intellia Therapeutics, LLC's merger with and into us as the Reorganization. As a result of the Reorganization, incentive units of Intellia Therapeutics, LLC were converted into shares of our common stock; Common Units of Intellia Therapeutics, LLC were converted into shares of our Founder Stock; Junior Preferred Units of Intellia Therapeutics, LLC were converted into shares of our Junior Preferred Stock; Class A-1 Preferred Units of Intellia Therapeutics, LLC were converted into shares of our Series A-2 Preferred Units of Intellia Therapeutics, LLC were converted into shares of our Series A-2 Preferred Stock. The Reorganization was effected pursuant to an Agreement and Plan of Merger between Intellia Therapeutics, LLC and Intellia Therapeutics, Inc. and did not constitute a sale for purposes of the Securities Act.

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(b) Sales of Securities

The following list sets forth information regarding all unregistered securities sold by us since our inception on May 7, 2014.

- 1. On June 19, 2014, we issued and sold 1,000 shares of our common stock, or the Atlas Common Shares, to Atlas Venture Fund IX, L.P., or Atlas Venture Fund IX, for aggregate consideration of \$0.1 million.
- 2. On July 16, 2014, Intellia Therapeutics, LLC issued and sold preferred securities since converted into an aggregate of 2,857,142 shares of our Series A-1 Preferred Stock to Atlas Venture Fund IX in exchange for \$2.9 million in cash and the Atlas Common Shares.
- 3. On July 16, 2014, Intellia Therapeutics, LLC issued preferred securities since converted into 8,110,599 shares of our Junior Preferred Stock to Caribou Therapeutics Holdco, LLC, a holding company owned and managed by Caribou Biosciences, Inc., or Caribou. In exchange for such shares, Caribou Therapeutics Holdco, LLC contributed to Intellia Therapeutics, LLC all of its membership interests of Intellia, LLC, a holding company that was the original party to a license agreement with Caribou, dated July 16, 2014.
- 4. On July 31, 2014, Intellia Therapeutics, LLC issued to Atlas Venture Fund IX preferred securities since converted into an aggregate of 946,237 shares of founder stock as of August 31, 2015.
- 5. Between September 17, 2014 and January 28, 2015, in connection with a preferred securities financing, Intellia Therapeutics, LLC issued to Atlas Venture Fund IX and Novartis Institutes for Biomedical Research, Inc., or Novartis, in a series of closings, preferred securities since converted into an aggregate of 5,714,287 shares of our Series A-1 Preferred Stock and 3,999,999 shares of our Series A-2 Preferred Stock for aggregate consideration of \$6.0 million and \$6.0 million, respectively.
- 6. On August 20, 2015, we issued and sold an aggregate of 13,336,601 shares of our Series B Preferred Stock to 28 accredited investors at a per share purchase price of \$5.25 for aggregate gross consideration of \$70.0 million.
- 7. Between July 31, 2014 and July 31, 2015, Intellia Therapeutics, LLC issued to certain of our employees, consultants and scientific advisory board members equity representing an aggregate of 4,349,919 shares of restricted common stock and 1,351,763 shares of our founder stock, in each case as of August 31, 2015, in exchange for their services to us.
- 8. Between September 22, 2015 and March 17, 2016, we issued to certain of our employees and a director options to purchase an aggregate of 4,538,076 shares of our common stock, in exchange for their services to us.

We deemed the offers, sales and issuances of the securities described in paragraphs (1) through (6) above to be exempt from registration under the Securities Act, in reliance on Section 4(a)(2) of the Securities Act, including Regulation D and Rule 506 promulgated thereunder, regarding transactions by an issuer not involving a public offering. All purchasers of securities in transactions exempt from registration pursuant to Regulation D represented to us that they were accredited investors and were acquiring the shares 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. The purchasers received written disclosures that the securities had not been registered under the Securities Act and that any resale must be made pursuant to a registration statement or an available exemption from such registration.

We deemed the issuances of our common stock and our founder stock described in paragraph (7) and options to purchase shares of our common stock in paragraph (8) to be exempt from registration under the Securities Act in reliance on Rule 701 of the Securities Act as offers and sales of securities under compensatory benefit plans and contracts relating to compensation in compliance with Rule 701. Each of the recipients of

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securities in any transaction exempt from registration either received or had adequate access, through employment, business or other relationships, to information about us.

All certificates representing the securities issued in the transactions described in this Item 15 included appropriate legends setting forth that the securities had not been offered or sold pursuant to a registration statement and describing the applicable restrictions on transfer of the securities. There were no underwriters employed in connection with any of the transactions set forth in this Item 15.

Item 16. Exhibits and Financial Statement Schedules.

The exhibits to the registration statement are listed in the Exhibit Index to this registration statement and are incorporated herein by reference.

Item 17. Undertakings.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, or the 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 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 Act and will be governed by the final adjudication of such issue.

The Registrant hereby undertakes that:

- (a) The Registrant will provide to the underwriter at the closing as specified in the underwriting agreement, certificates in such denominations and registered in such names as required by the underwriter to permit prompt delivery to each purchaser.
- (b) For purposes of determining any liability under the Securities Act of 1933, as amended, the information omitted from a form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in the form of prospectus filed by the Registrant pursuant to Rule 424(b) (1) or (4) or 497(h) under the Securities Act of 1933, as amended, shall be deemed to be part of this registration statement as of the time it was declared effective.
- (c) For the purpose of determining any liability under the Securities Act of 1933, as amended, 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.
- (d) If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.
- (e) For the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities that in a primary offering of securities of the undersigned

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registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- i. Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- ii. Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- iii. The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- iv. Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this Registration Statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cambridge, Commonwealth of Massachusetts, on the day of , 2016.

INTELLIA THERAPEUTICS, INC.

By:

Nessan Bermingham, Ph.D.

Founder, President and Chief Executive Officer

POWER OF ATTORNEY AND SIGNATURES

Each individual whose signature appears below hereby constitutes and appoints each of Nessan Bermingham, Ph.D. and José E. Rivera, J.D. and as such person's true and lawful attorney-in-fact and agent with full power of substitution and resubstitution, for such person in such person's name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement (or any Registration Statement for the same offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933), and to file the same, with all exhibits thereto, and all documents in connection therewith, with the Securities and Exchange Commission granting unto each said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that any said attorney-in-fact and agent, or any substitute or substitutes of any of them, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement and Power of Attorney has been signed by the following person in the capacities and on the date indicated.

Name	Title	Date
Nessan Bermingham, Ph.D.	Founder, President, Chief Executive Officer and Director (<i>Principal Executive Officer</i>)	, 2016
Sapna Srivastava, Ph.D.	Chief Financial and Strategy Officer (Principal Financial Officer)	, 2016
Nicole Heifner	Chief Accounting Officer (Principal Accounting Officer)	, 2016
Caroline Dorsa	Director	, 2016
Jean François Formela, M.D.	Director	, 2016
Carl L. Gordon, Ph.D.	Director	, 2016
Rachel Haurwitz, Ph.D.	Director	, 2016
John M. Leonard, M.D.	Chief Medical Officer and Director	, 2016

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EXHIBIT INDEX

Exhibit No.	Exhibit Index
1.1*	Form of Underwriting Agreement
3.1**	Amended and Restated Certificate of Incorporation of the Registrant, as currently in effect
3.2*	Form of Second Amended and Restated Certificate of Incorporation of the Registrant (to be effective upon completion of this offering)
3.3**	Amended and Restated By-laws of the Registrant, as currently in effect
3.4*	Form of Second Amended and Restated By-laws (to be in effective upon completion of this offering)
4.1*	Specimen Common Stock Certificate
4.2**	Investor Rights Agreement among the Registrant and certain of its stockholders, dated August 20, 2015
5.1*	Opinion of Goodwin Procter LLP
10.1#*	2015 Amended and Restated Stock Option and Incentive Plan and forms of award agreements thereunder
10.3+**	License Agreement dated as of July 16, 2014 by and between the Registrant (as successor in interest of Intellia Therapeutics, LLC) and Caribou Biosciences, Inc.
10.4+**	Services Agreement dated as of July 16, 2014 by and between the Registrant (as successor in interest of Intellia Therapeutics, LLC) and Caribou Biosciences, Inc.
10.5+**	License and Collaborative Research Agreement dated as of December 18, 2014 by and between the Registrant and Novartis Institutes for BioMedical Research, Inc.
10.6*	Form of Indemnification Agreement
10.7**	Lease Agreement, by and between the Registrant and MIT 130 Brookline LLC, dated as of October 21, 2014
10.8	Lease Agreement, by and between the Registrant and BMR-Sidney Research Campus LLC, dated as of January 6, 2016
10.9#*	2016 Employee Stock Purchase Plan
10.10+	Amendment No. 1 to License Agreement dated as of February 2, 2016 by and between the Registrant and Caribou Biosciences, Inc.
10.11+	Addendum to License Agreement dated as of February 2, 2016 by and between the Registrant and Caribou Biosciences, Inc.
16.1**	Letter from PricewaterhouseCoopers LLP dated December 22, 2015
21.1**	Subsidiaries of the Registrant
23.1*	Consent of Deloitte & Touche LLP, Independent Registered Public Accounting Firm
23.2**	Consent of Goodwin Procter LLP (included in Exhibit 5.1)
24.1*	Power of Attorney (included in page II-6)

* To be included by amendment

** Previously submitted.

Application has been made to the Securities and Exchange Commission for confidential treatment of certain provisions. Omitted material for which confidential treatment has been requested has been filed separately with the Securities and Exchange Commission.

Indicates a management contract or any compensatory plan, contract or arrangement

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LEASE

by and between

BMR-SIDNEY RESEARCH CAMPUS LLC, a Delaware limited liability company

and

INTELLIA THERAPEUTICS, INC., a Delaware corporation

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LEASE

THIS LEASE (this "Lease") is entered into as of this 6th day of January, 2016 (the "Execution Date"), by and between BMR-Sidney Research Campus LLC, a Delaware limited liability company ("Landlord"), and Intellia Therapeutics, Inc., a Delaware corporation ("Tenant").

RECITALS

A. WHEREAS, Landlord owns certain real property (the "<u>Property</u>") and the improvements on the Property located at 40 Erie Street and 200 Sidney Street, Cambridge, Massachusetts, including the buildings located thereon; and

B. WHEREAS, Landlord wishes to lease to Tenant, and Tenant desires to lease from Landlord, certain premises (the "<u>Premises</u>") located on the basement, first floor and second floor of the building located at 40 Erie Street (the "<u>Building</u>"), pursuant to the terms and conditions of this Lease, as detailed below.

AGREEMENT

NOW, THEREFORE, Landlord and Tenant, in consideration of the mutual promises contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound, agree as follows:

1. Lease of Premises.

1.1. Effective on the Term Commencement Date (as defined below), Landlord hereby leases to Tenant, and Tenant hereby leases from Landlord, the Premises, as shown on Exhibit A attached hereto, including exclusive shafts, cable runs, mechanical spaces and rooftop areas, for use by Tenant in accordance with the Permitted Use (as defined below) and no other uses (except that (i) the Waste Storage Area (as defined below) and (ii) any Rooftop Installation Area (as defined below) designated after the date hereof are explicitly not part of the Premises demised under this Lease). The Property and all landscaping, parking facilities, private drives and other improvements and appurtenances related thereto, including the Building, the 200 Sidney Street Building (as hereinafter defined), and the parking garage located at 47 Erie Street in Cambridge, Massachusetts (to the extent of Landlord's interest therein) (the "Parking Garage"), are hereinafter collectively referred to as the "Project." All portions of the Building that are for the non-exclusive use of the tenants of the Building only, and not the tenants of the Project generally, including but not limited to service corridors, stairways, elevators, public restrooms and public lobbies (all to the extent located in the Building), are hereinafter referred to as "Building Common Area." All portions of the Project that are for the non-exclusive use of tenants of the Project generally, including driveways, sidewalks, parking areas, the Parking Garage, landscaped areas, and service corridors, stairways, and elevators (but excluding Building Common Area," and hereinafter referred to as "Project Common Area." The Building Common Area and Project Common Area are collectively referred to herein as "Common Area,"

2. <u>Basic Lease Provisions</u>. For convenience of the parties, certain basic provisions of this Lease are set forth herein. The provisions set forth herein are subject to the remaining terms and conditions of this Lease and are to be interpreted in light of such remaining terms and conditions.

2.1. This Lease shall take effect upon the Execution Date and, except as specifically otherwise provided within this Lease, each of the provisions hereof shall be binding upon and inure to the benefit of Landlord and Tenant from the date of execution and delivery hereof by all parties hereto.

2.2. In the definitions below, each current Rentable Area (as defined below) is expressed in square feet. Rentable Area and "Tenant's Pro Rata Share" are all subject to adjustment as provided in this Lease.

Definition or Provision	Means the Following (As of the Term Commencement Date)
Approximate Rentable Area of Premises	65,319 square feet
Approximate Rentable Area of Building	106,638 square feet
Tenant's Pro Rata Share of Building	61.25%

2.3. Monthly and annual installments of Base Rent for the Premises ("<u>Base Rent</u>") as of the Rent Commencement Date (as defined below), subject to adjustment under this Lease:

Dates	Square Feet of Rentable Area	Base Rent per Square Foot of Rentable Area	Monthly Base Rent	Annual Base Rent
Rent Commencement Date – The day prior to first (1st) anniversary of				
Rent Commencement Date	65,319	\$ 68.00 annually	\$370,141	\$4,441,692

2.4. Estimated Term Commencement Date: October 1, 2016

2.5. Estimated Term Expiration Date: September 30, 2026

2.6. Security Deposit: \$2,200,000.

2.7. Permitted Use: Office and laboratory use, including a vivarium, in conformity with all federal, state, municipal and local laws, codes, ordinances, rules and regulations of Governmental Authorities (as defined below), committees, associations, or other regulatory committees, agencies or governing bodies having jurisdiction over the Premises, the Building, the Property, the Project, Landlord or Tenant, including both statutory and common law and hazardous waste rules and regulations ("<u>Applicable Laws</u>"). Tenant acknowledges and agrees that, notwithstanding anything in this Lease to the contrary, pursuant to Applicable Laws, the portion of the Premises located in the basement of the Building is not permitted to be occupied by human beings and may only be used for storage purposes or other uses that are included within the Permitted Use that do not involve or require occupancy by human beings.

2.8. Address for Rent Payment:

BMR-Sidney Research Campus LLC Attention Entity 241 P.O. Box 511415 Los Angeles, California 90051-7970

2.9. Address for Notices to Landlord:

BMR-Sidney Research Campus LLC 17190 Bernardo Center Drive San Diego, California 92128 Attn: Real Estate Legal Department

2.10. Address for Notices to Tenant prior to Term Commencement Date:

Intellia Therapeutics, Inc. 130 Brookline Street, Suite 201 Cambridge, Massachusetts 02139 Attn: General Counsel Email: <u>ITXNOTICE@Intelliatx.com</u>

Address for Notices to Tenant following Term Commencement Date:

Intellia Therapeutics, Inc. 40 Erie Street, Suite 130 Cambridge, Massachusetts 02139 Attn: General Counsel Email: <u>ITXNOTICE@Intelliatx.com</u>

2.11. Address for Invoices to Tenant prior to Term Commencement Date:

Intellia Therapeutics, Inc. 130 Brookline Street, Suite 201 Cambridge, Massachusetts 02139 Attn: VP of Finance Email: <u>ITXNOTICE@Intelliatx.com</u>

Address for Invoices to Tenant following Term Commencement Date:

Intellia Therapeutics, Inc. 40 Erie Street, Suite 130 Cambridge, Massachusetts 02139 Attn: VP of Finance Email: <u>ITXNOTICE@Intelliatx.com</u>

2.12. The following Exhibits are attached hereto and incorporated herein by reference:

Exhibit A	Premises
Exhibit B	Work Letter
Exhibit B-1	Tenant Work Insurance Requirements
Exhibit C	Acknowledgement of Term Commencement Date and Term Expiration Date
Exhibit D	Landlord's Work
Exhibit E	Form of Letter of Credit
Exhibit F	Plan of Premises Layout Zones
Exhibit G	Rules and Regulations
Exhibit H	PTDM
Exhibit I	Tenant's Personal Property
Exhibit J	Form of Estoppel Certificate
Exhibit K	Definition of Obsolete Equipment
Exhibit L	Signage Plan

3. <u>Term</u>.

3.1. The actual term of this Lease (as the same may be extended pursuant to <u>Article 42</u> hereof, and as the same may be earlier terminated in accordance with this Lease, the "<u>Term</u>") shall commence on the actual Term Commencement Date (as defined in <u>Article 4</u>) and end on the date (the "<u>Term Expiration Date</u>") that is one hundred twenty (120) months after the Term Commencement Date, subject to extension or earlier termination of this Lease as provided herein.

3.2. Provided that the Premises are programmed in accordance with the lab and office zones identified on Exhibit F attached hereto, and incorporate flexible wall and lab bench systems as of the date the Termination Option Notice (as hereafter defined) is delivered and the Termination Date (as hereafter defined), Tenant shall have the one-time option to terminate this Lease with respect to the entire Premises (the "Termination Option") on the sixth (6th) anniversary of the Term Commencement Date (the "Termination Date") by providing Landlord

with written notice thereof (the "Termination Option Notice") on or prior to the date which is twelve (12) months prior to the Termination Date. If Tenant timely delivers the Termination Option Notice, then, on or before the date which is ten (10) business days after the date the Termination Option Notice is delivered to Landlord, Tenant shall deliver to Landlord the Termination Fee (as defined below) as consideration for and a condition precedent to such early termination. The "Termination Fee" equals the unamortized amounts (as of the Termination Date) of the brokerage commissions paid in connection with this Lease, which amounts shall be calculated by amortizing the same on a straight-line basis commencing on the Term Commencement Date (as defined below) and ending on the Term Expiration Date. If Tenant fails to timely deliver to Landlord the Termination Option Notice or the Termination Fee, then the Termination Option shall automatically terminate and be of no further force or effect. If Tenant timely delivers to Landlord the Termination Option Notice and the Termination Fee, then Tenant shall surrender the Premises to Landlord on or before the Termination Date in accordance with all of the terms and conditions of this Lease. If Tenant does not so surrender the Premises in accordance with all of the terms and conditions of this Lease on or before the Termination Date, then Tenant, pursuant to Article 27, shall become a tenant at sufferance until the actual date that Tenant surrenders the Premises to Landlord in accordance with the terms and conditions of this Lease. If Tenant timely delivers to Landlord the Termination Option Notice and the Termination Fee, then this Lease shall terminate on the Termination Date and shall thereafter be of no further force or effect, except for those provisions that, by their express terms, survive the expiration or earlier termination thereof. Notwithstanding anything in this Section to the contrary, Tenant shall not be permitted to exercise the Termination Option during any period of time during which Tenant is in Default (as defined below) (so long as Tenant has received prior written notice of such Default). Any attempted exercise of the Termination Option during a period of time in which Tenant is in Default shall be void and of no force or effect. The Termination Option is personal to Intellia Therapeutics, Inc., and may not be exercised by any assignee, sublessee or transferee of this Lease, except to Tenant's Affiliate (as defined below) subsequent to an Exempt Transfer (as defined below), unless Landlord expressly agrees that the Termination Option may be transferred to any such assignee, sublessee or transferee, which agreement Landlord may grant or withhold in its sole discretion.

4. Possession and Commencement Date.

4.1. Landlord shall use commercially reasonable efforts to tender possession of the Premises to Tenant on or before the Estimated Term Commencement Date, with the work (the "<u>Tenant Improvements</u>") required of Landlord described in the Work Letter attached hereto as <u>Exhibit B</u> (the "<u>Work Letter</u>") Substantially Complete (as defined below). Tenant agrees that in the event such work is not Substantially Complete on or before the Estimated Term Commencement Date for any reason, then (a) this Lease shall not be void or voidable, (b) Landlord shall not be liable to Tenant for any loss or damage resulting therefrom, (c) the Term Expiration Date shall be extended accordingly and (d) Tenant shall not be responsible for the payment of any Base Rent until the actual Term Commencement Date as described in <u>Section 4.2</u> occurs. Notwithstanding anything in this Lease (including the Work Letter) to the contrary, Landlord's obligation to timely achieve Substantial Completion shall be subject to extension on a day-for-day basis as a result of Force Majeure (as defined below).

4.2. The "Term Commencement Date" shall be the date that Landlord tenders possession of the Premises to Tenant with the Tenant Improvements and the work in the Premises to be performed by Landlord described on Exhibit D attached hereto (the "Landlord's Work") each Substantially Complete. If Landlord's tender of possession of the Premises is delayed by (a) any default by Tenant under this Lease and the Work Letter of which prior notice has been provided to Tenant, including Tenant's failure to timely pay the Excess TI Costs to Landlord, (b) Tenant's request to change the Tenant Improvements or (c) interference with the completion of the Tenant Improvements or Landlord's Work as a result of Tenant's early access pursuant to Section 4.3 below (each, a "Tenant Delay"), then the Term Commencement Date shall be the date that the Term Commencement Date would have occurred but for such Tenant Delay. Notwithstanding anything to the contrary contained herein, if Landlord fails to deliver the Premises to Tenant with the Tenant Improvements Substantially Complete (i) on or before the date that is the earlier of (A) seventy-five (75) days after the Estimated Term Commencement Date or (B) December 31, 2016, Base Rent shall be abated one (1) day for each day after the Estimated Term Commencement Date that Landlord fails to deliver the Premises to Tenant with the Tenant Improvements Substantially Complete and (ii) on or before the date that is one hundred twenty (120) days after the Estimated Term Commencement Date, Base Rent shall be abated two (2) days for each day after the Estimated Term Commencement Date that Landlord fails to deliver the Premises with Tenant's Improvements Substantially Complete. In addition, in the event the Term Commencement Date has not occurred within one hundred twenty (120) days after the Estimated Term Commencement Date, Tenant shall have the right to terminate this Lease by delivering written notice to Landlord within one hundred thirty (130) days after the Estimated Term Commencement Date. Tenant shall execute and deliver to Landlord written acknowledgment of the actual Term Commencement Date and the Term Expiration Date within ten (10) days after Tenant takes occupancy of the Premises, in the form attached as Exhibit C hereto. Failure to execute and deliver such acknowledgment, however, shall not affect the Term Commencement Date or Landlord's or Tenant's liability hereunder. Failure by Tenant to obtain validation by any medical review board or other similar governmental licensing of the Premises required for the Permitted Use by Tenant shall not serve to extend the Term Commencement Date. The term "Substantially Complete" or "Substantial Completion" as used herein with respect to (x) the Landlord's Work means that the Landlord's Work is substantially complete, except for minor punch list items; and (y) the Tenant Improvements means the Tenant Improvements are substantially complete in accordance with the Approved Plans (as defined in the Work Letter), except for minor punch list items that do not interfere with Tenant's Permitted Use, and a temporary or permanent certificate of occupancy for the Premises has been issued. Landlord shall use commercially reasonable efforts to complete the punch list items within a reasonable period of time following the Term Commencement Date. In the event Landlord obtains a temporary certificate of occupancy for the Premises, Landlord shall obtain a permanent certificate of occupancy within a reasonable period of time following the Term Commencement Date.

4.3. Landlord shall cause the Tenant Improvements to be constructed in the Premises pursuant to the Work Letter at a cost to Landlord not to exceed (a) Nine Million Seven Hundred Ninety-Seven Thousand Eight Hundred Fifty and 00/100 Dollars (\$9,797,850.00) (based upon One Hundred Fifty Dollars (\$150.00) per square foot of Rentable Area) (the "<u>Base TI Allowance</u>"), plus (b) up to Six Thousand Five Hundred Thirty-Two and 00/100 Dollars (\$9,804,382.00). The Base TI Allowance, together with the A&E Allowance, shall be referred to herein as the "<u>TI Allowance</u>." The TI Allowance may be applied to the costs of (m) construction, (n) project management by Landlord (which fee shall equal three percent (3%) of the cost of the Tenant Improvements), (o) commissioning report by a licensed, qualified commissioning agent hired by Landlord, and review of such party's commissioning report by a licensed, qualified commissioning agent hired by Landlord, and review of such party's commissioning report by a licensed, qualified commissioning agent hired by Governmental Authorities (as defined below) for permits or for inspections of the Tenant Improvements and (r) costs and expenses for labor, material, equipment and fixtures. The A&E Allowance may be applied to the costs of space planning and architectural, engineering and related services performed by third parties unaffiliated with Tenant for the Tenant Improvements. In no event shall the TI Allowance be used for (t) the cost of work that is not authorized by the Approved Plans (as defined in the Work Letter) or otherwise approved in writing by Landlord, (u) payments to Tenant or any affiliates of Tenant, (v) the purchase of any furniture, personal property or other non-building system equipment, or (w) costs resulting from any default by Tenant of its obligations under this Lease.

4.4. Tenant shall have until ninety (90) days after the Term Commencement Date to (the "<u>TI Deadline</u>") to expend, or have a binding commitment to expend, the unused portion of the TI Allowance, after which date Landlord's obligation to fund such costs shall expire.

4.5. In the event that Landlord permits (in Landlord's sole and absolute discretion) Tenant to enter upon the Premises prior to the Term Commencement Date for the purpose of installing improvements or the placement of personal property, Tenant shall furnish to Landlord evidence satisfactory to Landlord in advance that insurance coverages required of Tenant under the provisions of <u>Article 23</u> are in effect, and such entry shall be subject to all the terms and conditions of this Lease, other than the payment of Base Rent (as defined below); and <u>provided</u>, further, that if the Term Commencement Date is delayed due to such early access, then the Term Commencement Date shall be the date that the Term Commencement Date would have occurred but for such delay. Landlord agrees to use reasonable efforts to notify Tenant of any anticipated delays due to Tenant's early access (which notice may be by email or orally), to the extent Landlord is made aware of such anticipated delays. Notwithstanding the foregoing, Landlord shall have no liability for failing to notify Tenant of any anticipated delays.

4.6. Notwithstanding anything to the contrary in this Lease, Landlord and Tenant agree that all Tenant Improvements and Alterations (as hereinafter defined) shall (a) be programmed in accordance with the lab and office zones identified on <u>Exhibit F</u> attached hereto, and (b) incorporate flexible wall and lab bench systems.

5. <u>Condition of Premises</u>. Except as expressly set forth herein, Tenant acknowledges that neither Landlord nor any agent of Landlord has made any representation or warranty with respect to the condition of the Premises, the Building or the Project, or with respect to the suitability of the Premises, the Building or the Project for the conduct of Tenant's business. Tenant acknowledges that (a) it is fully familiar with the condition of the Premises and agrees to take the same in its condition "as is" as of the Term Commencement Date, subject to the completion of the Tenant Improvements in accordance with the Work Letter and (b) Landlord shall have no obligation to alter, repair or otherwise prepare the Premises for Tenant's occupancy or to pay for or construct any improvements to the Premises, except with respect to the completion of the Landlord's Work and except with respect to the payment of the Base TI Allowance and the A&E Allowance. Tenant's taking of possession of the Premises shall, except as otherwise agreed to in writing by Landlord and Tenant, conclusively establish that the Premises, the Building and the Project were at such time in good, sanitary and satisfactory condition and repair.

6. Rentable Area.

6.1. The term "<u>Rentable Area</u>" shall reflect such areas as reasonably calculated by Landlord's architect, as the same may be reasonably adjusted from time to time by Landlord in consultation with Landlord's architect to reflect changes to the Premises, the Building or the Project, as applicable. Notwithstanding the foregoing to the contrary, in no event shall the Rentable Area of the Premises, the Building or the Project be deemed to have increased unless due to a change in the outer dimensions of the exterior walls of the same.

6.2. The Rentable Area of the Building is generally determined by making separate calculations of Rentable Area applicable to each floor within the Building and totaling the Rentable Area of all floors within the Building. The Rentable Area of a floor is computed by measuring to the outside finished surface of the permanent outer Building walls. The full area calculated as previously set forth is included as Rentable Area, without deduction for columns and projections or vertical penetrations, including stairs, elevator shafts, flues, pipe shafts, vertical ducts and the like, as well as such items' enclosing walls.

6.3. The term "<u>Rentable Area</u>," when applied to the Premises, is that area equal to the usable area of the Premises, plus an equitable allocation of Rentable Area within the Building that is not then utilized or expected to be utilized as usable area, including that portion of the Building devoted to corridors, equipment rooms, restrooms, elevator lobby, atrium and mailroom.

6.4. The Rentable Area of the Project is the total Rentable Area of the Building.

6.5. Review of allocations of Rentable Areas as between tenants of the Building shall be made as frequently as Landlord deems appropriate, including in order to facilitate an equitable apportionment of Operating Expenses (as defined below), but in no event shall the Rentable Area of the Premises or the Building be subject to remeasurement except as otherwise provided in <u>Section 6.1</u> hereof.

7. <u>Rent</u>.

7.1. Tenant shall pay to Landlord as Base Rent for the Premises, commencing on the date that is one (1) month and one (1) week after the Term Commencement Date (the "<u>Rent Commencement Date</u>"), the sums set forth in <u>Section 2.3</u>, subject to the rental adjustments provided in <u>Article 8</u> hereof. Base Rent shall be paid in equal monthly installments as set forth in <u>Section 2.3</u>, subject to the rental adjustments provided in <u>Article 8</u> hereof, each in advance on the first day of each and every calendar month during the Term. Notwithstanding the foregoing, in the event Tenant does not timely exercise its Termination Option pursuant to the provisions of <u>Section 3.2</u> hereof, Base Rent and Tenant's Adjusted Share of Operating Expenses shall be abated for one (1) month and one (1) week beginning on the sixth (6th) anniversary of the Term Commencement Date.

7.2. In addition to Base Rent, Tenant shall pay to Landlord as additional rent ("Additional Rent") at times hereinafter specified in this Lease (a) Tenant's Adjusted Share (as defined below) of Operating Expenses (as defined below), (b) the Property Management Fee (as defined below), (c) sums due for consulting services provided to Tenant by Landlord at Tenant's request if those services exceed the customary tenant-servicing efforts of Landlord in Landlord's reasonable discretion (with Landlord having sole discretion with respect to the provision of such services (if any) and how those services will be billed to Tenant, including the use of a taxable subsidiary to provide such services and bill for the same) and (d) any other amounts that Tenant assumes or agrees to pay under the provisions of this Lease that are owed to Landlord, including any and all other sums that may become due by reason of any default of Tenant or failure on Tenant's part to comply with the agreements, terms, covenants and conditions of this Lease to be performed by Tenant, after notice and the lapse of any applicable cure periods.

7.3. Base Rent and Additional Rent shall together be denominated "<u>Rent</u>." Rent shall be paid to Landlord, without abatement, deduction or offset, in lawful money of the United States of America to the address set forth in <u>Section 2.8</u> or to such other person or at such other place as Landlord may from time designate in writing. In the event the Term commences or ends on a day other than the first day of a calendar month, then the Rent for such fraction of a month shall be prorated for such period on the basis of the number of days in the month and shall be paid at the then-current rate for such fractional month.

7.4. Tenant's obligation to pay Rent shall not be discharged or otherwise affected by (a) any Applicable Laws now or hereafter applicable to the Premises, (b) any other restriction on Tenant's use, (c) except as expressly provided herein, any casualty or taking or (d) any other occurrence, except as expressly set forth herein; and, except as expressly set forth herein, Tenant waives all rights now or hereafter existing to terminate or cancel this Lease or quit or surrender the Premises or any part thereof, or to assert any defense in the nature of constructive eviction to any action seeking to recover rent. Tenant's obligation to pay Rent with respect to any period or obligations arising, existing or pertaining to the period prior to the date of the expiration or

earlier termination of the Term or this Lease shall survive any such expiration or earlier termination; <u>provided</u>, however, that nothing in this sentence shall in any way affect Tenant's obligations with respect to any other period.

8. <u>Rent Adjustments</u>. Base Rent shall be subject to an annual upward adjustment of three percent (3%) of the then-current Base Rent. The first such adjustment shall become effective commencing on the first (1st) annual anniversary of the Term Commencement Date, and subsequent adjustments shall become effective on every successive annual anniversary for so long as the initial Term of this Lease continues in effect. The amount of Base Rent during any extension period shall be governed by <u>Article 42</u> hereof.

9. Operating Expenses.

9.1. As used herein, the term "Operating Expenses" shall include:

(a) Government impositions, including property tax costs consisting of real and personal property taxes (including amounts due under any improvement bond upon the Building or, if such taxes are assessed in conjunction with the Building's taxes the Project (including the parcel or parcels of real property upon which the Building, the other buildings in the Project and areas serving the Building and the Project are located) or assessments in lieu thereof imposed by any federal, state, regional, local or municipal governmental authority, agency or subdivision (each, a "<u>Governmental Authority</u>"); non-income taxes on or measured by gross rentals received from the rental of space in the Project; taxes based on the square footage of the Premises, the Building or the Project, as well as any parking charges, utilities surcharges or any other costs levied, assessed or imposed by, or at the direction of, or resulting from Applicable Laws or interpretations thereof, promulgated by any Governmental Authority in connection with the use or occupancy of the Project or the parking facilities serving the Project, including without limitation the Parking Garage; taxes on this transaction or any document to which Tenant is a party creating or transferring an interest in the Premises; any fee for a business license to operate an office building; and any expenses, including the reasonable cost of attorneys or experts, reasonably incurred by Landlord in seeking reduction by the taxing authority of the applicable taxes, less tax refunds obtained as a result of an application for review thereof; and

(b) All other costs of any kind paid or incurred by Landlord in connection with the operation or maintenance of the Building and the Project, which shall include Project office rent at fair market rental for a commercially reasonable amount of space for Project management personnel, to the extent an office used for Project operations is maintained at the Project, plus customary expenses for such office, and costs of repairs and replacements to improvements within the Project as appropriate to maintain the Project as required hereunder, including costs of funding such reasonable reserves as Landlord, consistent with good business practice, may establish to provide for furture repairs and replacements; costs of utilities furnished to the Common Area; costs associated with the operation of food trucks for the benefit of employees of tenants, including Tenant, at the Project; sewer fees; cable television; trash collection; cleaning, including windows; heating, ventilation and air-conditioning ("<u>HVAC</u>"); maintenance of landscaping and grounds; snow removal; maintenance of drives and parking

areas, including without limitation the Parking Garage; maintenance of the roof; security services and devices; building supplies; maintenance or replacement of equipment utilized for operation and maintenance of the Project; license, permit and inspection fees; sales, use and excise taxes on goods and services purchased by Landlord in connection with the operation, maintenance or repair of the Building or Project systems and equipment; telephone, postage, stationery supplies and other expenses incurred in connection with the operation, maintenance or repair of the Project; accounting, legal and other professional fees and expenses incurred in connection with routine maintenance and operation of the Project; costs of furniture, draperies, carpeting, landscaping supplies, snow removal supplies and other customary and ordinary items of personal property provided by Landlord for use in Common Areas or in the Project office; capital expenditures incurred (i) in replacing obsolete equipment, as such term is defined on Exhibit K attached hereto, (ii) for the primary purpose of reducing Operating Expenses or (iii) required by any Governmental Authority to comply with changes in Applicable Laws that take effect after the Execution Date or to ensure continued compliance with Applicable Laws in effect as of the Execution Date, in each case amortized over the useful life thereof, as reasonably determined by Landlord, in accordance with generally accepted accounting principles, but in no event longer than ten (10) years; costs of complying with Applicable Laws (except to the extent such costs are incurred to remedy non-compliance as of the Execution Date with Applicable Laws); costs to keep the Project in compliance with, or fees otherwise required under, any CC&Rs (as defined below), including condominium fees; insurance premiums, including premiums for commercial general liability, property casualty, earthquake, terrorism and environmental coverages; portions of insured losses paid by Landlord as part of the deductible portion of a loss pursuant to the terms of insurance policies for the Building or the Parking Garage; service contracts; costs of services of independent contractors retained to do work of a nature referenced above; and costs of compensation (including employment taxes and fringe benefits) of all persons who perform regular and recurring duties connected with the day-to-day operation and maintenance of the Project, its equipment, the adjacent walks, landscaped areas, drives and parking areas, including janitors, floor waxers, window washers, watchmen, gardeners, sweepers, plow truck drivers, handymen, and engineering/maintenance personnel.

(c) Notwithstanding the foregoing, Operating Expenses shall not include any net income, franchise, capital stock, estate or inheritance taxes, or taxes that are the personal obligation of Tenant or of another tenant of the Project; any leasing commissions; expenses that relate to preparation of rental space for a tenant; advertising and promotional expenditures directly related to Landlord's efforts to lease space in the Building or the Project; expenses of initial development and construction, including grading, paving, landscaping and decorating (as distinguished from maintenance, repair and replacement of the foregoing); costs of constructing new buildings within the Project; legal expenses relating to other tenants; legal and accounting fees not incurred in connection with operation and management of the Building (including any legal and other costs incurred in connection with the sale, financing, refinancing, syndication, securitization, or change of ownership of the Building, including, without limitation, brokerage commissions, attorneys' and accountants' fees, closing costs, title insurance premiums, points, and interest charges); costs of repairs to the extent reimbursed by payment of insurance proceeds received by Landlord or which are covered by warranties or guarantees or reimbursed pursuant to

service contracts; costs incurred directly and solely as a result of Landlord's gross negligence or willful misconduct; principal and interest upon loans to Landlord or secured by a mortgage or deed of trust covering the Project or a portion thereof (provided that interest upon a government assessment or improvement bond payable in installments shall constitute an Operating Expense under Subsection 9.1(a)); salaries of executive officers of Landlord, or of Landlord's personnel above the level of Building manager who are not spending a majority of their time on the operation and maintenance of the Building or Project; depreciation claimed by Landlord for tax purposes (provided that this exclusion of depreciation is not intended to delete from Operating Expenses actual costs of repairs and replacements and reasonable reserves in regard thereto that are provided for in Subsection 9.1(b)); taxes that are excluded from Operating Expenses by the last sentence of Subsection 9.1(a); costs or expenses incurred in connection with the financing or sale of the Project or any portion thereof; political or charitable contributions; costs expressly excluded from Operating Expenses elsewhere in this Lease or that are charged to or paid by Tenant under other provisions of this Lease; professional fees and disbursements and other costs and expenses related to the ownership (as opposed to the use, occupancy, operation, maintenance or repair) of the Project; and any item that, if included in Operating Expenses, would involve a double collection for such item by Landlord, such as ordinary maintenance and repair costs for the Parking Garage which are included in the parking fee payable by Tenant in accordance with <u>Section 13.4</u> hereof. To the extent that Tenant uses more than Tenant's Pro Rata Share of any item of Operating Expenses, together with Tenant's Pro Rata Share of Operating Expenses (such excess, together with Tenant's Pro Rata Share").

9.2. Tenant shall pay to Landlord (a) commencing on the Term Commencement Date and on the first day of each calendar month of the Term, as Additional Rent, one-twelfth (1/12th) of the Property Management Fee (as defined below) and (b) commencing on the Rent Commencement Date and on the first day of each calendar month of the Term, as Additional Rent, Landlord's estimate of Tenant's Adjusted Share of Operating Expenses with respect to the Building and the Project, as applicable, for such month.

(x) The "<u>Property Management Fee</u>" shall equal three percent (3%) of Base Rent due from Tenant. Tenant shall pay the Property Management Fee in accordance with <u>Section 9.2</u> with respect to the entire Term, including any extensions thereof or any holdover periods, regardless of whether Tenant is obligated to pay Base Rent, Operating Expenses or any other Rent with respect to any such period or portion thereof. For the period of time between the Term Commencement Date and Rent Commencement Date, if any, and any period of occupancy prior to the Term as further described in <u>Section 9.5</u>, the Property Management Fee shall be calculated as if Tenant were paying \$370,141.00 per month for Base Rent.

(y) Within ninety (90) days after the conclusion of each calendar year (or such longer period as may be reasonably required by Landlord), Landlord shall furnish to Tenant a statement showing in reasonable detail the actual Operating Expenses, Tenant's Adjusted Share of Operating Expenses, and the cost of providing utilities to the Premises for the previous calendar year ("Landlord's Statement"). Any additional sum due from Tenant to Landlord shall

be due and payable within thirty (30) days after receipt of an invoice therefor. If the amounts paid by Tenant pursuant to this Section exceed Tenant's Adjusted Share of Operating Expenses for the previous calendar year, then Landlord shall credit the difference against the Rent next due and owing from Tenant; provided that, if the Lease term has expired, Landlord shall accompany Landlord's Statement with payment for the amount of such difference.

(z) Any amount due under this Section for any period that is less than a full month shall be prorated for such fractional month on the basis of the number of days in the month.

9.3. Landlord may, from time to time, modify Landlord's calculation and allocation procedures for Operating Expenses, so long as such modifications produce Dollar results substantially consistent with Landlord's then-current practice at the Project. Landlord or an affiliate(s) of Landlord currently own other property(ies) adjacent to the Project or its neighboring properties, including but not limited to the building located at 21 Erie Street in Cambridge, Massachusetts (collectively, "<u>Neighboring Properties</u>"). In connection with Landlord performing services for the Project pursuant to this Lease, similar services may be performed by the same vendor(s) for Neighboring Properties (for instance, shuttle services, food truck services or landscaping maintenance). In such a case, Landlord shall reasonably allocate to the Building and the Project the costs for such services based upon the ratio that the square footage of the Building or the Project (as applicable) bears to the total square footage of all of the Neighboring Properties or buildings within the Neighboring Properties for which the services are performed, unless the scope of the services performed for any building or property (including the Building and the Project). Furthermore, the parties acknowledge that the Property contains a separate building known as 200 Sidney Street (the "<u>200</u> <u>Sidney Street Building</u>"). With respect to any Operating Expenses (including, without limitation, real estate taxes) that apply to the Property as a whole (as opposed to allocated specifically to each of the Building and the 200 Sidney Street Building and the 200 Sidney Street Building, Landlord shall reasonably allocate to each building to gether, or such other equitable allocation as Landlord reasonably allocate to each building the source of each of the Building and the 200 Sidney Street Building and the 200 Sidney Street Building, respectively, bears to the total square footage of Rentable Area of two buildings together, or such other equitable allocation as Landlo

9.4. Landlord's annual statement shall be final and binding upon Tenant unless Tenant, within sixty (60) days after Tenant's receipt thereof, shall contest any item therein by giving written notice to Landlord, specifying each item contested and the reasons therefor; provided that Tenant shall in all events pay the amount specified in Landlord's annual statement, pending the results of the Independent Review and determination of the Accountant(s), as applicable and as each such term is defined below. If, during such sixty (60)-day period, Tenant reasonably and in good faith questions or contests the correctness of Landlord's statement of Tenant's Adjusted Share of Operating Expenses, Landlord shall provide Tenant with reasonable access to Landlord's books and records to the extent relevant to determination of Operating

Expenses, and such information as Landlord reasonably determines to be responsive to Tenant's written inquiries. In the event that, after Tenant's review of such information, Landlord and Tenant cannot agree upon the amount of Tenant's Adjusted Share of Operating Expenses, then Tenant shall have the right to have an independent public accounting firm hired by Tenant on an hourly basis and not on a contingent-fee basis (at Tenant's sole cost and expense) and approved by Landlord (which approval Landlord shall not unreasonably withhold or delay) audit and review such of Landlord's books and records for the year in question as directly relate to the determination of Operating Expenses for such year (the "Independent Review"), but not books and records of entities other than Landlord unless such other entities share costs with Landlord, in which event Landlord shall only be obligated to make available the books and records of such other entity to the extent related to the shared costs. Landlord shall make such books and records available at the location where Landlord maintains them in the ordinary course of its business. Landlord need not provide copies of any books or records. Tenant shall commence the Independent Review within fifteen (15) days after the date Landlord has given Tenant access to Landlord's books and records for the Independent Review. Tenant shall complete the Independent Review and notify Landlord in writing of Tenant's specific objections to Landlord's calculation of Operating Expenses (including Tenant's accounting firm's written statement of the basis, nature and amount of each proposed adjustment) no later than sixty (60) days after Landlord has first given Tenant access to Landlord's books and records for the Independent Review. Landlord shall review the results of any such Independent Review. The parties shall endeavor to agree promptly and reasonably upon Operating Expenses taking into account the results of such Independent Review. If, as of the date that is sixty (60) days after Tenant has submitted the Independent Review to Landlord, the parties have not agreed on the appropriate adjustments to Operating Expenses, then the parties shall engage a mutually agreeable independent third party accountant with at least ten (10) years' experience in commercial real estate accounting in the Cambridge, Massachusetts area (the "Accountant"). If the parties cannot agree on the Accountant, each shall within twenty (20) days after such impasse appoint an Accountant (different from the accountant and accounting firm that conducted the Independent Review) and, within twenty (20) days after the appointment of both such Accountants, those two Accountants shall select a third (which cannot be the accountant and accounting firm that conducted the Independent Review). If either party fails to timely appoint an Accountant, then the Accountant the other party appoints shall be the sole Accountant. Within twenty (20) days after appointment of the Accountant(s), Landlord and Tenant shall each simultaneously give the Accountants (with a copy to the other party) its determination of Operating Expenses, with such supporting data or information as each submitting party determines appropriate. Within twenty (20) days after such submissions, the Accountants shall by majority vote select either Landlord's or Tenant's determination of Operating Expenses. The Accountants may not select or designate any other determination of Operating Expenses. The determination of the Accountant(s) shall bind the parties. If the parties agree or the Accountant(s) determine that the Operating Expenses actually paid by Tenant for the calendar year in question exceeded Tenant's obligations for such calendar year, then Landlord shall, at Tenant's option, either (a) credit the excess to the next succeeding installments of estimated Additional Rent or (b) pay the excess to Tenant within thirty (30) days after delivery of such results. If the parties agree or the Accountant(s) determine that Tenant's payments of Operating Expenses for such calendar year were less than Tenant's

obligation for the calendar year, then Tenant shall pay the deficiency to Landlord within thirty (30) days after delivery of such results. Tenant shall pay the cost of the Accountant(s), unless the Independent Review or Accountants determine that Operating Expenses paid by Tenant for the calendar year in question exceeded Tenant's obligations by ten percent (10%) or more, in which case, Landlord shall pay all costs of Tenant's audit and review.

9.5. Tenant shall not be responsible for Operating Expenses with respect to any time period prior to the Term Commencement Date, provided, however, that if Tenant, with Landlord's permission, takes possession of and commences business operations in the Premises prior to the Term Commencement Date, Tenant shall be responsible for Operating Expenses from such earlier date of possession (the Term Commencement Date or such earlier date, as applicable, the "Expense Trigger Date"); and provided, further, that Landlord may annualize certain Operating Expenses incurred prior to the Expense Trigger Date over the course of the budgeted year during which the Expense Trigger Date occurs, and Tenant shall be responsible for the annualized portion of such Operating Expenses corresponding to the number of days during such year, commencing with the Expense Trigger Date, for which Tenant is otherwise liable for Operating Expenses pursuant to this Lease. Tenant's responsibility for Tenant's Adjusted Share of Operating Expenses shall continue to the latest of (a) the date of termination of the Lease, and (b) the date Tenant has fully vacated the Premises, subject to any remedies Landlord may have in the event of a Tenant Default.

9.6. Operating Expenses for the calendar year in which Tenant's obligation to share therein commences and for the calendar year in which such obligation ceases shall be prorated on a basis reasonably determined by Landlord. Expenses such as taxes, assessments and insurance premiums that are incurred for an extended time period shall be prorated based upon the time periods to which they apply so that the amounts attributed to the Premises relate in a reasonable manner to the time period wherein Tenant has an obligation to share in Operating Expenses.

9.7. Within thirty (30) days after the end of each calendar month, Tenant shall, except with respect to the Tenant Improvements, submit to Landlord an invoice, or, in the event an invoice is not available, an itemized list, of all costs and expenses that (a) Tenant has incurred (either internally or by employing third parties) during the prior month and (b) for which Tenant reasonably believes it is entitled to reimbursements from Landlord pursuant to the terms of this Lease.

9.8. In the event that the Building or Project is less than fully occupied during a calendar year, Landlord may extrapolate Operating Expenses that vary depending on the occupancy of the Building or Project, as applicable, to equal Landlord's reasonable estimate of what such Operating Expenses would have been had the Building or Project, as applicable, been ninety-five percent (95%) occupied during such calendar year; <u>provided</u>, however, that Landlord shall not recover more than one hundred percent (100%) of Operating Expenses.

10. Taxes on Tenant's Property.

10.1. Tenant shall be solely responsible for the payment of any and all taxes levied upon (a) personal property and trade fixtures located at the Premises and (b) any gross or net receipts of or sales by Tenant, and shall pay the same at least twenty (20) days prior to delinquency.

10.2. If any such taxes on Tenant's personal property or trade fixtures are levied against Landlord or Landlord's property or, if the assessed valuation of the Building, the Property or the Project is increased by inclusion therein of a value attributable to Tenant's personal property or trade fixtures, and if Landlord, after written notice to Tenant, pays the taxes based upon any such increase in the assessed value of the Building, the Property or the Project, then Tenant shall, upon demand, repay to Landlord the taxes so paid by Landlord.

11. Security Deposit.

11.1. Tenant shall deposit with Landlord on or before the Execution Date the sum set forth in <u>Section 2.6</u> (the "<u>Security Deposit</u>"), which sum shall be held by Landlord as security for the faithful performance by Tenant of all of the terms, covenants and conditions of this Lease to be kept and performed by Tenant during the period commencing on the Execution Date and ending upon the expiration or termination of Tenant's obligations under this Lease. If Tenant Defaults (as defined below) with respect to any provision of this Lease, including any provision relating to the payment of Rent, then Landlord may (but shall not be required to) use, apply or retain all or any part of the Security Deposit for the payment of any Rent or any other sum in default, or to compensate Landlord for any other loss or damage that Landlord may suffer by reason of Tenant's default. If any portion of the Security Deposit is so used or applied, then Tenant shall, within ten (10) days following demand therefor, deposit cash with Landlord in an amount sufficient to restore the Security Deposit to its original amount, and Tenant's failure to do so shall be a material breach of this Lease. The provisions of this Article shall survive the expiration or earlier termination of this Lease.

11.2. In the event of bankruptcy or other debtor-creditor proceedings against Tenant, the Security Deposit shall be deemed to be applied first to the payment of Rent and other charges due Landlord for all periods prior to the filing of such proceedings.

11.3. Landlord may deliver to any purchaser of Landlord's interest in the Premises the funds deposited hereunder by Tenant, and thereupon Landlord shall be discharged from any further liability with respect to such deposit. This provision shall also apply to any subsequent transfers.

11.4. If Tenant is not in default at the end of thirty (30) days after the expiration or earlier termination of this Lease (of which Tenant has received written notice and an opportunity to cure), then the Security Deposit, or any balance thereof, shall be returned to Tenant (or, at Landlord's option, to the last assignee of Tenant's interest hereunder) within forty-five (45) days after the expiration or earlier termination of this Lease.

11.5. If the Security Deposit shall be in cash, Landlord shall hold the Security Deposit in an account at a banking organization selected by Landlord; <u>provided</u>, however, that Landlord shall not be required to maintain a separate account for the Security Deposit, but may intermingle it with other funds of Landlord. Landlord shall be entitled to all interest and/or dividends, if any, accruing on the Security Deposit. Landlord shall not be required to credit Tenant with any interest for any period during which Landlord does not receive interest on the Security Deposit.

11.6. The Security Deposit may be in the form of cash, a letter of credit or any other security instrument acceptable to Landlord in its sole reasonable discretion. Tenant may at any time, except when Tenant is in Default (as defined below), deliver a letter of credit (the "L/C Security") as the entire Security Deposit, as follows:

(a) If Tenant elects to deliver L/C Security, then Tenant shall provide Landlord, and maintain in full force and effect throughout the Term and until the date that is sixty (60) days after the then-current Term Expiration Date, a letter of credit in the form of Exhibit E issued by an issuer reasonably satisfactory to Landlord, in the amount of the Security Deposit, with an initial term of at least one year. Landlord may require the L/C Security to be reissued by a different issuer at any time during the Term if Landlord reasonably believes that the issuing bank of the L/C Security is or may soon become insolvent; provided, however, Landlord shall return the existing L/C Security to the existing issuer immediately upon receipt of the substitute L/C Security. If any issuer of the L/C Security shall become insolvent or placed into FDIC receivership, then Tenant shall immediately deliver to Landlord (without the requirement of notice from Landlord) substitute L/C Security issued by an issuer reasonably satisfactory to Landlord, and otherwise conforming to the requirements set forth in this Article. As used herein with respect to the issuer of the L/C Security, "insolvent" shall mean the determination of insolvency as made by such issuer's primary bank regulator (*i.e.*, the state bank supervisor for state chartered banks; the OCC or OTS, respectively, for federally chartered banks or thrifts; or the Federal Reserve for its member banks). If, at the Term Expiration Date, any Rent remains uncalculated or unpaid, then (i) Landlord shall with reasonable diligence complete any necessary calculations, (ii) Tenant shall extend the expiry date of such L/C Security from time to time as Landlord reasonably requires and (iii) in such extended period, Landlord shall not unreasonably refuse to consent to an appropriate reduction of the L/C Security. Tenant shall reimburse Landlord's legal costs (as estimated by Landlord's counsel) in handling Landlord's acceptance of L/C Security or its replacement or extension.

(b) If Tenant delivers to Landlord satisfactory L/C Security in place of the entire Security Deposit, Landlord shall remit to Tenant any cash Security Deposit Landlord previously held.

(c) Landlord may draw upon the L/C Security, and hold and apply the proceeds in the same manner and for the same purposes as the Security Deposit, if (i) an uncured Default (as defined below) exists, (ii) as of the date thirty (30) days before any L/C Security expires (even if such scheduled expiry date is after the Term Expiration Date) Tenant has not delivered to Landlord an amendment or replacement for such L/C Security, reasonably satisfactory to Landlord, extending the expiry date to the earlier of (1) sixty (60) days after the

then-current Term Expiration Date or (2) the date one year after the then-current expiry date of the L/C Security, (iii) the L/C Security provides for automatic renewals, Landlord asks the issuer to confirm the current L/C Security expiry date, and the issuer fails to do so within ten (10) business days, (iv) Tenant fails to pay (when and as Landlord reasonably requires) any bank charges for Landlord's transfer of the L/C Security or (v) the issuer of the L/C Security ceases, or announces that it will cease, to maintain an office in the city where Landlord may present drafts under the L/C Security (and fails to permit drawing upon the L/C Security by overnight courier or facsimile). This Section does not limit any other provisions of this Lease allowing Landlord to draw the L/C Security under specified circumstances.

(d) Tenant shall not seek to enjoin, prevent, or otherwise interfere with Landlord's draw under L/C Security, even if it violates this Lease. Tenant acknowledges that the only effect of a wrongful draw would be to substitute a cash Security Deposit for L/C Security, causing Tenant no legally recognizable damage. Landlord shall hold the proceeds of any draw in the same manner and for the same purposes as a cash Security Deposit. In the event of a wrongful draw, (a) the parties shall cooperate to allow Tenant to post replacement L/C Security simultaneously with the return to Tenant of the wrongfully drawn sums, (b) Landlord shall upon request confirm in writing to the issuer of the L/C Security that Landlord's draw was erroneous, and (c) if Tenant receives a final determination from a court of competent jurisdiction that is not subject to appeal that Landlord has made a "wrongful" draw, (i) Landlord shall pay Tenant interest upon the amount of such wrongful draw at the rate of six percent (6%) and (ii) Tenant shall be entitled to recover its reasonable attorney's fees in accordance with <u>Section 40.7</u>. For purposes of the immediately foregoing sentence, the term "wrongful" shall mean that Landlord had no reasonable basis to believe that it had the right to make the draw.

(e) If Landlord transfers its interest in the Premises, then Tenant shall at Tenant's expense, within five (5) business days after receiving a request from Landlord, deliver (and, if the issuer requires, Landlord shall consent to) an amendment to the L/C Security naming Landlord's grantee as substitute beneficiary. If the required Security Deposit changes while L/C Security is in force, then Tenant shall deliver (and, if the issuer requires, Landlord shall consent to) a corresponding amendment to the L/C Security.

11.7. If Tenant, as of the first (1st) anniversary of the Term Commencement Date, (a) has a net worth that is equal to or greater than the net worth of Tenant as of the Execution Date, which net worth shall be considered the total assets of Tenant, excluding intangibles, less total liabilities (the "<u>L/C Security Reduction</u> <u>Obligations</u>"), and (b) has not been in Default under this Lease prior to such first (1st) anniversary of the Term Commencement Date, then Tenant, no later than forty-five (45) days after the first (1st) anniversary of the Term Commencement Date, may notify Landlord in writing, which notification shall include a certificate (in form and substance reasonably acceptable to Landlord) from Tenant's Chief Financial Officer certifying that Tenant has satisfied the L/C Security Reduction Obligations. Tenant's notification shall also include Tenant's most recent unconsolidated financial statements audited by a nationally recognized accounting firm and most recent unaudited unconsolidated financial statements certified by Tenant's Chief Financial Officer. If, within ten (10) business days following Landlord's receipt

of such notice, Landlord reasonably determines that Tenant has met the L/C Security Reduction Obligations, then Landlord shall notify Tenant in writing and the Security Deposit may be reduced to One Million Four Hundred Sixty-Six Thousand Six Hundred and Sixty-Seven Dollars (\$1,466,667). If Landlord is then holding a cash Security Deposit, then it shall return to Tenant the amount of Seven Hundred Thirty-Three Thousand Three Hundred Thirty-Three Dollars (\$733,333) within thirty (30) days of its approval of such certification. If the Security Deposit is in the form of the L/C Security, the Tenant may provide to Landlord a replacement L/C Security in the amount of One Million Four Hundred Sixty-Six Thousand Six Hundred and Sixty-Seven Dollars (\$1,466,667). Provided such replacement L/C Security complies with the terms and provisions of this Article 11, Landlord shall, within thirty (30) days after its receipt of such replacement L/C Security, return to Tenant the L/C Security then being held by Landlord.

12. <u>Use</u>.

12.1. Tenant shall use the Premises for the Permitted Use, and shall not use the Premises, or permit or suffer the Premises to be used, for any other purpose without Landlord's prior written consent, which consent Landlord may withhold in its sole and absolute discretion.

12.2. Tenant shall not use or occupy the Premises in violation of Applicable Laws; zoning ordinances; or the certificate of occupancy issued for the Building or the Project, and shall, upon five (5) days' written notice from Landlord, discontinue any use of the Premises that is declared or claimed by any Governmental Authority having jurisdiction to be a violation of any of the above, or that in Landlord's reasonable opinion violates any of the above. Tenant shall comply with any direction of any Governmental Authority having jurisdiction that shall, by reason of the nature of Tenant's use or occupancy of the Premises, impose any duty upon Tenant or Landlord with respect to the Premises or with respect to the use or occupation thereof, and shall indemnify, compensate, save, defend (at Landlord's option and with counsel reasonably acceptable to Landlord) and hold Landlord and its affiliates, employees, agents and contractors; and any lender, mortgagee, ground lessor or beneficiary (each, a "Lender" and, collectively with Landlord and its affiliates, employees, agents and contractors, the "Landlord Indemnitees") harmless from and against any and all demands, claims, liabilities, losses, costs, expenses, actions, causes of action, damages, suits or judgments, and all reasonable expenses (including reasonable attorneys' fees, charges and disbursements, regardless of whether the applicable demand, claim, action, cause of action or suit is voluntarily withdrawn or dismissed) incurred in investigating or resisting the same (collectively, "Claims") of any kind or nature that arise before, during or after the Term as a result of Tenant's breach of this Section. Nothwithstanding anything to the contrary set forth in this Lease, Tenant shall not be responsible for compliance with Applicable Laws with respect to any work performed in the Premises or Building by or at the direction of anyone other than a Tenant Party.

12.3. Tenant shall not do or permit to be done anything that will invalidate or increase the cost of any fire, environmental, extended coverage or any other insurance policy covering the Building or the Project, and shall comply with all rules, orders, regulations and requirements of the insurers of the Building and the Project, and Tenant shall promptly, upon demand, reimburse Landlord for any additional premium charged for such policy by reason of Tenant's failure to comply with the provisions of this Article.

12.4. Tenant shall keep all doors opening onto public corridors closed, except when in use for ingress and egress.

12.5. No additional locks or bolts of any kind shall be placed upon any of the doors or windows by Tenant, nor shall any changes be made to existing locks or the mechanisms thereof without Landlord's prior written consent, which shall not be unreasonably withheld. Tenant shall, upon termination of this Lease, return to Landlord all keys to offices and restrooms either furnished to or otherwise procured by Tenant. In the event any key so furnished to Tenant is lost, Tenant shall pay to Landlord the cost of replacing the same or of changing the lock or locks opened by such lost key if Landlord shall deem it necessary to make such change.

12.6. No awnings or other projections shall be attached to any outside wall of the Building. No curtains, blinds, shades or screens shall be attached to or hung in, or used in connection with, any window or door of the Premises other than Landlord's standard window coverings. Neither the interior nor exterior of any windows shall be coated or otherwise sunscreened without Landlord's prior written consent, nor shall any bottles, parcels or other articles be placed on the windowsills or items attached to windows that are visible from outside the Premises. No equipment, furniture or other items of personal property shall be placed on any exterior balcony without Landlord's prior written consent.

12.7. Tenant shall be entitled to install and maintain, at its sole cost and expense, (a) one (1) exterior Building sign in the location shown on Exhibit L or such other location as mutually agreed upon by the parties, identifying Tenant, provided that (x) the Premises is equal to or greater than sixty percent (60%) of the Building, and (y) Tenant occupies equal to or greater than seventy-five percent (75%) of the Premises; and (b) an exterior sign located at the 130 Waverly Street entrance for the sole purpose of identifying Tenant's Premises (collectively, the "Permitted Signage"). The Permitted Signage shall be subject to Landlord's approval, which approval shall not be unreasonably withheld, conditioned or delayed. No additional sign, advertisement or notice (collectively, with the Permitted Signage, "Signage") shall be exhibited, painted or affixed by Tenant on any part of the Premises or the Building without Landlord's prior written consent. Signage shall conform to Landlord's design criteria. For any Signage, Tenant shall, at Tenant's own cost and expense, (a) acquire all permits for such Signage in compliance with Applicable Laws and (b) design, fabricate, install and maintain such Signage in a first-class condition. Tenant shall be responsible for reimbursing Landlord for actual costs incurred by Landlord in removing any of Tenant's Signage upon the expiration or earlier termination of the Lease. Interior signs on entry doors to the Premises shall be inscribed, painted or affixed by Tenant at Tenant's sole cost and expense, and shall be of a size, color and type and be located in a place reasonably acceptable to Landlord. The directory tablet shall be provided exclusively for the display of the name and location of tenants only. Tenant shall not place anything on the exterior of the corridor walls or corridor doors other than Landlord's standard

lettering. At Landlord's option, Landlord may install any Tenant Signage, and Tenant shall pay all costs associated with such installation within thirty (30) days after demand therefor. Notwithstanding anything set forth herein to the contrary, all rights of Tenant with respect to Signage on the exterior of the Building shall be personal to Tenant and may not be assigned with this Lease or otherwise.

12.8. Tenant may only place equipment within the Premises with floor loading consistent with the Building's structural design unless Tenant obtains Landlord's prior written approval. Tenant may place such equipment only in a location designed to carry the weight of such equipment.

12.9. Tenant shall cause any equipment or machinery to be installed in the Premises so as to reasonably prevent sounds or vibrations therefrom from extending into the Common Area or other offices in the Project.

12.10. Tenant shall not (a) do or permit anything to be done in or about the Premises that shall in any way obstruct or interfere with the rights of other tenants or occupants of the Project, or injure them, (b) use or allow the Premises to be used for, unlawful purposes, (c) cause, maintain or permit any nuisance or waste in, on or about the Project or (d) take any other action that would in Landlord's reasonable determination in any manner adversely affect other tenants' quiet use and enjoyment of their space or adversely impact their reasonable ability to conduct business in a professional and suitable work environment. Notwithstanding anything in this Lease to the contrary, Tenant may not install any security systems (including cameras) outside the Premises or that record sounds or images outside the Premises without Landlord's prior written consent, which Landlord may withhold in its sole discretion.

12.11. Notwithstanding any other provision herein to the contrary, Tenant shall be responsible for all liabilities, costs and expenses arising out of or in connection with the compliance of the Premises with the Americans with Disabilities Act, 42 U.S.C. § 12101, et seq., and any state and local accessibility laws, codes, ordinances and rules (collectively, and together with regulations promulgated pursuant thereto, the "<u>ADA</u>") from and after the Term Commencement Date, and Tenant shall indemnify, compensate, save, defend (at Landlord's option and with counsel reasonably acceptable to Landlord) and hold the Landlord Indemnitees harmless from and against Claims arising out of any such failure of the Premises to comply with the ADA from and after the Term Commencement Date. This Section (as well as any other provisions of this Lease dealing with indemnification of the Landlord Indemnitees by Tenant) shall be deemed to be modified in each case by the insertion in the appropriate place of the following: "except as otherwise provided in Mass. G.L. Ter. Ed., C. 186, Section 15." Landlord represents and warrants that the Premises and the Common Areas shall be in compliance with the ADA as of the Term Commencement Date. The provisions of this Section shall survive the expiration or earlier termination of this Lease.

12.12. Tenant shall maintain temperature and humidity in the Premises in accordance with ASHRAE standards at all times (subject to Landlord's compliance with its obligation with respect to base Building HVAC systems under <u>Sections 16.9</u> and <u>18.1</u> of this Lease).

12.13. Tenant shall establish and maintain a chemical safety program administered by a licensed, qualified individual in accordance with the requirements of the Massachusetts Water Resources Authority ("<u>MWRA</u>") and any other applicable Governmental Authority. Tenant shall be solely responsible for all costs incurred in connection with such chemical safety program, and Tenant shall provide Landlord with such documentation as Landlord may reasonably require evidencing Tenant's compliance with the requirements of (a) the MWRA and any other applicable Governmental Authority with respect to such chemical safety program and (b) this Section. Notwithstanding the foregoing, Landlord shall obtain and maintain during the Term (m) any permit required by the MWRA ("<u>MWRA Permit</u>") and (n) a wastewater treatment operator license from the Commonwealth of Massachusetts with respect to Tenant's use of the Acid Neutralization Tank (as defined below) in the Building. Tenant shall not introduce anything into the Acid Neutralization Tank (x) in violation of the terms of the MWRA Permit, (y) in violation of Applicable Laws or (z) that would interfere with the proper functioning of the Acid Neutralization Tank. Tenant agrees to reasonably cooperate with Landlord in order to obtain the MWRA Permit and the wastewater treatment operator license. Tenant shall reimburse Landlord within ten (10) business days after demand for any costs incurred by Landlord pursuant to this Section.

13. Rules and Regulations, CC&Rs, Parking Facilities and Common Area.

13.1. Tenant shall have the non-exclusive right, in common with others, to use the Common Area in conjunction with Tenant's use of the Premises for the Permitted Use, and such use of the Common Area and Tenant's use of the Premises shall be subject to the rules and regulations adopted by Landlord and attached hereto as <u>Exhibit G</u>, together with such other reasonable and nondiscriminatory rules and regulations as are hereafter promulgated by Landlord in its sole and absolute discretion (the "<u>Rules and Regulations</u>"). Tenant shall and shall ensure that its contractors, subcontractors, employees, subtenants and invitees faithfully observe and comply with the Rules and Regulations. Landlord shall not be responsible to Tenant for the violation or non-performance by any other tenant or any agent, employee or invitee thereof of any of the Rules and Regulations.

13.2. This Lease is subject to any recorded covenants, conditions or restrictions on the Project or Property, including the Parking and Transportation Demand Management Plan for the Project that was approved on April 28, 1999, and that is attached hereto as <u>Exhibit H</u> with all applicable transfers thereof (the "<u>PTDM</u>"), as the same may be amended, amended and restated, supplemented or otherwise modified from time to time (the "<u>CC&Rs</u>"). Tenant shall comply with the CC&Rs. Tenant acknowledges that Tenant, at its sole cost and expense, shall comply with the tenant requirements in the PTDM, including the requirements set forth in the "Alternative Work Programs," "Alternative Mode Promotions and Incentives," "MBTA Corporate Pass Program and Subsidized Transit Passes," "Ridesharing Vehicles" and "Bicycle and Pedestrian Programs" sections thereof. Tenant, at its sole cost and expense, shall also comply with the reporting requirements set forth in the PTDM at Landlord's request. Any costs incurred by Landlord in connection with the PTDM shall constitute an Operating Expense.

13.3. The Charles River Transportation Management Association (of which Landlord or an affiliate of Landlord is currently a member) provides certain programs to help improve transportation in the Cambridge area. Their website is www.charlesrivertma.org.

13.4. Tenant shall have a non-exclusive, irrevocable license to use Tenant's Pro Rata Share of Building of parking spaces allocated to the Building ("Pro Rata Parking Share"). Tenant's Pro Rata Parking Share as of the date hereof consists of a total of sixty-five (65) parking spaces, of which five (5) parking spaces shall be reserved parking spaces on the Property in a designated location determined by Landlord, and the remainder of which parking spaces shall in the Parking Garage in common on an unreserved basis with other tenants of the Project and Neighboring Properties during the Term. The cost of each parking space shall be Two Hundred Fifty Dollars (\$250.00) per month (subject to market rate adjustments by Landlord from time to time throughout the Term), which Tenant shall pay starting on the Term Commencement Date, and following the Rent Commencement Date, simultaneously with payments of Base Rent as Additional Rent. Landlord shall install, at Tenant's sole cost and expense, reasonable signage indicating the reserved nature of the five (5) parking spaces on the Property. Tenant, at any time and from time to time during the Term, may elect to waive its right to use some or all or Tenant's Pro Rata Parking Share upon written notice to Landlord. If Tenant so elects, then it shall forfeit for the then-remainder of the Term (including any extension thereof) any and all rights to such waived parking spaces, whether located on the Property or in the Parking Garage; provided, however, that Tenant may later request from Landlord additional parking spaces up to Tenant's Pro Rata Parking Share, and subject to the availability of such additional parking spaces, as determined by Landlord in its sole and absolute discretion, then the number of parking spaces licensed to Tenant under this <u>Section 13.4</u> shall be increased by the number of parking spaces so requested. Landlord, from time to time during the Term of this Lease, may require that Tenant confirm the number of parking spaces licensed to Tenant shall execute a

13.5. Tenant agrees not to unreasonably overburden the parking facilities in violation of any rules and regulations reasonably promulgated by Landlord and agrees to cooperate with Landlord and other tenants in the use of the parking facilities. Landlord reserves the right to determine that parking facilities are becoming overcrowded and to limit Tenant's thereof. Upon such determination, Landlord may reasonably allocate parking spaces among Tenant and other tenants of the Building or the Project, provided that Tenant shall be entitled to the number of spaces set forth in <u>Section 13.4</u> above. Nothing in this Section, however, is intended to create an affirmative duty on Landlord's part to monitor parking.

13.6. Subject to the terms of this Lease including the Rules and Regulations and the rights of other tenants of the Building, Tenant shall have the right on an unreserved basis to access the freight loading dock (containing two (2) loading bays) designated for Tenant twenty-four (24) hours per day, seven (7) days per week, at no additional cost. Nothing in this Section is intended to create an affirmative duty on Landlord's part to monitor usage of the loading dock. As part of the Tenant Improvements, Tenant shall install a dumpster at the loading dock for Tenant's use for the disposal of non-Hazardous Materials. Tenant shall be solely responsible for the disposal of any Hazardous Materials used by Tenant in accordance with Applicable Laws.

13.7. The land upon which the Parking Garage is situated is subject to that certain Activity and Use Limitation dated February 23, 2001, which was recorded on February 27, 2001 as Instrument No. 785 in Book 32422, Page 393 in the Middlesex South District Registry of Deeds, Commonwealth of Massachusetts and filed as Document No. 1163744 in the Middlesex South District Registry of the Land Court.

14. Project Control by Landlord.

14.1. Landlord reserves full control over the Building and the Project to the extent not inconsistent with Tenant's enjoyment of the Premises as provided by and consistent with the other terms in this Lease. This reservation includes Landlord's right to subdivide the Project; convert the Building to condominium units; change the size of the Project by selling all or a portion of the Project or adding real property and any improvements thereon to the Project; grant easements and licenses to third parties; maintain or establish ownership of the Building separate from fee title to the Property; make additions to or reconstruct portions of the Building and the Project; install, use, maintain, repair, replace and relocate for service to the Premises and other parts of the Building or the Project pipes, ducts, conduits, wires and appurtenant fixtures, wherever located in the Premises, the Building or elsewhere at the Project; and alter or relocate any other Common Area or facility, including private drives, lobbies, entrances and landscaping; provided, however, that such rights shall be exercised in a way that does not materially adversely affect Tenant's beneficial use and occupancy of the Premises, including the Permitted Use and Tenant's access to the Premises.

14.2. Possession of areas of the Premises necessary for utilities, services, safety and operation of the Building is reserved to Landlord; <u>provided</u>, however, that such possession shall not materially adversely affect Tenant's beneficial use and occupancy of the Premises, including the Permitted Use and Tenant's access to the Premises.

14.3. Tenant shall, at Landlord's request, promptly execute such further documents as may be reasonably appropriate to assist Landlord in the performance of its obligations hereunder; <u>provided</u> that Tenant need not execute any document that creates additional liability for Tenant or that deprives Tenant of the quiet enjoyment and use of the Premises as provided for in this Lease.

14.4. Landlord may, at any and all reasonable times during non-business hours (or during business hours, if (a) with respect to <u>Subsections 14.4(u)</u> through <u>14.4(y)</u>, Tenant so requests, and (b) with respect to <u>Subsection 14.4(z)</u>, if Landlord so requests), and upon twenty-four (24) hours' prior notice (which may be oral or by email to the office manager or other Tenant-designated individual at the Premises; but <u>provided</u> that no time restrictions shall apply or advance notice be required if an emergency necessitates immediate entry), enter the Premises to (u) inspect the same and to determine whether Tenant is in compliance with its obligations hereunder, (v) supply any service Landlord is required to provide hereunder, (w) alter, improve or repair any portion of the Building other than the Premises for which access to the Premises is

reasonably necessary, (x) post notices of nonresponsibility, (y) access the telephone equipment, electrical substation and fire risers and (z) show the Premises to prospective tenants during the final year of the Term and current and prospective purchasers and lenders at any time. Notwithstanding the foregoing, Tenant shall have the right to have a representative of Tenant accompany Landlord at such times; provided, however, if Tenant's representative is not available or does not elect to accompany Landlord at the times that Landlord has requested access, then such unavailability shall not prohibit or otherwise restrict Landlord's access, and Landlord may access the Premises with or without Tenant's representative present. In connection with any such alteration, improvement or repair as described in <u>Subsection 14.4(w)</u>, Landlord may erect in the Premises or elsewhere in the Project scaffolding and other structures reasonably required for the alteration, improvement or repair work to be performed. In no event shall Tenant's Rent abate as a result of Landlord's activities pursuant to this Section; <u>provided</u>, however, that all such activities shall be conducted in such a manner so as to cause as little interference to Tenant as is reasonably possible. Landlord shall at all times retain a key with which to unlock all of the doors in the Premises. If an emergency necessitates immediate access to the Premises, Landlord may use whatever force is necessary to enter the Premises, and any such entry to the Premises shall not constitute a forcible or unlawful entry to the Premises, a detainer of the Premises, or an eviction of Tenant from the Premises or any portion thereof.

15. <u>Quiet Enjoyment</u>. Landlord covenants that Tenant, upon paying the Rent and performing its obligations contained in this Lease, may 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 Applicable Laws and rights of record to which this Lease is or may become subordinate. This covenant is in lieu of any other quiet enjoyment covenant, either express or implied.

16. Utilities and Services.

16.1. Tenant shall pay for all water (including the cost to service, repair and replace reverse osmosis, de-ionized and other treated water), gas, heat, light, power, telephone, internet service, cable television, other telecommunications and other utilities supplied to the Premises, together with any fees, surcharges and taxes thereon. Power shall be separately sub-metered to Tenant. If any other utility is not separately metered or sub-metered to Tenant, Tenant shall pay Tenant's Pro Rata Share, or if applicable, Tenant's Adjusted Share of all charges of such utility jointly metered with other premises as Additional Rent. Landlord may base its bills for utilities on reasonable estimates; provided that Landlord adjusts such billings promptly thereafter or as part of the next Landlord's Statement to reflect the actual cost of providing utilities to the Premises. To the extent that Tenant uses more than Tenant's Pro Rata Share of any utilities, then Tenant shall pay Landlord for Tenant's Adjusted Share of such utility usage that varies depending on the occupancy of the Building or Project (as applicable) to equal Landlord's reasonable estimate of what such utility usage would have been had the Building or Project, as applicable, been ninety-five percent (95%) occupied during such calendar year; provided, however, that Landlord shall not recover more than one hundred percent (100%) of the cost of such utilities. Tenant shall not

be liable for the cost of utilities supplied to the Premises attributable to the time period prior to the Term Commencement Date; <u>provided</u>, however, that, if Landlord shall permit Tenant possession of the Premises prior to the Term Commencement Date and Tenant commences business operations in the Premises, then Tenant shall be responsible for the cost of utilities supplied to the Premises from such earlier date.

16.2. Landlord shall not be liable for, nor shall any eviction of Tenant result from, the failure to furnish any utility or service, whether or not such failure is caused by accidents; breakage; casualties (to the extent not caused by the party claiming Force Majeure); Severe Weather Conditions (as defined below); physical natural disasters (but excluding weather conditions that are not Severe Weather Conditions); strikes, lockouts or other labor disturbances or labor disputes (other than labor disturbances and labor disputes resulting solely from the acts or omissions of the party claiming Force Majeure); acts of terrorism; riots or civil disturbances; wars or insurrections; shortages of materials (which shortages are not unique to the party claiming Force Majeure); government regulations, moratoria or other governmental actions, inactions or delays; failures by third parties to deliver gas, oil or another suitable fuel supply, or inability of the party claiming Force Majeure, by exercise of reasonable diligence, to obtain gas, oil or another suitable fuel; or other causes beyond the reasonable control of the party claiming that Force Majeure has occurred (collectively, "Force Majeure"); or, to the extent permitted by Applicable Laws, Landlord's negligence. In the event of such failure, Tenant shall not be entitled to termination of this Lease or, except as set forth in this Section, any abatement or reduction of Rent, nor shall Tenant be relieved from the operation of any covenant or agreement of this Lease. "Severe Weather Conditions" means weather conditions that are materially worse than those that reasonably would be anticipated for the Property at the applicable time based on historic meteorological records. Notwithstanding anything to the contrary in this Lease, if, for more than five (5) consecutive business days following written notice to Landlord and as a direct result of Landlord's gross negligence or willful misconduct (and except to the extent that such failure is caused by any other factor, including any action or inaction of a Tenant Party (as defined below)), the provision of HVAC or other utilities to all or a material portion of the Premises that Landlord must provide pursuant to this Lease is interrupted (a "Material Services Failure"), then Tenant's Base Rent and Operating Expenses (or, to the extent that less than all of the Premises are affected, a proportionate amount (based on the Rentable Area of the Premises that is rendered unusable) of Base Rent and Operating Expenses) shall thereafter be abated until the Premises are again usable by Tenant for the Permitted Use; provided, however, that, if Landlord is diligently pursuing the restoration of such HVAC and other utilities and Landlord provides substitute HVAC and other utilities reasonably suitable for Tenant's continued use and occupancy of the Premises for the Permitted Use (e.g., supplying potable water or portable air conditioning equipment), then neither Base Rent nor Operating Expenses shall be abated. During any Material Services Failure, Tenant will cooperate with Landlord to arrange for the provision of any interrupted utility services on an interim basis via temporary measures until final corrective measures can be accomplished, and Tenant will permit Landlord the necessary access to the Premises to remedy such Material Service Failure. In the event of any interruption of HVAC or other utilities that Landlord must provide pursuant to this Lease, regardless of the cause, Landlord shall diligently pursue the restoration of such HVAC and other utilities.

Notwithstanding anything in this Lease to the contrary, but subject to <u>Article 24</u> (which shall govern in the event of a casualty), the provisions of this Section shall be Tenant's sole recourse and remedy in the event of an interruption of HVAC or other utilities to the Premises, including related to <u>Section 16.8</u>.

16.3. Tenant shall pay for, prior to delinquency of payment therefor, any utilities and services that may be furnished to the Premises during or, if Tenant occupies the Premises after the expiration or earlier termination of the Term, after the Term, beyond those utilities provided by Landlord, including telephone, internet service, cable television and other telecommunications, together with any fees, surcharges and taxes thereon. Upon Landlord's demand, utilities and services provided to the Premises that are separately metered shall be paid by Tenant directly to the supplier of such utilities or services.

16.4. Tenant shall not, without Landlord's prior written consent, use any device in the Premises (including data processing machines) that will in any way (a) increase the amount of ventilation, air exchange, gas, steam, electricity or water required or consumed in the Premises based upon Tenant's Pro Rata Share of the Building or Project (as applicable) beyond the existing capacity of the Building or the Project usually furnished or supplied for the Permitted Use or (b) exceed Tenant's Pro Rata Share of the Building's or Project's (as applicable) capacity to provide such utilities or services.

16.5. If Tenant shall require utilities or services in excess of those usually furnished or supplied for tenants in similar spaces in the Building or the Project by reason of Tenant's equipment or extended hours of business operations, then Tenant shall first procure Landlord's consent for the use thereof, which consent Landlord may condition upon the availability of such excess utilities or services, and Tenant shall pay as Additional Rent an amount equal to the cost of providing such excess utilities and services.

16.6. Landlord shall provide water in Common Area for lavatory and landscaping purposes only, which water shall be from the local municipal or similar source.

16.7. Landlord reserves the right to stop service of the elevator, plumbing, ventilation, air conditioning and utility systems, when Landlord deems necessary or desirable, due to accident, emergency or the need to make repairs, alterations or improvements, until such repairs, alterations or improvements shall have been completed, and subject to the terms of Section 16.2, Landlord shall further have no responsibility or liability for failure to supply elevator facilities, plumbing, ventilation, air conditioning or utility service when prevented from doing so by Force Majeure or, to the extent permitted by Applicable Laws, Landlord's negligence. Without limiting the foregoing, it is expressly understood and agreed that any covenants on Landlord's part to furnish any service pursuant to any of the terms, covenants, conditions, provisions or agreements of this Lease, or to perform any act or thing for the benefit of Tenant, shall not be deemed breached if Landlord is unable to furnish or perform the same by virtue of Force Majeure or, to the extent permitted by Applicable Laws, Landlord's negligence.

16.8. Landlord will install a back-up generator at the Building (the "<u>Generator</u>"). Tenant shall have the right to install an automatic transfer switch connecting the Generator to the Premises as part of the Tenant Improvements. Tenant shall be entitled to use up to Tenant's Pro Rata Share of the Building (after deducting any power from the Generator required for the Common Area and base Building systems) of power from the Generator on a non-exclusive basis with other tenants in the Building. The cost of maintaining, repairing and replacing the Generator shall constitute Operating Expenses. Landlord expressly disclaims any warranties with regard to the Generator or the installation thereof, including any warranty of merchantability or fitness for a particular purpose. Landlord shall maintain the Generator (and any equipment connecting the Generator to Tenant's automatic transfer switch) in good working condition as set forth above, provided, however, that Tenant shall be solely responsible, at Tenant's sole cost and expense, (and Landlord shall not be liable) for maintaining and operating Tenant's automatic transfer switch throughout the Premises, and provided further that Landlord shall not be liable for any failure to make any repairs or to perform any maintenance of the Building Generator that is an obligation of Landlord unless Tenant provides Landlord with written notice of the need for such repairs or maintenance. Upon receipt of such written notice, Landlord shall promptly commence to cure such failure and shall diligently prosecute the same to completion in accordance with <u>Section 31.12</u> of this Lease. The provisions of <u>Section 16.2</u> of this Lease shall apply to the Generator.

16.9. For the Premises, Landlord shall (a) subject to <u>Section 18.1</u>, maintain and operate the HVAC systems used for the Permitted Use only and not for uses other than the Permitted Use and (b) subject to <u>Section 16.2</u> and <u>Subsection 16.9(a)</u>, furnish HVAC as reasonably required (except as this Lease otherwise provides or as to any special requirements that arise from Tenant's particular use of the Premises) for reasonably comfortable occupancy of the Premises twenty-four (24) hours a day, every day during the Term, subject to casualty, eminent domain or as otherwise specified in this Article. To the extent that Tenant requires HVAC services in excess of those provided by connection to the Building HVAC systems, Tenant shall install and maintain, at its sole cost, (and Landlord shall not be liable for) supplemental HVAC systems in accordance with the provisions of this Lease. Tenant shall pay Landlord, as Additional Rent, for the costs of Tenant's airflow consumption at the Premises. Notwithstanding anything to the contrary in this Section, Landlord shall have no liability, and Tenant shall have no right or remedy, on account of any interruption or impairment in HVAC services; provided that Landlord diligently endeavors to cure any such interruption or impairment.

16.10. For any utilities serving the Premises for which Tenant is billed directly by such utility provider, Tenant agrees to furnish to Landlord (a) any invoices or statements, and any other utility usage information reasonably requested by Landlord, for such utilities within thirty (30) days after Landlord's request, and (b) within thirty (30) days after each calendar year during the Term, authorization to allow Landlord to access Tenant's usage information necessary for Landlord to complete an ENERGY STAR® Statement of Performance (or similar comprehensive utility usage report (e.g., related to Labs 21), if requested by Landlord) and any other information reasonably requested by Landlord for the immediately preceding year; and Tenant shall comply with any other energy usage or consumption requirements required by

Applicable Laws. Tenant shall retain records of utility usage at the Premises, including invoices and statements from the utility provider, for at least sixty (60) months, or such other period of time as may be requested by Landlord. Tenant acknowledges that any utility information for the Premises, the Building and the Project may be shared with third parties, including Landlord's consultants and Governmental Authorities. In the event that Tenant fails to comply with this Section, Tenant hereby authorizes Landlord to collect utility usage information directly from the applicable utility providers, and Tenant shall pay Landlord a fee of Five Hundred Dollars (\$500) per month to collect such utility usage information. In addition to the foregoing, Tenant shall comply with all Applicable Laws related to the disclosure and tracking of energy consumption at the Premises. The provisions of this Section shall survive the expiration or earlier termination of this Lease.

16.11. The Building is currently serviced by a common laboratory waste sanitary sewer connection from the pH neutralization room in the basement of the Building to the municipal sewer line in the street adjacent to the Building. There currently exists a separate acid neutralization tank (the "Acid Neutralization Tank") in the basement of the Building that will serve the Building. Tenant shall construct a connection from the Acid Neutralization Tank to the Premises as part of the Tenant Improvements. Tenant shall have a non-exclusive right to use up to Tenant's Pro Rata Share of the Building of the Acid Neutralization Tank in accordance with Applicable Laws in common with other tenants of the Building. Tenant, as a portion of its Operating Expenses, shall reimburse Landlord for all costs, charges and expenses incurred by Landlord from time to time in connection with or arising out of the operation, use, maintenance, repair or refurbishment of the Acid Neutralization Tank, including all clean-up costs relating to the Acid Neutralization Tank (collectively, "Tank Costs"); provided, however, that if the Acid Neutralization Tank is being used by other tenant(s) or occupant(s) of the Building at any time during the Term, then, during such time period, Tenant shall only be obligated to pay its Pro Rata Share of the Building of the Tank Costs. Notwithstanding the foregoing, in the event the Acid Neutralization Tank is damaged or repairs to the Acid Neutralization Tank are required as a result of the improper use of the Acid Neutralization Tank by Tenant, Tenant shall be responsible for one hundred percent (100%) of the cost of any repairs or replacement required as a result of such improper use by Tenant, regardless of whether the Acid Neutralization Tank is then being used by other tenant(s) or occupant(s) of the Building. Similarly, if the Acid Neutralization Tank is damaged, or if repairs to the Acid Neutralization Tank are required as a result of the improper use of the Acid Neutralization Tank by other tenant(s) or occupant(s) of the Building, then Tenant shall have no responsibility for the cost of any repairs or replacements required as a result of such improper use by such other tenant(s) or occupant(s). Tenant shall indemnify, compensate, save, defend (at Landlord's option and with counsel reasonably acceptable to Landlord) and hold the Landlord Indemnitees harmless from and against any and all Claims, including (a) diminution in value of the Project or any portion thereof, (b) damages for the loss or restriction on use of rentable or usable space or of any amenity of the Project, (c) damages arising from any adverse impact on marketing of space in the Project or any portion thereof and (d) sums paid in settlement of Claims that arise during or after the Term as a result of Tenant's improper use of the Acid Neutralization Tank. This indemnification by Tenant includes costs incurred in connection with any investigation of site conditions or any clean-up, remediation, removal or restoration required by any Governmental Authority caused by Tenant's improper use of the Acid Neutralization Tank.

17. Alterations.

17.1. Tenant shall make no alterations, additions or improvements in or to the Premises or engage in any construction, demolition, reconstruction, renovation or other work (whether major or minor) of any kind in, at or serving the Premises ("Alterations") without Landlord's prior written approval, which approval Landlord shall not unreasonably withhold; provided, however, that, in the event any proposed Alteration affects (a) any structural portions of the Building, including exterior walls, the roof, the foundation or slab, foundation or slab systems (including barriers and subslab systems) or the core of the Building, (b) the exterior of the Building or (c) any Building systems, including elevator, plumbing, HVAC, electrical, security, life safety and power, then Landlord may withhold its approval in its sole and absolute discretion. Tenant shall, in making any Alterations, use only those architects, contractors, suppliers and mechanics of which Landlord has given prior written approval, which approval shall be in Landlord's sole and absolute discretion. In seeking Landlord's approval, Tenant shall provide Landlord, at least thirty (30) days in advance of any proposed construction, with plans, specifications, bid proposals, certified stamped engineering drawings and calculations by Tenant's engineer of record or architect of record (including connections to the Building's structural system, modifications to the Building's envelope, non-structural penetrations in slabs or walls, and modifications or tie-ins to life safety systems), work contracts, requests for laydown areas and such other information concerning the nature and cost of the Alterations as Landlord may reasonably request. In no event shall Tenant use or Landlord be required to approve any architects, consultants, contractors, subcontractors or material suppliers that Landlord reasonably believes could cause labor disharmony or may not have sufficient experience, in Landlord's reasonable opinion, to perform work in an occupied Class "A" laboratory research building and in tenant-occupied lab areas. Notwithstanding the foregoing, Tenant may make strictly cosmetic changes to the Premises that do not require any permits or more than three (3) total contractors and subcontractors ("Cosmetic Alterations") without Landlord's consent; provided that (y) the cost of any Cosmetic Alterations does not exceed One Hundred Forty Thousand Dollars (\$140,000) in any one instance or Two Hundred Fifty Thousand Dollars (\$250,000) annually, (z) such Cosmetic Alterations do not (i) require any structural or other substantial modifications to the Premises, (ii) require any changes to or adversely affect the Building systems, (iii) affect the exterior of the Building or (iv) trigger any requirement under Applicable Laws that would require Landlord to make any alteration or improvement to the Premises, the Building or the Project. Tenant shall give Landlord at least ten (10) days' prior written notice of any Cosmetic Alterations.

17.2. Tenant shall not construct or permit to be constructed partitions or other obstructions that might interfere with free access to mechanical installation or service facilities of the Building or with other tenants' components located within the Building, or interfere with the moving of Landlord's equipment to or from the enclosures containing such installations or facilities.

17.3. Tenant shall accomplish any work performed on the Premises or the Building in such a manner as to permit any life safety systems to remain fully operable at all times.

17.4. Any work performed on the Premises, the Building or the Project by Tenant or Tenant's contractors shall be done at such times and in such manner as Landlord may from time to time designate. Tenant covenants and agrees that all work done by Tenant or Tenant's contractors shall be performed in full compliance with Applicable Laws. Within thirty (30) days after completion of any Alterations (other than Cosmetic Alterations), Tenant shall provide Landlord with complete "as built" drawing print sets and electronic CADD files on disc (or files in such other current format in common use as Landlord reasonably approves or requires) showing any changes in the Premises, as well as a commissioning report prepared by a licensed, qualified commissioning agent hired by Tenant and approved by Landlord for all new or affected mechanical, electrical and plumbing systems. Any such "as built" plans shall show the applicable Alterations as an overlay on the Building as-built plans; provided that Landlord provides the Building "as built" plans to Tenant.

17.5. Before commencing any Alterations (other than Cosmetic Alterations), Tenant shall give Landlord at least thirty (30) days' prior written notice of the proposed commencement of such work and shall, if required by Landlord, secure, at Tenant's own cost and expense, a completion and lien indemnity bond satisfactory to Landlord for such work.

17.6. Tenant shall repair any damage to the Premises caused by Tenant's removal of any property from the Premises. During any such restoration period, Tenant shall pay Rent to Landlord as provided herein as if such space were otherwise occupied by Tenant. The provisions of this Section shall survive the expiration or earlier termination of this Lease.

17.7. The Premises plus any Alterations, Signage, Tenant Improvements, attached equipment, decorations, fixtures, movable laboratory casework and related appliances, trade fixtures, and other additions and improvements attached to or built into the Premises made by either of the parties (including all floor and wall coverings; paneling; sinks and related plumbing fixtures; laboratory benches; exterior venting fume hoods; walk-in freezers and refrigerators; ductwork; conduits; electrical panels and circuits; business and trade fixtures; attached machinery and equipment; and built-in furniture and cabinets, in each case, together with all additions and accessories thereto), shall (unless, prior to such construction or installation, Landlord elects otherwise in writing) at all times remain the property of Landlord, shall remain in the Premises and shall (unless, prior to construction or installation thereof, Landlord elects otherwise in writing) be surrendered to Landlord upon the expiration or earlier termination of this Lease. For the avoidance of doubt, the items listed on <u>Exhibit I</u> attached hereto (which <u>Exhibit I</u> may be updated by Tenant from and after the Term Commencement Date, subject to Landlord's written consent) constitute Tenant's property and shall be removed by Tenant upon the expiration or earlier termination of the Lease.

17.8. Notwithstanding any other provision of this Article to the contrary, in no event shall Tenant remove any improvement from the Premises as to which Landlord contributed payment, including the Tenant Improvements, without Landlord's prior written consent, which consent Landlord may withhold in its sole and absolute discretion.

17.9. If Tenant shall fail to remove any of its property from the Premises prior to the expiration or earlier termination of this Lease, then Landlord may, at its option, remove the same in any manner that Landlord shall choose and store such effects without liability to Tenant for loss thereof or damage thereto, and Tenant shall pay Landlord, upon demand, any costs and expenses incurred due to such removal and storage or Landlord may, at its sole option and without notice to Tenant, sell such property or any portion thereof at private sale and without legal process for such price as Landlord may obtain and apply the proceeds of such sale against any (a) amounts due by Tenant to Landlord under this Lease and (b) any expenses incident to the removal, storage and sale of such property.

17.10. Tenant shall pay to Landlord an amount equal to four percent (4%) of the cost to Tenant of all Alterations (or, in the case of Cosmetic Alterations, one-half percent (0.5%) of the cost of all Cosmetic Alterations) to cover Landlord's overhead and expenses for plan review, engineering review, coordination, scheduling and supervision thereof. For purposes of payment of such sum, Tenant shall submit to Landlord copies of all bills, invoices and statements covering the costs of such charges, accompanied by payment to Landlord of the fee set forth in this Section. Tenant shall reimburse Landlord for any extra expenses incurred by Landlord by reason of faulty work done by Tenant or its contractors, or by reason of delays caused by such work, or by reason of inadequate clean-up.

17.11. Within sixty (60) days after final completion of any Alterations performed by Tenant with respect to the Premises, Tenant shall submit to Landlord documentation showing the amounts expended by Tenant with respect to such Alterations, together with supporting documentation reasonably acceptable to Landlord.

17.12. Tenant shall take, and shall cause its contractors to take, commercially reasonable steps to protect the Premises during the performance of any Alterations, including covering or temporarily removing any window coverings so as to guard against dust, debris or damage.

17.13. Tenant shall require its contractors and subcontractors performing work on the Premises to name Landlord and its affiliates and Lenders as additional insureds on their respective insurance policies.

17.14. Notwithstanding anything to the contrary in this Lease, Landlord and Tenant agree that Landlord shall be permitted to withhold its approval (in its sole and absolute discretion) of any Alteration that is inconsistent with the office and lab zones identified on <u>Exhibit F</u> attached hereto, or (b) affects the use or function of any flexible wall and lab bench system within the Premises.

18. Repairs and Maintenance.

18.1. Subject to the limitations set forth in <u>Section 16.9</u>, Landlord shall repair and maintain the Common Area and the structural and exterior portions of the Building, including

roofing and covering materials; foundations (excluding any architectural slabs, but including any structural slabs); exterior walls; plumbing; fire sprinkler and life safety systems (if any); base Building HVAC systems up to the first damper or isolation valve that serves the Premises (for purposes of clarity, the portion of the HVAC system that includes such first damper or isolation valve and extends into and through the Premises, and any supplemental HVAC serving the Premises including but not limited to any supplemental HVAC serving Tenant's vivarium, shall not be part of the base Building HVAC and shall be Tenant's obligation to maintain and repair pursuant to <u>Section 18.2</u> below); the Generator, the Acid Neutralization Tank and associated monitoring system; elevators; and all base Building electrical systems, in a first class manner comparable to other buildings in Cambridgeport, Cambridge, Massachusetts owned or operated by Landlord or its affiliates that are similar to the Building and operated and used for the same use as the Permitted Use.

18.2. Except for services of Landlord, if any, required by <u>Section 18.1</u>, Tenant shall at Tenant's sole cost and expense maintain and keep the Premises (including but not limited to the portion of the HVAC system that includes such first damper or isolation valve and extends into and through the Premises and any supplemental HVAC serving the Premises, including but not limited to any supplemental HVAC serving Tenant's vivarium), and every part thereof in good condition and repair, damage thereto from ordinary wear and tear excepted, and shall, within ten (10) days after receipt of written notice from Landlord, provide to Landlord any maintenance records that Landlord reasonably requests. Tenant shall, upon the expiration or sooner termination of the Term, surrender the Premises to Landlord in as good a condition as existed when the Tenant Improvements are finally completed by Landlord, and with respect to Alterations, in substantially the same condition as existed on the date such Alterations are substantially completed by Tenant, ordinary wear and tear excepted; and shall, at Landlord's request (written notice of which shall be provided in writing at least eight (8) months prior to the expiration of the Term) and Tenant's sole cost and expense, remove all telephone and data systems, wiring and equipment from the Premises, repair any damage to the Premises caused thereby. Landlord shall have no obligation to alter, remodel, improve, repair, decorate or paint the Premises or any part thereof, other than pursuant to the terms and provisions of the Work Letter or <u>Section 4.1</u>.

18.3. Landlord shall not be liable for any failure to make any repairs or to perform any maintenance that is Landlord's obligation pursuant to this Lease unless such failure shall persist for an unreasonable time after Tenant provides Landlord with written notice of the need of such repairs or maintenance. Tenant waives its rights under Applicable Laws now or hereafter in effect to make repairs at Landlord's expense.

18.4. If any excavation shall be made upon land adjacent to or under the Building, or shall be authorized to be made, Tenant shall afford to the person causing or authorized to cause such excavation, license to enter the Premises for the purpose of performing such work as such person shall deem necessary or desirable to preserve and protect the Building from injury or damage and to support the same by proper foundations, without any claim for damages or liability against Landlord and without reducing or otherwise affecting Tenant's obligations under this Lease; provided such party makes all commercially reasonable efforts to avoid any interference or disruption of Tenant's business.

18.5. This Article relates to repairs and maintenance arising in the ordinary course of operation of the Building and the Project. In the event of a casualty described in <u>Article 24</u>, <u>Article 24</u> shall apply in lieu of this Article. In the event of eminent domain, <u>Article 25</u> shall apply in lieu of this Article.

18.6. Costs incurred by Landlord pursuant to this Article shall constitute Operating Expenses.

19. <u>Liens</u>.

19.1. Subject to the immediately succeeding sentence, Tenant shall keep the Premises, the Building and the Project free from any liens arising out of work or services performed, materials furnished to or obligations incurred by Tenant. Tenant further covenants and agrees that any mechanic's or materialman's lien filed against the Premises, the Building or the Project for work or services claimed to have been done for, or materials claimed to have been furnished to, or obligations incurred by Tenant shall be discharged or bonded by Tenant within ten (10) days after Tenant's receipt of notice of the filing thereof, at Tenant's sole cost and expense.

19.2. Should Tenant fail to discharge or bond against any lien of the nature described in <u>Section 19.1</u>, Landlord may, at Landlord's election, pay such claim or post a statutory lien bond or otherwise provide security to eliminate the lien as a claim against title, and Tenant shall immediately reimburse Landlord for the costs thereof as Additional Rent. Tenant shall indemnify, compensate, save, defend (at Landlord's option and with counsel reasonably acceptable to Landlord) and hold the Landlord Indemnitees harmless from and against any Claims arising from any such liens, including any administrative, court or other legal proceedings related to such liens.

19.3. In the event that Tenant leases or finances the acquisition of office equipment, furnishings or other personal property of a removable nature utilized by Tenant in the operation of Tenant's business, Tenant warrants that any Uniform Commercial Code financing statement shall, upon its face or by exhibit thereto, indicate that such financing statement is applicable only to removable personal property of Tenant located within the Premises. In no event shall the address of the Premises, the Building or the Project be furnished on a financing statement without qualifying language as to applicability of the lien only to removable personal property located in an identified suite leased by Tenant. Should any holder of a financing statement record or place of record a financing statement that appears to constitute a lien against any interest of Landlord or against equipment that may be located other than within an identified suite leased by Tenant, Shall, within ten (10) days after filing such financing statement, cause (a) a copy of the lender security agreement or other documents to which the financing statement pertains to be furnished to Landlord to facilitate Landlord's ability to demonstrate that the lien of such financing statement is not applicable to Landlord's interest and (b) Tenant's lender to amend such financing statement and any other documents of record to clarify that any liens imposed thereby are not applicable to any interest of Landlord in the Premises, the Building or the Project.

20. <u>Estoppel Certificate</u>. Each party shall, within ten (10) days after receipt of written notice from the other party, execute, acknowledge and deliver a statement in writing substantially in the form attached to this Lease as <u>Exhibit J</u>, or on any other form reasonably requested by (i) a current or proposed Lender or encumbrancer or proposed purchaser or a lender, or (ii) a lender, proposed lender, partner, proposed partner, or purchaser or proposed purchaser of Tenant, (a) certifying that this Lease is unmodified and in full force and effect (or, if modified, stating the nature of such modification and certifying that this Lease as so modified is in full force and effect) and the dates to which rental and other charges are paid in advance, if any, (b) acknowledging that there are not, to such party's knowledge, any uncured defaults on the part of the requesting party hereunder, or specifying such defaults if any are claimed, and (c) setting forth such further information with respect to this Lease or the Premises as may be requested thereon. Any such statements may be relied upon by any prospective purchaser or encumbrancer of all or any portion of the Property and by any prospective purchaser, partner or lender of Tenant. Tenant's failure to deliver any such statement within such prescribed time if such failure continues for more than five (5) days after Landlord gives Tenant written notice thereof shall, at Landlord's option, constitute a Default (as defined below) under this Lease, and, in any event, shall be binding upon the party providing the estoppel that the Lease is in full force and effect and without modification except as may be represented by the requesting party in any certificate prepared by the requesting party and delivered to the other party for execution.

21. Hazardous Materials.

21.1. Tenant shall not cause or permit any Hazardous Materials (as defined below) to be brought upon, kept or used in or about the Premises, the Building or the Project in violation of Applicable Laws by Tenant or any of its employees, agents, contractors or invitees (collectively with Tenant, each a "<u>Tenant Party</u>"). If (a) Tenant breaches such obligation, (b) the presence of Hazardous Materials as a result of such a breach results in contamination of the Project, any portion thereof, or any adjacent property, (c) contamination of the Premises otherwise occurs during the Term or any extension or renewal hereof or holding over hereunder (other than if such contamination results from (i) migration of Hazardous Materials from outside the Premises not caused by a Tenant Party or (ii) to the extent such contamination is caused by Landlrod's gross negligence or willful misconduct), or (d) contamination of the Project occurs as a result of Hazardous Materials that are placed on or under or are released into the Project by a Tenant Party, then Tenant shall indemnify, compensate, save, defend (at Landlord's option and with counsel reasonably acceptable to Landlord) and hold the Landlord Indemnitees harmless from and against any and all Claims of any kind or nature, including (w) diminution in value of the Project or any portion thereof, (x) damages for the loss or restriction on use of rentable or usable space or of any amenity of the Project, (y) damages arising from any adverse impact on marketing of space in the Project or any portion thereof and (z) sums paid in settlement of Claims that arise before, during or after the Term as a result of such breach or contamination. This indemnification and compensation by Tenant includes costs incurred in connection with any

investigation of site conditions or any clean-up, remedial, removal or restoration work required by any Governmental Authority because of Hazardous Materials present in the air, soil or groundwater above, on, under or about the Project. Without limiting the foregoing, if the presence of any Hazardous Materials in, on, under or about the Project, any portion thereof or any adjacent property caused or permitted by any Tenant Party results in any contamination of the Project, any portion thereof or any adjacent property, then Tenant shall promptly take all actions at its sole cost and expense as are necessary to return the Project, any portion thereof or any adjacent property to its respective condition existing prior to the time of such contamination; <u>provided</u> that Landlord's written approval of such action shall first be obtained, which approval Landlord shall not unreasonably withhold; and <u>provided</u>, further, that it shall be reasonable for Landlord to withhold its consent if such actions could have a material adverse long-term or short-term effect on the Project, any portion thereof or any adjacent property. Tenant's obligations under this Section shall not be affected, reduced or limited by any limitation on the amount or type of damages, compensation or benefits payable by or for Tenant under workers' compensation acts, disability benefit acts, employee benefit acts or similar legislation. Landlord hereby agrees to hold Tenant harmless from and against any and all loss, cost, damage, claim or expense (including legal fees) incurred in connection with or arising out of or relating in any way to the presence of Hazardous Materials at the Property as of the Execution Date, unless placed on the Property by a Tenant Party. The provisions of the foregoing sentence shall survive the expiration or earlier termination of this Lease.

21.2. Landlord acknowledges that it is not the intent of this Article to prohibit Tenant from operating its business for the Permitted Use. Tenant may operate its business according to the custom of Tenant's industry so long as the use or presence of Hazardous Materials is strictly and properly monitored in accordance with Applicable Laws. As a material inducement to Landlord to allow Tenant to use Hazardous Materials in connection with its business, Tenant agrees to deliver to Landlord (a) a list identifying each type of Hazardous Material to be present at the Premises that is subject to regulation under any environmental Applicable Laws, (b) a list of any and all approvals or permits from Governmental Authorities required in connection with the presence of such Hazardous Material at the Premises and (c) correct and complete copies of (i) notices of violations of Applicable Laws related to Hazardous Materials and (ii) plans relating to the installation of any storage tanks to be installed in, on, under or about the Project (provided that installation of storage tanks shall only be permitted after Landlord has given Tenant its written consent to do so, which consent Landlord may withhold in its sole and absolute discretion) and closure plans or any other documents required by any and all Governmental Authorities for any storage tanks installed in, on, under or about the Project for the closure of any such storage tanks (collectively, "<u>Hazardous Materials Documents</u>"). Notwithstanding the foregoing, Tenant shall not be required to include within the Hazardous Materials Documents any Hazardous Materials Documents, within fourteen (14) days after receipt of a written request therefor from Landlord, not more often than once per year, unless (m) there are any changes to the Hazardous Materials Documents or (n) Tenant initiates any Alterations or changes its business, in either case in a way that involves any material increase in the types or amounts of Hazardous Materials. For each

type of Hazardous Material listed, the Hazardous Materials Documents shall include (t) the chemical name, (u) the material state (e.g., solid, liquid, gas or cryogen), (v) the concentration, (w) the storage amount and storage condition (e.g., in cabinets or not in cabinets), (x) the use amount and use condition (e.g., open use or closed use), (y) the location (e.g., room number or other identification) and (z) if known, the chemical abstract service number. Notwithstanding anything in this Section to the contrary, Tenant shall not be required to provide Landlord with any Hazardous Materials Documents containing information of a proprietary nature, which Hazardous Materials Documents, in and of themselves, do not contain a reference to any Hazardous Materials or activities related to Hazardous Materials. Landlord may, at Landlord's expense, cause the Hazardous Materials Documents to be reviewed by a person or firm qualified to analyze Hazardous Materials to confirm compliance with the provisions of this Lease and with Applicable Laws. In the event that a review of the Hazardous Materials Documents indicates non-compliance with this Lease or Applicable Laws, Tenant shall, at its expense, diligently take steps to bring its storage and use of Hazardous Materials into compliance. Notwithstanding anything in this Lease to the contrary or Landlord's review into Tenant's Hazardous Materials Documents or use or disposal of hazardous materials, however, Landlord shall not have and expressly disclaims any liability related to Tenant's or other tenants' use or disposal of Hazardous Materials, it being acknowledged by Tenant that Tenant is best suited to evaluate the safety and efficacy of its Hazardous Materials usage and procedures.

21.3. Tenant represents and warrants to Landlord that it is not nor has it been, in connection with the use, disposal or storage of Hazardous Materials, (a) subject to a material enforcement order issued by any Governmental Authority or (b) required to take any remedial action.

21.4. Upon at least two (2) business days prior written notice to Tenant (unless Landlord reasonably believes testing must be completed sooner), prior to the expiration of the Term, Landlord shall have the right to conduct appropriate tests of the Project or any portion thereof to demonstrate that Hazardous Materials are present or that contamination has occurred due to the acts or omissions of a Tenant Party. Tenant shall pay all reasonable costs of such tests if such tests reveal that Hazardous Materials exist at the Project in violation of this Lease.

21.5. If underground or other storage tanks storing Hazardous Materials installed or utilized by Tenant are located on the Premises, or are hereafter placed on the Premises by Tenant (or by any other party, if such storage tanks are utilized by Tenant), then Tenant shall monitor the storage tanks, maintain appropriate records, implement reporting procedures, properly close any underground storage tanks, and take or cause to be taken all other steps necessary or required under the Applicable Laws. Tenant shall have no responsibility or liability for underground or other storage tanks installed by anyone other than Tenant unless Tenant utilizes such tanks, in which case Tenant's responsibility for such tanks shall be as set forth in this Section.

21.6. Tenant shall promptly report to Landlord any actual or suspected presence of mold or water intrusion at the Premises.

21.7. Tenant's obligations under this Article shall survive the expiration or earlier termination of the Lease. During any period of time needed by Tenant or Landlord after the termination of this Lease to complete the removal from the Premises of any such Hazardous Materials for which Tenant is liable, Tenant shall be deemed a holdover tenant and subject to the provisions of <u>Article 27</u>.

21.8. As used herein, the term "Hazardous Material" means any toxic, explosive, corrosive, flammable, infectious, radioactive, carcinogenic, mutagenic or otherwise hazardous substance, material or waste that is or becomes regulated by Applicable Laws or any Governmental Authority.

21.9. Notwithstanding anything to the contrary in this Lease, Landlord shall have sole control over the equitable allocation of fire control areas (as defined in the Uniform Building Code as adopted by the city or municipality(ies) in which the Project is located (the "<u>UBC</u>")). The UBC definition of fire control areas also sets forth the maximum quantity and type of Hazardous Materials permitted to be stored within a fire control area. Landlord and Tenant acknowledge that as of the Term Commencement Date, there will be the following two (2) separate fire control areas in the Building to be used by all tenants of the Building; (a) a waste storage room located adjacent to the loading dock, as shown on Exhibit A attached hereto (the "Waste Storage Room"), and (b) the remainder of the Building exclusive of the waste storage room (the "Building Control Area"). Tenant shall have the right to use its Pro Rata Share of the area in the Waste Storage Room to store up to Tenant's Pro Rata Share of the quantity of Hazardous Materials permitted within one fire control area. Tenant shall also have the right to store in the Premises (exclusive of the area comprised of Tenant's Pro Rata Share of the Waste Storage Room), up to its Pro Rata Share of the quantity of Hazardous Materials allowed within the Building Control Area. The Building Control Area shall constitute a separate and distinct fire control area from the Waste Storage Area, and the Tenant's Pro Rata Share of the quantity of Hazardous Materials permitted in one fire control area shall not be aggregated with the Tenant's Pro Rata Share of the quantity of Hazardous Materials permitted in the other fire control area. Notwithstanding anything to the contrary in this Lease, the quantity of Hazardous Materials allowed by this Section 21.9 is specific to Tenant and shall not run with the Lease in the event of a Transfer (as defined in Article 29). In the event of a Transfer, if the use of Hazardous Materials by such new tenant ("New Tenant") is such that New Tenant utilizes fire control areas in excess of New Tenant's Pro Rata Share of the Building, then New Tenant shall, at its sole cost and expense and upon Landlord's written request, establish and maintain a separate area of the Premises classified by the UBC as an "H" occupancy area for the use and storage of Hazardous Materials, or take such other action as is necessary to ensure that (i) its share of the Waste Control Room is not greater than New Tenant's Pro Rata Share of the Waste Control Room, and (ii) the quantity of Hazardous Materials stored by New Tenant in each of the Premises (exclusive of the Waste Control Room) and the Waste Control Room does not exceed Tenant's Pro Rata Share of the quantity of Hazardous Materials to be stored in each such location. Notwithstanding anything in this Lease to the contrary, Landlord shall not have and expressly disclaims any liability related to Tenant's or other tenants' use or disposal of fire control areas or storage of Hazardous Materials and the quantity thereof, it being acknowledged by Tenant that Tenant and other tenants are best suited to evaluate the safety and efficacy of its Hazardous Materials usage and procedures.

22. <u>Odors and Exhaust</u>. Tenant acknowledges that Landlord would not enter into this Lease with Tenant unless Tenant assured Landlord that under no circumstances will any other occupants of the Building or the Project (including persons legally present in any outdoor areas of the Project) be subjected to odors or fumes (whether or not noxious), and that the Building and the Project will not be damaged by any exhaust, in each case from Tenant's operations, including in Tenant's vivarium. Landlord and Tenant therefore agree as follows:

22.1. Tenant shall not cause or permit (or conduct any activities that would cause) any release of any odors or fumes of any kind from the Premises.

22.2. If the Building has a ventilation system that, in Landlord's judgment, is adequate, suitable, and appropriate to vent the Premises in a manner that does not release odors affecting any indoor or outdoor part of the Project, Tenant shall vent the Premises through such system. If Landlord at any time determines that any existing ventilation system is inadequate, or if no ventilation system exists, Tenant shall in compliance with Applicable Laws vent all fumes and odors from the Premises (and remove odors from Tenant's exhaust stream) as Landlord requires. The placement and configuration of all ventilation exhaust pipes, louvers and other equipment shall be subject to Landlord's approval. Tenant acknowledges Landlord's legitimate desire to maintain the Project (indoor and outdoor areas) in an odor-free manner, and Landlord may require Tenant to abate and remove all odors in a manner that goes beyond the requirements of Applicable Laws.

22.3. Tenant shall, at Tenant's sole cost and expense, provide odor eliminators and other devices (such as filters, air cleaners, scrubbers and whatever other equipment may in Landlord's judgment be necessary or appropriate from time to time) to completely remove, eliminate and abate any odors, fumes or other substances in Tenant's exhaust stream that, in Landlord's judgment, emanate from Tenant's Premises. Any work Tenant performs under this Section shall constitute Alterations.

22.4. Tenant's responsibility to remove, eliminate and abate odors, fumes and exhaust shall continue throughout the Term. Landlord's construction of the Tenant Improvements shall not preclude Landlord from requiring additional measures to eliminate odors, fumes and other adverse impacts of Tenant's exhaust stream (as Landlord may designate in Landlord's discretion). Tenant shall install additional equipment as Landlord requires from time to time under the preceding sentence. Such installations shall constitute Alterations.

22.5. If Tenant fails to install satisfactory odor control equipment within ten (10) business days after Landlord's demand made at any time, then Landlord may, without limiting Landlord's other rights and remedies, require Tenant to cease and suspend any operations in the Premises that, in Landlord's determination, cause odors, fumes or exhaust. For example, if Landlord determines that Tenant's production of a certain type of product causes odors, fumes or exhaust, and Tenant does not install satisfactory odor control equipment within ten (10) business

days after Landlord's request, then Landlord may require Tenant to stop producing such type of product in the Premises unless and until Tenant has installed odor control equipment satisfactory to Landlord.

23. Insurance; Waiver of Subrogation.

23.1. Landlord shall maintain insurance for the Building and the Project in amounts equal to full replacement cost (exclusive of the costs of excavation, foundations and footings, engineering costs or such other costs to the extent the same are not incurred in the event of a rebuild and without reference to depreciation taken by Landlord upon its books or tax returns) or such lesser coverage as Landlord may elect, <u>provided</u> that such coverage shall not be less than the amount of such insurance Landlord's Lender, if any, requires Landlord to maintain, providing protection against any peril generally included within the classification "Fire and Extended Coverage," together with insurance against sprinkler damage (if applicable), vandalism and malicious mischief. Landlord, subject to availability thereof, shall further insure, if Landlord deems it appropriate, coverage against flood, environmental hazard, earthquake, loss or failure of building equipment, rental loss during the period of repairs or rebuilding, Workers' Compensation insurance and fidelity bonds for employees employed to perform services. Notwithstanding the foregoing, Landlord may, but shall not be deemed required to, provide insurance for any improvements installed by Tenant or that are in addition to the standard improvements customarily furnished by Landlord, without regard to whether or not such are made a part of or are affixed to the Building.

23.2. In addition, Landlord shall carry Commercial General Liability insurance with limits of not less than One Million Dollars (\$1,000,000) per occurrence/general aggregate for bodily injury (including death), or property damage with respect to the Project.

23.3. Tenant shall, at its own cost and expense, procure and maintain during the Term the following insurance for the benefit of Tenant and Landlord (as their interests may appear) with insurers financially acceptable and lawfully authorized to do business in the state where the Premises are located:

(a) Commercial General Liability insurance on a broad-based occurrence coverage form, with coverages including but not limited to bodily injury (including death), property damage (including loss of use resulting therefrom), premises/operations, personal & advertising injury, and contractual liability with limits of liability of not less than \$2,000,000 for bodily injury and property damage per occurrence, \$2,000,000 general aggregate, which limits may be met by use of excess and/or umbrella liability insurance provided that such coverage is at least as broad as the primary coverages required herein.

(b) Commercial Automobile Liability insurance covering liability arising from the use or operation of any auto, including those owned, hired or otherwise operated or used by or on behalf of the Tenant. The coverage shall be on a broad-based occurrence form with combined single limits of not less than \$1,000,000 per accident for bodily injury and property damage.

(c) Commercial Property insurance covering property damage to the full replacement cost value and business interruption. Covered property shall include all tenant improvements in the Premises (to the extent not insured by Landlord pursuant to <u>Section 23.1</u>) and Tenant's Property including personal property, furniture, fixtures, machinery, equipment, stock, inventory and improvements and betterments, which may be owned by Tenant or Landlord and required to be insured hereunder, or which may be leased, rented, borrowed or in the care custody or control of Tenant, or Tenant's agents, employees or subcontractors. Such insurance, with respect only to all Alterations or other work performed on the Premises by Tenant (collectively, "<u>Tenant Work</u>"), shall name Landlord and Landlord's current and future mortgagees as loss payees as their interests may appear. Such insurance shall be written on an "all risk" of physical loss or damage basis including the perils of fire, extended coverage, electrical injury, mechanical breakdown, windstorm, vandalism, malicious mischief, sprinkler leakage, back-up of sewers or drains, flood, earthquake, terrorism and such other risks Landlord may from time to time designate, for the full replacement cost value of the covered items with an agreed amount endorsement with no co-insurance. Business interruption coverage shall have limits sufficient to cover Tenant's lost profits and necessary continuing expenses, including rents due Landlord under the Lease. The minimum period of indemnity for business interruption coverage shall be twelve (12) months.

(d) Workers' Compensation insurance as is required by statute or law, or as may be available on a voluntary basis and Employers' Liability insurance with limits of not less than the following: each accident, Five Hundred Thousand Dollars (\$500,000); disease (\$500,000); disease (each employee), Five Hundred Thousand Dollars (\$500,000).

(e) Intentionally Omitted.

(f) Pollution Legal Liability insurance is required if Tenant stores, handles, generates or treats Hazardous Materials, as determined solely by Landlord, on or about the Premises. Such coverage shall include bodily injury, sickness, disease, death or mental anguish or shock sustained by any person; property damage of others including physical injury to or destruction of tangible property of others including the resulting loss of use thereof, clean-up costs, and the loss of use of tangible property of others that has not been physically injured or destroyed; and defense costs, charges and expenses incurred in the investigation, adjustment or defense of claims for such compensatory damages. Coverage shall apply to both sudden and non-sudden pollution conditions including the discharge, dispersal, release or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids or gases, waste materials or other irritants, contaminants or pollutants into or upon land, the atmosphere or any watercourse or body of water. Claims-made coverage is permitted, provided the policy retroactive date is continuously maintained prior to the commencement date of this agreement, and coverage is continuously maintained during all periods in which Tenant occupies the Premises. Coverage shall be maintained with limits of not less than \$1,000,000 per incident with a \$2,000,000 policy aggregate and for a period of two (2) years thereafter.

(g) During all construction by Tenant at the Premises, with respect to tenant improvements being constructed (including any Alterations, insurance required in <u>Exhibit B-1</u> must be in place.

The insurance required of Tenant by this Article shall be with companies at all times having a current rating of not less than A- and financial category rating of at least Class VII in "A.M. Best's Insurance Guide" current edition. Tenant shall obtain for Landlord from the insurance companies/broker or cause the insurance companies/broker to furnish certificates of insurance evidencing all coverages required herein to Landlord. No such policy shall be cancelable or subject to reduction of coverage or other modification or cancellation except after thirty (30) days' prior written notice to Landlord from Tenant (except in the event of non-payment of premium, in which case ten (10) days' written notice shall be given). All general liability policies shall be written as primary policies, not contributing with and not in excess of the coverage that Landlord may carry. Tenant's required general liability policies shall contain severability of interests clauses stating that, except with respect to limits of insurance, coverage shall apply separately to each insured or additional insured. Tenant shall, at least twenty-five (25) days prior to the expiration of such policies, furnish Landlord with renewal certificates of insurance or binders. Tenant agrees that if Tenant does not take out and maintain such insurance, Landlord may (but shall not be required to) procure such insurance on Tenant's behalf and at its cost to be paid by Tenant as Additional Rent. Commercial General Liability, Commercial Automobile Liability, Umbrella Liability and Pollution Legal Liability insurance as required above shall name Landlord Bealty, L.P., and BioMed Realty Trust, Inc., and their respective officers, employees, agents, general partners, members, subsidiaries, affiliates and Lenders ("Landlord Parties") as additional insureds as respects liability arising from work or operations performed by or on behalf of Tenant, Tenant's use or occupancy of Premises, and ownership, maintenance or use of vehicles by or on behalf of Tenant.

23.4. In each instance where insurance is to name Landlord Parties as additional insureds, Tenant shall, upon Landlord's written request, also designate and furnish certificates evidencing such Landlord Parties as additional insureds to (a) any Lender of Landlord holding a security interest in the Building or the Project, (b) the landlord under any lease whereunder Landlord is a tenant of the real property upon which the Building is located if the interest of Landlord is or shall become that of a tenant under a ground lease rather than that of a fee owner and (c) any management company retained by Landlord to manage the Project.

23.5. Tenant assumes the risk of damage to any fixtures, goods, inventory, merchandise, equipment and leasehold improvements, and Landlord shall not be liable for injury to Tenant's business or any loss of income therefrom, relative to such damage, all as more particularly set forth within this Lease. Tenant shall, at Tenant's sole cost and expense, carry such insurance as Tenant desires for Tenant's protection with respect to personal property of Tenant or business interruption.

23.6. Each of Tenant and Landlord and their respective insurers hereby waive any and all rights of recovery or subrogation against the Landlord Parties and Tenant Parties, as applicable, with respect to any loss, damage, claims, suits or demands, howsoever caused, that

are covered, or should have been covered, by valid and collectible insurance, including any deductibles or self-insurance maintained thereunder. If necessary, Tenant and Landlord agree to endorse the required insurance policies to permit waivers of subrogation as required hereunder and hold harmless, indemnify and compensate the Landlord Parties and Tenant Parties, as applicable, for any loss or expense incurred as a result of a failure to obtain such waivers of subrogation from insurers. Such waivers shall continue so long as Tenant's and Landlord's insurers so permit. Any termination of such a waiver shall be by written notice to Landlord or Tenant, as applicable, containing a description of the circumstances hereinafter set forth in this Section. Tenant, upon obtaining the policies of insurance required or permitted under this Lease, shall give notice to its insurance carriers that the foregoing waiver of subrogation is contained in this Lease. If such policies shall not be obtainable with such waiver or shall be so obtainable only at a premium over that chargeable without such waiver, then Tenant shall notify Landlord of such conditions.

23.7. Landlord may require insurance policy limits required under this Lease to be raised to conform with requirements of Landlord's Lender or to bring coverage limits to levels then being required of new tenants within the Project.

23.8. Any costs incurred by Landlord pursuant to this Article shall constitute a portion of Operating Expenses.

23.9. The provisions of this Section shall survive the expiration or earlier termination of this Lease.

24. Damage or Destruction.

24.1. In the event of a partial destruction of (a) the Premises or (b) Common Area of the Building or the Project ((a) and (b) together, the "<u>Affected Areas</u>") by fire or other perils covered by extended coverage insurance not exceeding twenty-five percent (25%) of the full insurable value thereof, and <u>provided</u> that (x) the damage thereto is such that the Affected Areas may be repaired, reconstructed or restored within a period of six (6) months from the date of the happening of such casualty, (y) Landlord shall receive insurance proceeds sufficient to cover the cost of such repairs, reconstruction and restoration (except for any deductible amount provided by Landlord's policy, which deductible amount, if paid by Landlord, shall constitute an Operating Expense) and (z) such casualty was not intentionally caused by a Tenant Party, then Landlord shall commence and proceed diligently with the work of repair, reconstruction and restoration of the Affected Areas and this Lease shall continue in full force and effect.

24.2. In the event of any damage to or destruction of the Building or the Project other than as described in <u>Section 24.1</u>, Landlord may elect to repair, reconstruct and restore the Building or the Project, as applicable, in which case this Lease shall continue in full force and effect. If Landlord elects not to repair, reconstruct and restore the Building or the Project, as applicable, then this Lease shall terminate as of the date of such damage or destruction. In the event of any damage or destruction (regardless of whether such damage is governed by <u>Section 24.1</u> or this Section), if (a) in Landlord's determination as set forth in the Damage Repair

Estimate (as defined below), the Affected Areas cannot be repaired, reconstructed or restored within twelve (12) months after the date of such casualty, (b) subject to <u>Section 24.6</u>, the Affected Areas are not actually repaired, reconstructed and restored within eighteen (18) months after the date of such casualty, or (c) the damage and destruction occurs within the last twelve (12) months of the then-current Term, then Tenant shall have the right to terminate this Lease, effective as of the date of such damage or destruction, by delivering to Landlord its written notice of termination (a "<u>Termination Notice</u>") (y) with respect to <u>Subsections 24.2(a)</u> and (c), no later than fifteen (15) days after Landlord delivers to Tenant Landlord's Damage Repair Estimate and (z) with respect to <u>Subsection 24.2(b)</u>, no later than fifteen (15) days after such eighteen (18) month period (as the same may be extended pursuant to <u>Section 24.6</u>) expires. If Tenant provides Landlord with a Termination Notice pursuant to <u>Subsection 24.2(z)</u>, Landlord shall have an additional thirty (30) days after receipt of such Termination Notice to complete the repair, reconstruction and restoration. If Landlord does not complete such repair, reconstruction and restoration within such thirty (30) day period, then Tenant may terminate this Lease by giving Landlord written notice within two (2) business days after the expiration of such thirty (30) day period. If Landlord does complete such repair, reconstruction and restoration within such thirty (30) day period, then this Lease shall continue in full force and effect.

24.3. As soon as reasonably practicable, but in any event within sixty (60) days following the date of damage or destruction, Landlord shall notify Tenant of Landlord's good faith estimate of the period of time in which the repairs, reconstruction and restoration will be completed (the "<u>Damage Repair Estimate</u>"), which estimate shall be based upon the opinion of a contractor reasonably selected by Landlord and experienced in comparable repair, reconstruction and restoration of similar buildings. Additionally, Landlord shall give written notice to Tenant within sixty (60) days following the date of damage or destruction of its election not to repair, reconstruct or restore the Building or the Project, as applicable.

24.4. Upon any termination of this Lease under any of the provisions of this Article, the parties shall be released thereby without further obligation to the other from the date possession of the Premises is surrendered to Landlord, except with regard to (a) items occurring prior to the damage or destruction and (b) provisions of this Lease that, by their express terms, survive the expiration or earlier termination hereof.

24.5. In the event of repair, reconstruction and restoration as provided in this Article, all Rent to be paid by Tenant under this Lease shall be abated proportionately based on the extent to which Tenant's use of the Premises is impaired during the period of such repair, reconstruction or restoration, unless Landlord provides Tenant with other space during the period of repair, reconstruction and restoration that, in Tenant's reasonable opinion, is suitable for the temporary conduct of Tenant's business; provided, however, that the amount of such abatement shall be reduced by the amount of Rent that is received by Tenant as part of the business interruption or loss of rental income with respect to the Premises from the proceeds of business interruption or loss of rental income insurance.

24.6. Notwithstanding anything to the contrary contained in this Article, should Landlord be delayed or prevented from completing the repair, reconstruction or restoration of the

damage or destruction to the Premises after the occurrence of such damage or destruction by Force Majeure or delays caused by a Tenant Party, then the time for Landlord to commence or complete repairs, reconstruction and restoration shall be extended on a day-for-day basis; <u>provided</u>, however, that at Landlord's election, Landlord shall be relieved of its obligation to make such repairs, reconstruction and restoration.

24.7. If Landlord is obligated to or elects to repair, reconstruct or restore as herein provided, then Landlord shall be obligated to make such repairs, reconstruction or restoration only with regard to (a) those portions of the Premises that were originally provided at Landlord's expense (including the Tenant Improvements) and (b) the Common Area portion of the Affected Areas. The repairs, reconstruction or restoration of improvements not originally provided by Landlord or at Landlord's expense shall be the obligation of Tenant. In the event Tenant has elected to upgrade certain improvements from Landlord's building standard (the "<u>Building Standard</u>"), Landlord shall, upon the need for replacement due to an insured loss, provide only the Building Standard, unless Tenant again elects to upgrade such improvements and pay any incremental costs related thereto, except to the extent that excess insurance proceeds, if received, are adequate to provide such upgrades, in addition to providing for basic repairs, reconstruction and restoration of the Premises, the Building and the Project.

24.8. Notwithstanding anything to the contrary contained in this Article, Landlord shall not have any obligation whatsoever to repair, reconstruct or restore the Premises if the damage resulting from any casualty covered under this Article occurs during the last twenty-four (24) months of the Term or any extension thereof, or to the extent that insurance proceeds are not available therefor.

24.9. Landlord's obligation, should it elect or be obligated to repair, reconstruct or restore, shall be limited to the Affected Areas, and shall be conditioned upon Landlord receiving any permits or authorizations required by Applicable Laws. Tenant shall, at its expense, replace or fully repair all of Tenant's personal property and any Alterations installed by Tenant existing at the time of such damage or destruction. If Affected Areas are to be repaired, reconstructed or restored in accordance with the foregoing, Landlord shall make available to Tenant any portion of insurance proceeds it receives that are allocable to the Alterations constructed by Tenant to this Lease; <u>provided</u> Tenant is not then in default under this Lease, and subject to the requirements of any Lender of Landlord.

24.10. This Article sets forth the terms and conditions upon which this Lease may terminate in the event of any damage or destruction. Accordingly, the parties hereby waive the provisions of any Applicable Laws (and any successor statutes) permitting the parties to terminate this Lease as a result of any damage or destruction.

25. Eminent Domain.

25.1. In the event (a) the whole of all Affected Areas or (b) such part thereof as shall substantially interfere with Tenant's use and occupancy of the Premises for the Permitted Use shall be taken for any public or quasi-public purpose by any lawful power or authority by

exercise of the right of appropriation, condemnation or eminent domain, or sold to prevent such taking, Tenant or Landlord may terminate this Lease effective as of the date possession is required to be surrendered to such authority, except with regard to (y) items occurring prior to the taking and (z) provisions of this Lease that, by their express terms, survive the expiration or earlier termination hereof.

25.2. In the event of a partial taking of (a) the Building or the Project or (b) drives, walkways or parking areas serving the Building or the Project for any public or quasi-public purpose by any lawful power or authority by exercise of right of appropriation, condemnation, or eminent domain, or sold to prevent such taking, then, without regard to whether any portion of the Premises occupied by Tenant was so taken, Landlord may elect to terminate this Lease (except with regard to (y) items occurring prior to the taking and (z) provisions of this Lease that, by their express terms, survive the expiration or earlier termination hereof) as of such taking if such taking is, in Landlord's opinion, of a material nature such as to make it uneconomical to continue use of the unappropriated portion for purposes of renting office or laboratory space.

25.3. Tenant shall be entitled to any award that is specifically awarded as compensation for (a) the taking of Tenant's personal property that was installed at Tenant's expense and (b) the costs of Tenant moving to a new location. Except as set forth in the previous sentence, any award for such taking shall be the property of Landlord.

25.4. If, upon any taking of the nature described in this Article, this Lease continues in effect, then Landlord shall promptly proceed to restore the Affected Areas to substantially their same condition prior to such partial taking. To the extent such restoration is infeasible, as determined by Landlord in its sole and absolute discretion, the Rent shall be decreased proportionately to reflect the loss of any portion of the Premises no longer available to Tenant.

25.6 This Article sets forth the terms and conditions upon which this Lease may terminate in the event of any damage or destruction. Accordingly, the parties hereby waive the provisions of any Applicable Laws (and any successor statutes) permitting the parties to terminate this Lease as a result of any damage or destruction.

26. Surrender.

26.1. At least thirty (30) days prior to Tenant's surrender of possession of any part of the Premises, Tenant shall provide Landlord with a facility decommissioning and Hazardous Materials closure plan for the Premises ("<u>Exit Survey</u>") prepared by an independent third party state-certified professional with appropriate expertise, which Exit Survey must be reasonably acceptable to Landlord. The Exit Survey shall comply with the American National Standards Institute's Laboratory Decommissioning guidelines (ANSI/AIHA Z9.11-2008) or any successor standards published by ANSI or any successor organization (or, if ANSI and its successors no longer exist, a similar entity publishing similar standards). In addition, at least ten (10) days prior to Tenant's surrender of possession of any part of the Premises, Tenant shall (a) provide Landlord with written evidence of all appropriate governmental releases obtained by Tenant in accordance with Applicable Laws, including laws pertaining to the surrender of the Premises, (b) place Laboratory Equipment Decontamination Forms on all decommissioned equipment to

assure safe occupancy by future users and (c) conduct a site inspection with Landlord. In addition, Tenant agrees to remain responsible after the surrender of the Premises for the remediation of any recognized environmental conditions set forth in the Exit Survey. Tenant's obligations under this Section shall survive the expiration or earlier termination of the Lease.

26.2. No surrender of possession of any part of the Premises shall release Tenant from any of its obligations hereunder, unless such surrender is accepted in writing by Landlord.

26.3. The voluntary or other surrender of this Lease by Tenant shall not effect a merger with Landlord's fee title or leasehold interest in the Premises, the Building, the Property or the Project, unless Landlord consents in writing, and shall, at Landlord's option, operate as an assignment to Landlord of any or all subleases.

26.4. The voluntary or other surrender of any ground or other underlying lease that now exists or may hereafter be executed affecting the Building or the Project, or a mutual cancellation thereof or of Landlord's interest therein by Landlord and its lessor shall not effect a merger with Landlord's fee title or leasehold interest in the Premises, the Building or the Property and shall, at the option of the successor to Landlord's interest in the Building or the Project, as applicable, operate as an assignment of this Lease.

27. Holding Over.

27.1. If, with Landlord's prior written consent, Tenant holds possession of all or any part of the Premises after the Term, Tenant shall become a tenant from month to month after the expiration or earlier termination of the Term, and in such case Tenant shall continue to pay (a) Base Rent in accordance with <u>Article 7</u>, as adjusted in accordance with <u>Article 8</u>, and (b) any amounts for which Tenant would otherwise be liable under this Lease if the Lease were still in effect, including payments for Tenant's Adjusted Share of Operating Expenses. Any such month-to-month tenancy shall be subject to every other term, covenant and agreement contained herein.

27.2. Notwithstanding the foregoing, if Tenant remains in possession of the Premises after the expiration or earlier termination of the Term without Landlord's prior written consent, (a) Tenant shall become a tenant at sufferance subject to the terms and conditions of this Lease, except that the monthly rent shall be equal to one hundred fifty percent (150%) of the Rent in effect during the last thirty (30) days of the Term, and (b) if such holdover persists after the earlier of (i) thirty (30) days after the expiration or earlier termination of the Term and (ii) the date Landlord notifies Tenant that Landlord has procured a tenant that is ready, willing and able to sign a lease for the Premises (or a portion thereof), Tenant shall be liable to Landlord for any and all damages suffered by Landlord as a result of such holdover, including any lost rent or consequential, special and indirect damages (in each case, regardless of whether such damages are foreseeable).

27.3. Acceptance by Landlord of Rent after the expiration or earlier termination of the Term shall not result in an extension, renewal or reinstatement of this Lease.

27.4. The foregoing provisions of this Article are in addition to and do not affect Landlord's right of reentry or any other rights of Landlord hereunder or as otherwise provided by Applicable Laws.

27.5. The provisions of this Article shall survive the expiration or earlier termination of this Lease.

28. Indemnification and Exculpation.

28.1. Tenant agrees to indemnify, compensate, save, defend (at Landlord's option and with counsel reasonably acceptable to Landlord) and hold the Landlord Indemnitees harmless from and against any and all Claims of any kind or nature, real or alleged, arising from injury to or death of any person or damage to any property occurring within or about the Premises, the Building, the Property or the Project, arising directly or indirectly out of (a) the presence at or use or occupancy of the Premises or Project by a Tenant Party, (b) an act or omission on the part of any Tenant Party, (c) a breach or default by Tenant in the performance of any of its obligations hereunder or (d) injury to or death of persons or damage to or loss of any property, real or alleged, arising from the serving of alcoholic beverages at the Premises or Project by any Tenant Party, including liability under any dram shop law, host liquor law or similar Applicable Law, except to the extent directly caused by Landlord's negligence or willful misconduct. Tenant's obligations under this Section shall not be affected, reduced or limited by any limitation on the amount or type of damages, compensation or benefits payable by or for Tenant under workers' compensation acts, disability benefit acts, employee benefit acts or similar legislation. Tenant's obligations under this Section shall survive the expiration or earlier termination of this Lease. Subject to <u>Sections 23.6</u>, and <u>28.2</u> and any subrogation provisions contained in the Work Letter, Landlord agrees to indemnify, save, defend (at Tenant's option and with counsel reasonably acceptable to Tenant) and hold the Tenant Parties harmless from and against any and all Claims arising from injury to or death of any person or damage to or loss of any physical property occurring within or about the Premises, the Building, the Property or the Project to the extent directly arising out of Landlord's gross negligence or willful misconduct.

28.2. Notwithstanding anything in this Lease to the contrary, Landlord shall not be liable to Tenant for and Tenant assumes all risk of (a) damage or losses caused by fire, electrical malfunction, gas explosion or water damage of any type (including broken water lines, malfunctioning fire sprinkler systems, roof leaks or stoppages of lines), unless any such loss is due to Landlord's willful disregard of written notice by Tenant of need for a repair that Landlord is responsible to make for an unreasonable period of time, and (b) damage to personal property or scientific research, including loss of records kept by Tenant within the Premises (in each case, regardless of whether such damages are foreseeable). Tenant further waives any claim for injury to Tenant's business or loss of income relating to any such damage or destruction of personal property as described in this Section. Notwithstanding anything in the foregoing or this Lease to the contrary, except (x) as otherwise provided herein (including Section 27.2), (y) as may be provided by Applicable Laws or (z) in the event of Tenant's breach of <u>Article 21</u> or <u>Section 26.1</u>, in no event shall Landlord or Tenant be liable to the other for any consequential, special or indirect damages arising out of this Lease, including lost profits (provided that this <u>Subsection 28.2(z)</u> shall not limit Tenant's liability for Base Rent or Additional Rent pursuant to this Lease).

28.3. Landlord shall not be liable for any damages arising from any act, omission or neglect of any other tenant in the Building or the Project, or of any other third party.

28.4. Tenant acknowledges that security devices and services, if any, while intended to deter crime, may not in given instances prevent theft or other criminal acts. Landlord shall not be liable for injuries or losses caused by criminal acts of third parties, and Tenant assumes the risk that any security device or service may malfunction or otherwise be circumvented by a criminal. If Tenant desires protection against such criminal acts, then Tenant shall, at Tenant's sole cost and expense, obtain appropriate insurance coverage. Tenant's security programs and equipment for the Premises shall be coordinated with Landlord and subject to Landlord's reasonable approval.

28.5. The provisions of this Article shall survive the expiration or earlier termination of this Lease.

29. Assignment or Subletting.

29.1. Except as hereinafter expressly permitted, none of the following (each, a "<u>Transfer</u>"), either voluntarily or by operation of Applicable Laws, shall be directly or indirectly performed without Landlord's prior written consent: (a) Tenant selling, hypothecating, assigning, pledging, encumbering or otherwise transferring this Lease or subletting the Premises, for which Landlord's consent shall not be unreasonably withheld, conditioned or delayed or (b) a controlling interest in Tenant being sold, assigned or otherwise transferred (other than as a result of shares in Tenant being sold on a public stock exchange). For purposes of the preceding sentence, "control" means (a) owning (directly or indirectly) more than fifty percent (50%) of the stock or other equity interests of another person or (b) possessing, directly or indirectly, the power to direct or cause the direction of the management and policies of such person. Notwithstanding the foregoing, Tenant shall have the right to Transfer, without Landlord's consent, Tenant's interest in this Lease or the Premises or any part thereof to (i) any person that as of the date of determination and at all times thereafter directly, or indirectly through one or more intermediaries, controls, is controlled by or is under common control with Tenant ("<u>Tenant's Affiliate</u>"), (ii) any person or entity which Tenant is merged or to which all or substantially all of Tenant's assets or all or substantially all of the ownership interests in Tenant are sold, or (iii) any person or entity which is a successor-in-interest to Tenant by way of spin-off or consolidation; provided that Tenant shall notify Landlord in writing at least thirty (30) days prior to the effectiveness of such Transfer (an <u>"Exempt Transfer</u>") and otherwise comply with the requirements of this Lease regarding such Transfer; and <u>provided</u>, further, that the person that will be the tenant under this Lease after the Exempt Transfer has a net worth (as of both the day immediately prior to and the day immediat

than fifty percent (50%) of the stock or other equity interests of another person and (b) possessing, directly or indirectly, the power to direct or cause the direction of the management and policies of such person. In no event shall Tenant perform a Transfer to or with an entity that is a tenant at the Project or the Neighboring Property located at 21 Erie Street, Cambridge, Massachusetts ("<u>21 Erie Street</u>") or <u>270 Albany Street</u>, Cambridge, Massachusetts ("270 Albany Street") or that, to the knowledge of Tenant's executive officers as may be informed by Tenant's representatives or Landlord, is in discussion or negotiations with Landlord or an affiliate of Landlord to lease premises at the Project, 21 Erie Street or 270 Albany Street. Notwithstanding anything in this Lease to the contrary, if (a) Tenant or any proposed transferee, assignee or sublessee of Tenant has been required by any prior landlord, Lender or Governmental Authority to take material remedial action in connection with Hazardous Materials contaminating a property if the contamination resulted from such party's action or omission or use of the property in question or (b) Tenant or any proposed transferee, assignee or sublessee is subject to a material enforcement order issued by any Governmental Authority in connection with the use, disposal or storage of Hazardous Materials, then Landlord shall have the right to terminate this Lease in Landlord's sole and absolute discretion (with respect to any such matter involving Tenant), and it shall not be unreasonable for Landlord to withhold its consent to any proposed transfer, assignment or subletting (with respect to any such matter involving a proposed transferee, assignee or sublessee).

29.2. In the event Tenant desires to effect a Transfer (other than an Exempt Transfer), then, at least thirty (30) but not more than ninety (90) days prior to the date when Tenant desires the Transfer to be effective (the "<u>Transfer Date</u>"), Tenant shall provide written notice to Landlord (the "<u>Transfer Notice</u>") containing information (including references) concerning the character of the proposed transferee, assignee or sublessee; the Transfer Date; the most recent unconsolidated financial statements of Tenant and of the proposed transferee, assignee or sublessee satisfying the requirements of <u>Section 40.2</u> ("<u>Required Financials</u>"); any ownership or commercial relationship between Tenant and the proposed transferee, assignee or sublessee; and the consideration and all other material terms and conditions of the proposed Transfer, all in such detail as Landlord shall reasonably require.

29.3. Landlord, in determining whether consent should be given to a proposed Transfer, may give consideration to (a) the financial strength of Tenant and of such transferee, assignee or sublessee (notwithstanding Tenant remaining liable for Tenant's performance), (b) any change in use that such transferee, assignee or sublessee proposes to make in the use of the Premises and (c) Landlord's desire to exercise its rights under <u>Section 29.7</u> to cancel this Lease. In no event shall Landlord be deemed to be unreasonable for declining to consent to a Transfer to a transferee, assignee or sublessee of poor reputation, lacking financial qualifications or seeking a change in the Permitted Use, or jeopardizing directly or indirectly the status of Landlord or any of Landlord's affiliates as a Real Estate Investment Trust under the Internal Revenue Code of 1986 (as the same may be amended from time to time, the "<u>Revenue Code</u>"). Notwithstanding anything contained in this Lease to the contrary, (w) no Transfer shall be consummated on any basis such that the rental or other amounts to be paid by the occupant, assignee, manager or other transferee thereunder would be based, in whole or in part, on the income or profits derived by the

business activities of such occupant, assignee, manager or other transferee; (x) Tenant shall not furnish or render any services to an occupant, assignee, manager or other transferee with respect to whom transfer consideration is required to be paid, or manage or operate the Premises or any capital additions so transferred, with respect to which transfer consideration is being paid; (y) Tenant shall not consummate a Transfer with any person in which Landlord owns an interest, directly or indirectly (by applying constructive ownership rules set forth in Section 856(d)(5) of the Revenue Code); and (z) Tenant shall not consummate a Transfer with any person or in any manner that could cause any portion of the amounts received by Landlord pursuant to this Lease or any sublease, license or other arrangement for the right to use, occupy or possess any portion of the Premises to fail to qualify as "rents from real property" within the meaning of Section 856(d) of the Revenue Code, or any similar or successor provision thereto or which could cause any other income of Landlord to fail to qualify as income described in Section 856(c)(2) of the Revenue Code.

29.4. The following are conditions precedent to a Transfer or to Landlord considering a request by Tenant to a Transfer:

(a) Tenant shall remain fully liable under this Lease (except in the event Tenant is no longer in existence). Tenant agrees that it shall not be (and shall not be deemed to be) a guarantor or surety of this Lease, however, and waives its right to claim that is it is a guarantor or surety or to raise in any legal proceeding any guarantor or surety defenses permitted by this Lease or by Applicable Laws;

(b) If Tenant or the proposed transferee, assignee or sublessee does not or cannot deliver the Required Financials, then Landlord may elect to have either Tenant's ultimate parent company or the proposed transferee's, assignee's or sublessee's ultimate parent company provide a guaranty of the applicable entity's obligations under this Lease, in a form acceptable to Landlord, which guaranty shall be executed and delivered to Landlord by the applicable guarantor prior to the Transfer Date;

(c) In the case of an Exempt Transfer, Tenant shall provide Landlord with evidence reasonably satisfactory to Landlord that the Transfer qualifies as an Exempt Transfer;

(d) Tenant shall provide Landlord with evidence reasonably satisfactory to Landlord that the value of Landlord's interest under this Lease shall not be diminished or reduced by the proposed Transfer. Such evidence shall include evidence respecting the relevant business experience and financial responsibility and status of the proposed transferee, assignee or sublessee;

(e) Tenant shall reimburse Landlord for Landlord's actual costs and expenses, including reasonable attorneys' fees, charges and disbursements incurred in connection with the review, processing and documentation of such request, up to a maximum amount of \$5,000;

(f) Except with respect to an Exempt Transfer, if Tenant's transfer of rights or sharing of the Premises provides for the receipt by, on behalf of or on account of Tenant of any

consideration of any kind whatsoever (including a premium rental for a sublease or lump sum payment for an assignment, but excluding Tenant's reasonable costs in marketing and subleasing the Premises) in excess of the rental and other charges due to Landlord under this Lease, Tenant shall pay fifty percent (50%) of all of such excess to Landlord, after making deductions for any reasonable marketing expenses, tenant improvement funds expended by Tenant, alterations, cash concessions, brokerage commissions, attorneys' fees and free rent actually paid by Tenant. If such consideration consists of cash paid to Tenant, payment to Landlord shall be made upon receipt by Tenant of such cash payment;

(g) The proposed transferee, assignee or sublessee shall agree that, in the event Landlord gives such proposed transferee, assignee or sublessee notice that Tenant is in default under this Lease, such proposed transferee, assignee or sublessee shall thereafter make all payments otherwise due Tenant directly to Landlord, which payments shall be received by Landlord without any liability being incurred by Landlord, except to credit such payment against those due by Tenant under this Lease, and any such proposed transferee, assignee or sublessee shall agree to attorn to Landlord or its successors and assigns should this Lease be terminated for any reason; provided, however, that in no event shall Landlord or its Lenders, successors or assigns be obligated to accept such attornment;

(h) Landlord's consent to any such Transfer shall be effected on Landlord's forms;

- (i) Tenant shall not then be in default of any monetary obligation or any material non-monetary obligation hereunder in any respect;
- (j) Such proposed transferee, assignee or sublessee's use of the Premises shall be limited to the Permitted Use;
- (k) Landlord shall not be bound by any provision of any agreement pertaining to the Transfer, except for Landlord's written consent to the same;
- (1) Tenant shall pay all transfer and other taxes (including interest and penalties) assessed or payable for any Transfer;
- (m) Landlord's consent (or waiver of its rights) for any Transfer shall not waive Landlord's right to consent or refuse consent to any later Transfer;
- (n) Tenant shall deliver to Landlord one executed copy of any and all written instruments evidencing or relating to the Transfer; and

(o) Tenant shall deliver to Landlord a list of Hazardous Materials (as defined below), certified by the proposed transferee, assignee or sublessee to be true and correct, that the proposed transferee, assignee or sublessee intends to use or store in the Premises. Additionally, Tenant shall deliver to Landlord, on or before the date any proposed transferee, assignee or sublessee takes occupancy of the Premises, all of the items relating to Hazardous Materials of such proposed transferee, assignee or sublessee takes occupancy of the Premises, all of the items relating to Hazardous Materials of such proposed transferee, assignee or sublessee takes occupancy of the Premises, all of the items relating to Hazardous Materials of such proposed transferee, assignee or sublessee as described in <u>Section 21.2</u>.

29.5. Any Transfer that is not in compliance with the provisions of this Article or with respect to which Tenant does not fulfill its obligations pursuant to this Article shall be void and shall, at the option of Landlord, terminate this Lease.

29.6. Notwithstanding any Transfer, Tenant shall remain fully and primarily liable for the payment of all Rent and other sums due or to become due hereunder, and for the full performance of all other terms, conditions and covenants to be kept and performed by Tenant. The acceptance of Rent or any other sum due hereunder, or the acceptance of performance of any other term, covenant or condition thereof, from any person or entity other than Tenant shall not be deemed a waiver of any of the provisions of this Lease or a consent to any Transfer.

29.7. If Tenant delivers to Landlord (a) a Transfer Notice indicating a desire to assign this Lease to a proposed transferee (excluding any assignment constituting an Exempt Transfer), or (b) a notice indicating Tenant's intention to enter into a sublease or license agreement that would, in the aggregate with all other then-current subleases and licenses, cause more than fifty percent (50%) of the Rentable Area of the Premises to be licensed or subleased (excluding any subleases and licenses that constitute Exempt Transfers), or commence marketing the Premises or a portion thereof in connection with such a sublease or license (an "<u>Intent to Sublease Notice</u>"), then Landlord shall have the option, exercisable by giving notice to Tenant within ten (10) business days after Landlord's receipt of the Transfer Notice or Intent to Sublease Notice, as applicable, to terminate this Lease (i) as of the date specified in the Transfer Notice as the Transfer Date (with respect to subsection (a) hereof), or (ii) on the fifth (5th) day following the date of Landlord's notice (with respect to subsection (b) hereof), except for those provisions that, by their express terms, survive the expiration or earlier termination hereof. If Landlord exercises such option, then Tenant shall have the right to withdraw such Transfer Notice or Intent to Sublease Notice, as applicable, by delivering to Landlord written notice of such election within five (5) days after Landlord's delivery of notice electing to exercise Landlord's option to terminate this Lease. In the event Tenant withdraws the Transfer Notice or Intent to Sublease Notice, as applicable, by delivering to Exercise its option to terminate this Lease shall be deemed to be Landlord's consent to a proposed Transfer.

29.8. If Tenant sublets the Premises or any portion thereof, Tenant hereby immediately and irrevocably assigns to Landlord, as security for Tenant's obligations under this Lease, all rent from any such subletting, and appoints Landlord as assignee and attorney-in-fact for Tenant, and Landlord (or a receiver for Tenant appointed on Landlord's application) may collect such rent and apply it toward Tenant's obligations under this Lease; <u>provided</u> that, until the occurrence of a Default (as defined below) by Tenant, Tenant shall have the right to collect such rent.

30. Subordination and Attornment.

30.1. This Lease shall be subject and subordinate to the lien of any mortgage, deed of trust, or lease in which Landlord is tenant now or hereafter in force against the Building or the Project and to all advances made or hereafter to be made upon the security thereof without the necessity of the execution and delivery of any further instruments on the part of Tenant to effectuate such subordination.

30.2. Notwithstanding the foregoing, Tenant shall execute and deliver upon demand such further instrument or instruments evidencing such subordination of this Lease to the lien of any such mortgage or mortgages or deeds of trust or lease in which Landlord is tenant as may be required by Landlord on such lender's or ground lessor's standard form, as modified to include commercially reasonable comments submitted by Tenant and agreed to by such lender or ground lessor. If any such mortgagee, beneficiary or landlord under a lease wherein Landlord is tenant (each, a "<u>Mortgagee</u>") so elects, however, this Lease shall be deemed prior in lien to any such lease, mortgage, or deed of trust upon or including the Premises regardless of date and Tenant shall execute a statement in writing to such effect at Landlord's request. If Tenant fails to execute any document required from Tenant under this Section within ten (10) days after written request therefor, it shall be a default hereunder, subject to applicable notice and cure periods. Landlord shall use commercially reasonable efforts to obtain a subordination and attornment agreement from any Mortgagee on such Mortgagee's customary form, and Landlord shall use reasonable efforts to have such form modified by Tenant's commercially reasonable comments.

30.3. Upon written request of Landlord and opportunity for Tenant to review, Tenant agrees to execute any Lease amendments not materially altering the terms of this Lease, if required by a Mortgagee incident to the financing of the real property of which the Premises constitute a part.

30.4. In the event any proceedings are brought for foreclosure, or in the event of the exercise of the power of sale under any mortgage or deed of trust made by Landlord covering the Premises, Tenant shall at the election of the purchaser at such foreclosure or sale attorn to the purchaser upon any such foreclosure or sale and recognize such purchaser as Landlord under this Lease, subject to and in accordance with the provisions of any SNDA then in effect.

31. Defaults and Remedies.

31.1. Late payment by Tenant to Landlord of Rent and other sums due shall cause Landlord to incur costs not contemplated by this Lease, the exact amount of which shall be extremely difficult and impracticable to ascertain. Such costs include processing and accounting charges and late charges that may be imposed on Landlord by the terms of any mortgage or trust deed covering the Premises. Therefore, if any installment of Rent due from Tenant is not received by Landlord within three (3) business days after the date such payment is due, Tenant shall pay to Landlord (a) an additional sum of five percent (5%) of the overdue Rent as a late charge plus (b) interest at an annual rate (the "Default Rate") equal to the lesser of (a) twelve percent (12%) and (b) the highest rate permitted by Applicable Laws. The parties agree that this late charge represents a fair and reasonable estimate of the costs that Landlord shall incur by

reason of late payment by Tenant and shall be payable as Additional Rent to Landlord due with the next installment of Rent or within five (5) business days after Landlord's demand, whichever is earlier. Landlord's acceptance of any Additional Rent (including a late charge or any other amount hereunder) shall not be deemed an extension of the date that Rent is due or prevent Landlord from pursuing any other rights or remedies under this Lease, at law or in equity.

31.2. No payment by Tenant or receipt by Landlord of a lesser amount than the Rent payment herein stipulated shall be deemed to be other than on account of the Rent, nor shall any endorsement or statement on any check or any letter accompanying any check or payment as Rent be deemed an accord and satisfaction, and Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such Rent or pursue any other remedy provided in this Lease or in equity or at law. If a dispute shall arise as to any amount or sum of money to be paid by Tenant to Landlord hereunder, Tenant shall have the right to make payment "under protest," such payment shall not be regarded as a voluntary payment, and there shall survive the right on the part of Tenant to institute suit for recovery of the payment paid under protest.

31.3. If Tenant fails to pay any sum of money required to be paid by it hereunder or perform any other act on its part to be performed hereunder, in each case within the applicable cure period (if any) described in <u>Section 31.4</u>, then Landlord may (but shall not be obligated to), without waiving or releasing Tenant from any obligations of Tenant, make such payment or perform such act; <u>provided</u> that such failure by Tenant unreasonably interfered with the use of the Building or the Project by any other tenant or with the efficient operation of the Building or the Project, or resulted or could have resulted in a violation of Applicable Laws or the cancellation of an insurance policy maintained by Landlord. Notwithstanding the foregoing, in the event of an emergency, Landlord shall have the right to enter the Premises and act in accordance with its rights as provided elsewhere in this Lease. In addition to the late charge described in <u>Section 31.1</u>, Tenant shall pay to Landlord as Additional Rent all sums so paid or incurred by Landlord, together with interest at the Default Rate, computed from the date such sums were paid or incurred.

31.4. The occurrence of any one or more of the following events shall constitute a "Default" hereunder by Tenant:

(a) Tenant abandons or vacates the Premises;

(b) Tenant fails to make any payment of Rent, as and when due, or to satisfy its obligations under <u>Article 19</u>, where such failure shall continue for a period of three (3) business days after written notice thereof from Landlord to Tenant;

(c) Tenant fails to observe or perform any obligation or covenant contained herein (other than described in <u>Sections 31.4(a)</u> and <u>31.4(b)</u>) to be performed by Tenant, where such failure continues for a period of thirty (30) days after written notice thereof from Landlord to Tenant; <u>provided</u> that, if the nature of Tenant's default is such that it reasonably requires more than thirty (30) days to cure, Tenant shall not be deemed to be in Default if Tenant commences

such cure within such thirty (30) day period and thereafter diligently prosecutes the same to completion; and <u>provided</u>, further, that such cure is completed no later than sixty (60) days after Tenant's receipt of written notice from Landlord;

(d) Tenant makes an assignment for the benefit of creditors;

(e) A receiver, trustee or custodian is appointed to or does take title, possession or control of all or substantially all of Tenant's assets;

(f) Tenant files a voluntary petition under the United States Bankruptcy Code or any successor statute (as the same may be amended from time to time, the "<u>Bankruptcy Code</u>") or an order for relief is entered against Tenant pursuant to a voluntary or involuntary proceeding commenced under any chapter of the Bankruptcy Code;

(g) Any involuntary petition is filed against Tenant under any chapter of the Bankruptcy Code and is not dismissed within one hundred twenty (120) days;

(h) Tenant fails to deliver an estoppel certificate in accordance with Article 20; or

(i) A default exists under that certain Space License Agreement dated as of the date hereof, by and between Landlord and Tenant, after the expiration of any applicable notice and cure periods;

(j) Tenant's interest in this Lease is attached, executed upon or otherwise judicially seized and such action is not released within one hundred twenty (120) days of the action.

Notices given under this Section shall specify the alleged default and shall demand that Tenant perform the provisions of this Lease or pay the Rent that is in arrears, as the case may be, within the applicable period of time, or quit the Premises. No such notice shall be deemed a forfeiture or a termination of this Lease unless Landlord elects otherwise in such notice.

31.5. In the event of a Default by Tenant, and at any time thereafter, with or without notice or demand and without limiting Landlord in the exercise of any right or remedy that Landlord may have, Landlord has the right to do any or all of the following:

(a) Halt any Tenant Improvements or Landlord's Work and Alterations and order Tenant's contractors, subcontractors, consultants, designers and material suppliers to stop work;

(b) Terminate Tenant's right to possession of the Premises by written notice to Tenant or by any lawful means, in which case Tenant shall immediately surrender possession of the Premises to Landlord. In such event, Landlord shall have the immediate right to re-enter and remove all persons and property, and such property may be removed and stored in a public warehouse or elsewhere at the cost and for the account of Tenant, all without service of notice or resort to legal process and without being deemed guilty of trespass or becoming liable for any loss or damage that may be occasioned thereby; and

(i) Terminate this Lease, in which event Tenant shall immediately surrender possession of the Premises to Landlord. In such event, Landlord shall have the immediate right to re-enter and remove all persons and property, and such property may be removed and stored in a public warehouse or elsewhere at the cost and for the account of Tenant, all without service of notice or resort to legal process and without being deemed guilty of trespass or becoming liable for any loss or damage that may be occasioned thereby. In the event that Landlord shall elect to so terminate this Lease, then Landlord shall be entitled to recover from Tenant all damages incurred by Landlord by reason of Tenant's default, including the sum of:

(A) The worth at the time of award of any unpaid Rent that had accrued at the time of such termination; plus

(B) The costs of restoring the Premises to the condition required under the terms of this Lease; plus

(C) An amount (the "Election Amount") equal to either (A) the positive difference (if any, and measured at the time of such termination) between (1) the then-present value of the total Rent and other benefits that would have accrued to Landlord under this Lease for the remainder of the Term if Tenant had fully complied with the Lease minus (2) the then-present cash rental value of the Premises as determined by Landlord for what would be the then-unexpired Term if the Lease remained in effect, computed using the discount rate of the Federal Reserve Bank of San Francisco at the time of the award plus one (1) percentage point (the "Discount Rate") or (B) twelve (12) months (or such lesser number of months as may then be remaining in the Term) of Base Rent and Additional Rent at the rate last payable by Tenant pursuant to this Lease, in either case as Landlord specifies in such election. Landlord and Tenant agree that the Election Amount 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; and that the Election Amount is not a penalty.

As used in <u>Section 31.5(c)(i)</u>, "worth at the time of award" shall be computed by allowing interest at the Default Rate.

31.6. In addition to any other remedies available to Landlord at law or in equity and under this Lease (other than Section 31.5(b)(i)), Landlord may continue this Lease in effect after Tenant's Default or abandonment and recover Rent as it becomes due. In addition, Landlord shall not be liable in any way whatsoever for its failure or refusal to relet the Premises, unless or to the extent required by Applicable Law. For purposes of this Section, the following acts by Landlord will not constitute the termination of Tenant's right to possession of the Premises:

(a) Acts of maintenance or preservation or efforts to relet the Premises, including alterations, remodeling, redecorating, repairs, replacements or painting as Landlord shall consider advisable for the purpose of reletting the Premises or any part thereof; or

(b) The appointment of a receiver upon the initiative of Landlord to protect Landlord's interest under this Lease or in the Premises.

Notwithstanding the foregoing, in the event of a Default by Tenant, Landlord may elect at any time to terminate this Lease and to recover damages to which Landlord is entitled.

31.7. If Landlord does not elect to terminate this Lease as provided in <u>Section 31.5</u>, then Landlord may, from time to time, recover all Rent as it becomes due under this Lease. At any time thereafter, Landlord may elect to terminate this Lease and to recover damages to which Landlord is entitled.

31.8. In the event Landlord elects to terminate this Lease and relet the Premises, Landlord may execute any new lease in its own name. Tenant hereunder shall have no right or authority whatsoever to collect any Rent from such tenant. The proceeds of any such releting shall be applied as follows:

(a) First, to the payment of any indebtedness other than Rent due hereunder from Tenant to Landlord, including storage charges or brokerage commissions owing from Tenant to Landlord as the result of such reletting;

(b) Second, to the payment of the costs and expenses of reletting the Premises, including (i) alterations and repairs that Landlord deems reasonably necessary and advisable and (ii) reasonable attorneys' fees, charges and disbursements incurred by Landlord in connection with the retaking of the Premises and such reletting;

(c) Third, to the payment of Rent and other charges due and unpaid hereunder; and

(d) Fourth, to the payment of future Rent and other damages payable by Tenant under this Lease.

31.9. All of Landlord's rights, options and remedies hereunder shall be construed and held to be nonexclusive and cumulative. Landlord shall have the right to pursue any one or all of such remedies, or any other remedy or relief that may be provided by Applicable Laws, whether or not stated in this Lease. No waiver of any default of Tenant hereunder shall be implied from any acceptance by Landlord of any Rent or other payments due hereunder or any omission by Landlord to take any action on account of such default if such default persists or is repeated, and no express waiver shall affect defaults other than as specified in such waiver. Notwithstanding any provision of this Lease to the contrary, Landlord shall not be required to mitigate its damages with respect to any default by Tenant, unless or to the extent required by Applicable Law. Any obligation imposed by Applicable Law upon Landlord to relet the Premises after any termination

of this Lease shall be subject to the reasonable requirements of Landlord to (a) lease to high quality tenants on such terms as Landlord may from time to time deem appropriate in its discretion and (b) develop the Project in a harmonious manner with a mix of uses, tenants, floor areas, terms of tenancies, etc., as determined by Landlord. Landlord shall not be obligated to relet the Premises to (y) any Tenant's Affiliate or (z) any party (i) unacceptable to a Lender, (ii) that requires Landlord to make improvements to or re-demise the Premises, (iii) that desires to change the Permitted Use, (iv) that desires to lease the Premises for more or less than the remaining Term or (v) to whom Landlord or an affiliate of Landlord may desire to lease other available space in the Project or at another property owned by Landlord or an affiliate of Landlord.

31.10. Landlord's termination of (a) this Lease or (b) Tenant's right to possession of the Premises shall not relieve Tenant of any liability to Landlord that has previously accrued or that shall arise based upon events that occurred prior to the later to occur of (y) the date of Lease termination and (z) the date Tenant surrenders possession of the Premises.

31.11. To the extent permitted by Applicable Laws, Tenant waives any and all rights of redemption granted by or under any present or future Applicable Laws if Tenant is evicted or dispossessed for any cause, or if Landlord obtains possession of the Premises due to Tenant's default hereunder or otherwise.

31.12. Landlord shall not be in default or liable for damages under this Lease unless Landlord fails to perform obligations required of Landlord within a reasonable time, but in no event shall such failure continue for more than thirty (30) days after written notice from Tenant specifying the nature of Landlord's failure; provided, however, that if the nature of Landlord's obligation is such that more than thirty (30) days are required for its performance, then Landlord shall not be in default if Landlord commences performance within such thirty (30) day period and thereafter diligently prosecutes the same to completion. In no event shall Tenant have the right to terminate or cancel this Lease or to withhold or abate rent or to set off any Claims against Rent as a result of any default or breach by Landlord of any of its covenants, obligations, representations, warranties or promises hereunder, except as may otherwise be expressly set forth in this Lease.

31.13. In the event of any default by Landlord, Tenant shall give notice by registered or certified mail or overnight delivery with a reputable overnight delivery service to any (a) beneficiary of a deed of trust or (b) mortgagee under a mortgage covering the Premises, the Building or the Project and to any landlord of any lease of land upon or within which the Premises, the Building or the Project is located, and shall offer such beneficiary, mortgagee or landlord a reasonable opportunity to cure the default, including time to obtain possession of the Building or the Project by power of sale or a judicial action if such should prove necessary to effect a cure; provided that Landlord shall furnish to Tenant in writing, the names and addresses of all such persons who are to receive such notices, and any updates thereto throughout the Term of this Lease.

32. <u>Bankruptcy</u>. In the event a debtor, trustee or debtor in possession under the Bankruptcy Code, or another person with similar rights, duties and powers under any other Applicable Laws, proposes to cure any default under this Lease or to assume or assign this Lease and is obliged to provide adequate assurance to Landlord that (a) a default shall be cured, (b) Landlord shall be compensated for its damages arising from any breach of this Lease and (c) future performance of Tenant's obligations under this Lease shall occur, then such adequate assurances shall include any or all of the following, as designated by Landlord in its sole and absolute discretion:

32.1. Those acts specified in the Bankruptcy Code or other Applicable Laws as included within the meaning of "adequate assurance," even if this Lease does not concern a shopping center or other facility described in such Applicable Laws;

32.2. A prompt cash payment to compensate Landlord for any monetary defaults or actual damages arising directly from a breach of this Lease;

32.3. A cash deposit in an amount at least equal to the then-current amount of the Security Deposit; or

32.4. The assumption or assignment of all of Tenant's interest and obligations under this Lease.

33. Brokers.

33.1. Tenant represents and warrants that it has had no dealings with any real estate broker or agent in connection with the negotiation of this Lease other than Cushman and Wakefield of Massachusetts, Inc. ("<u>Broker</u>"), and that it knows of no other real estate broker or agent that is or might be entitled to a commission in connection with this Lease. Landlord shall compensate Broker in relation to this Lease pursuant to a separate agreement between Landlord and Broker.

33.2. Tenant represents and warrants that no broker or agent has made any representation or warranty relied upon by Tenant in Tenant's decision to enter into this Lease, other than as contained in this Lease.

33.3. Tenant acknowledges and agrees that the employment of brokers by Landlord is for the purpose of solicitation of offers of leases from prospective tenants and that no authority is granted to any broker to furnish any representation (written or oral) or warranty from Landlord unless expressly contained within this Lease. Landlord is executing this Lease in reliance upon Tenant's representations, warranties and agreements contained within <u>Sections 33.1</u> and <u>33.2</u>.

33.4. Tenant agrees to indemnify, save, defend (at Landlord's option and with counsel reasonably acceptable to Landlord) and hold the Landlord Indemnitees harmless from any and all cost or liability for compensation claimed by any broker or agent, other than Broker, employed or engaged by Tenant or claiming to have been employed or engaged by Tenant. Landlord agrees to indemnify, save, defend (at Tenant's option and with counsel reasonably acceptable to Tenant) and hold the Tenant harmless from any and all cost or liability for compensation claimed by any broker or agent employed or engaged by Landlord or claiming to have been employed or engaged by Landlord

34. <u>Definition of Landlord</u>. With regard to obligations imposed upon Landlord pursuant to this Lease, the term "Landlord," as used in this Lease, shall refer only to Landlord or Landlord's then-current successor-in-interest. In the event of any transfer, assignment or conveyance of Landlord's interest in this Lease or in Landlord's fee title to or leasehold interest in the Property, as applicable, Landlord herein named (and in case of any subsequent transfers or conveyances, the subsequent Landlord) shall be automatically freed and relieved, from and after the date of such transfer, assignment or conveyance, from all liability for the performance of any covenants or obligations contained in this Lease thereafter to be performed by Landlord and, without further agreement, the transferee, assignee or conveyee of Landlord's in this Lease or in Landlord's fee title to or leasehold interest in the Property, as applicable, shall be deemed to have assumed and agreed to observe and perform any and all covenants and obligations of Landlord hereunder during the tenure of its interest in the Lease or the Property. Landlord or any subsequent Landlord may transfer its interest in the Premises or this Lease without Tenant's consent; provided, however, Landlord shall notify Tenant of any such transfer and include contact information and payment information for such transferee. Subject to the provisions of <u>Article 11</u> hereof, Tenant shall not be liable, nor shall Tenant be deemed in default, for any Rent or Security Deposit paid to Landlord and not transferred or credited to Landlord's transferee.

35. Limitation of Landlord's Liability.

35.1. If Landlord is in default under this Lease and, as a consequence, Tenant recovers a monetary judgment against Landlord, the judgment shall be satisfied only out of (a) the proceeds of sale received on execution of the judgment and levy against the right, title and interest of Landlord in the Building and the Project, (b) rent or other income from such real property receivable by Landlord or (c) the consideration received by Landlord from the sale, financing, refinancing or other disposition of all or any part of Landlord's right, title or interest in the Building or the Project.

35.2. Neither Landlord nor any of its affiliates, nor any of their respective partners, shareholders, directors, officers, employees, members or agents shall be personally liable for Landlord's obligations or any deficiency under this Lease, and service of process shall not be made against any shareholder, director, officer, employee or agent of Landlord or any of Landlord's affiliates. No partner, shareholder, director, officer, employee, member or agent of Landlord or any of its affiliates shall be sued or named as a party in any suit or action, and service of process shall not be made against any partner or member of Landlord except as may be necessary to secure jurisdiction of the partnership, joint venture or limited liability company, as applicable. No partner, shareholder, director, officer, employee, member or agent of Landlord or any of its affiliates shall be required to answer or otherwise plead to any service of process, and no judgment shall be taken or writ of execution levied against any partner, shareholder, director, officer, employee, member or agent of Landlord or any of its affiliates.

35.3. Each of the covenants and agreements of this Article shall be applicable to any covenant or agreement either expressly contained in this Lease or imposed by Applicable Laws and shall survive the expiration or earlier termination of this Lease.

36. Joint and Several Obligations. If more than one person or entity executes this Lease as Tenant, then:

36.1. Each of them is jointly and severally liable for the keeping, observing and performing of all of the terms, covenants, conditions, provisions and agreements of this Lease to be kept, observed or performed by Tenant, and such terms, covenants, conditions, provisions and agreements shall be binding with the same force and effect upon each and all of the persons executing this Agreement as Tenant; and

36.2. The term "<u>Tenant</u>," as used in this Lease, shall mean and include each of them, jointly and severally. The act of, notice from, notice to, refund to, or signature of any one or more of them with respect to the tenancy under this Lease, including any renewal, extension, expiration, termination or modification of this Lease, shall be binding upon each and all of the persons executing this Lease as Tenant with the same force and effect as if each and all of them had so acted, so given or received such notice or refund, or so signed.

37. <u>Representations</u>. Tenant guarantees, warrants and represents that (a) Tenant is duly incorporated or otherwise established or formed and validly existing under the laws of its state of incorporation, establishment or formation, (b) Tenant has and is duly qualified to do business in the state in which the Property is located, (c) Tenant has full corporate, partnership, trust, association or other appropriate power and authority to enter into this Lease and to perform all Tenant's obligations hereunder, (d) each person (and all of the persons if more than one signs) signing this Lease on behalf of Tenant is duly and validly authorized to do so and (e) neither (i) the execution, delivery or performance of this Lease nor (ii) the consummation of the transactions contemplated hereby will violate or conflict with any provision of documents or instruments under which Tenant is constituted or to which Tenant is a party. In addition, Tenant guarantees, warrants and represents that none of (x) it, (y) its affiliates or partners nor (z) to the best of its knowledge, its members, shareholders or other equity owners or any of their respective employees, officers, directors, representatives or agents is a person or entity with whom U.S. persons or entities are restricted from doing business under regulations of the Office of Foreign Asset Control ("<u>OFAC</u>") of the Department of the Treasury (including those named on OFAC's Specially Designated and Blocked Persons 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) or other similar governmental action.

38. <u>Confidentiality</u>. Tenant shall keep the terms and conditions of this Lease and any information provided to Tenant or its employees, agents or contractors pursuant to <u>Article 9</u> confidential and shall not (a) disclose to any third party any terms or conditions of this Lease or any other Lease-related document (including subleases, assignments, work letters, construction contracts, letters of credit, subordination agreements, non-disturbance agreements, brokerage

agreements or estoppels) or (b) provide to any third party an original or copy of this Lease (or any Lease-related document). Landlord shall not release to any third party any non-public financial information or other non-public information that Tenant makes accessible to Landlord or Landlord's employees regarding Tenant's ownership structure, its business operations, research or financial condition, which Tenant has specified in writing as confidential. Notwithstanding the foregoing, confidential information under this Section may be released by Landlord or Tenant under the following circumstances: (x) if required by Applicable Laws or in any judicial proceeding; <u>provided</u> that the releasing party has given the other party reasonable notice of such requirement, if feasible, (y) to a party's attorneys, accountants, brokers, lenders, potential lenders, potential purchasers and other bona fide consultants or advisers (with respect to this Lease only) or to actual or potential investors or business partners; <u>provided</u> such third parties agree to be bound by this Section, or (z) to bona fide prospective assignees or subtenants of this Lease; <u>provided</u> they agree in writing to be bound by this Section. Landlord's obligations under this paragraph shall not be applicable to information that is or becomes generally known to, or ascertainable by, the public or Landlord, other than as a result of an unauthorized disclosure by Landlord or by persons or entities to whom Landlord has made an unauthorized disclosure. Landlord agrees that a breach of such confidentiality may cause Tenant harm for which recovery of damages would be an inadequate remedy, and in such event, Tenant shall be entitled to seek injunctive relief, as well as such further relief as may be granted by a court of competent jurisdiction, but excluding special, punitive, exemplary, indirect or consequential damages, including lost profits.

39. <u>Notices</u>. Except as otherwise stated in this Lease, any notice, consent, demand, invoice, statement or other communication required or permitted to be given hereunder shall be in writing and shall be given by (a) personal delivery, (b) overnight delivery with a reputable international overnight delivery service, such as FedEx, or (c) facsimile or email transmission, so long as such transmission is followed within one (1) business day by delivery utilizing one of the methods described in <u>Subsection 39(a)</u> or (b). Any such notice, consent, demand, invoice, statement or other communication shall be deemed delivered (x) upon receipt, if given in accordance with <u>Subsection 39(a)</u>; (y) one (1) business day after deposit with a reputable international overnight delivery service, if given in accordance with <u>Subsection 39(b)</u>; or (z) upon transmission, if given in accordance with <u>Subsection 39(c)</u>. Except as otherwise stated in this Lease, any notice, consent, demand, invoice, statement or other communication required or permitted to be given pursuant to this Lease shall be addressed to Tenant at the Premises, or to Landlord or Tenant at the addresses shown in <u>Sections 2.9 and 2.10</u> or <u>2.11</u>, respectively. Either party may, by notice to the other given pursuant to this Section, specify additional or different addresses for notice purposes.

40. Miscellaneous.

40.1. Landlord reserves the right to change the name of the Building or the Project in its sole discretion.

40.2. To induce Landlord to enter into this Lease, Tenant agrees that it shall promptly furnish to Landlord, from time to time, upon Landlord's written request, the most recent year-end

unconsolidated financial statements reflecting Tenant's current financial condition audited by a nationally recognized accounting firm. Tenant shall, within ninety (90) days after the end of Tenant's financial year, furnish Landlord with a certified copy of Tenant's year-end unconsolidated financial statements for the previous year audited by a nationally recognized accounting firm. Tenant represents and warrants that all financial statements, records and information furnished by Tenant to Landlord in connection with this Lease are true, correct and complete in all respects. If audited financials are not otherwise prepared, unaudited financials complying with generally accepted accounting principles and certified by the chief financial officer of Tenant as true, correct and complete in all respects shall suffice for purposes of this Section. If Tenant fails to deliver to Landlord any financial statement within the time period required under this Section, then Tenant shall be required to pay to Landlord an administrative fee equal to Five Hundred Dollars (\$500) within five (5) business days after receiving written notice from Landlord advising Tenant of such failure (provided, however, that Landlord's acceptance of such fee shall not prevent Landlord from pursuing any other rights or remedies under this Lease, at law or in equity). The provisions of this Section shall not apply at any time while Tenant is a corporation whose shares are traded on any nationally recognized stock exchange.

40.3. Submission of this instrument for examination or signature by Tenant does not constitute a reservation of or option for a lease, and shall not be effective as a lease or otherwise until execution by and delivery to both Landlord and Tenant.

40.4. The terms of this Lease are intended by the parties as a final, complete and exclusive expression of their agreement with respect to the terms that are included herein, and may not be contradicted or supplemented by evidence of any other prior or contemporaneous agreement.

40.5. Upon the request of either Landlord or Tenant, the parties shall execute a document in recordable form containing only such information as is necessary to constitute a Notice of Lease under Massachusetts law. All costs of preparing and recording such notice shall be borne by the requesting party. Simultaneously with the execution of any Notice of Lease as provided above, Tenant shall execute a recordable termination of such Notice of Lease (the "Lease Termination Notice"), which Lease Termination Notice shall be held in escrow by Landlord and may be released from escrow and recorded by Landlord after the expiration or earlier termination of this Lease. Neither party shall record this Lease.

40.6. Where applicable in this Lease, the singular includes the plural and the masculine or neuter includes the masculine, feminine and neuter. The words "include," "includes," "included" and "including" mean "include," etc., without limitation." The word "shall" is mandatory and the word "may" is permissive. The section headings of this Lease are not a part of this Lease and shall have no effect upon the construction or interpretation of any part of this Lease. Landlord and Tenant have each participated in the drafting and negotiation of this Lease, and the language in all parts of this Lease shall be in all cases construed as a whole according to its fair meaning and not strictly for or against either Landlord or Tenant.

40.7. Except as otherwise expressly set forth in this Lease, each party shall pay its own costs and expenses incurred in connection with this Lease and such party's performance under this Lease; <u>provided</u> that, if either party commences an action, proceeding, demand, claim, action, cause of action or suit against the other party arising out of or in connection with this Lease, then the substantially prevailing party shall be reimbursed by the other party for all reasonable costs and expenses, including reasonable attorneys' fees and expenses, incurred by the substantially prevailing party in such action, proceeding, demand, claim, action, cause of action, suit or appeal is voluntarily withdrawn or dismissed).

40.8. Time is of the essence with respect to the performance of every provision of this Lease.

40.9. Each provision of this Lease performable by Tenant shall be deemed both a covenant and a condition.

40.10. Notwithstanding anything to the contrary contained in this Lease, Tenant's obligations under this Lease are independent and shall not be conditioned upon performance by Landlord.

40.11. Whenever consent or approval of either party is required, that party shall not unreasonably withhold, condition or delay such consent or approval, except as may be expressly set forth to the contrary.

40.12. Any provision of this Lease that shall prove to be invalid, void or illegal shall in no way affect, impair or invalidate any other provision hereof, and all other provisions of this Lease shall remain in full force and effect and shall be interpreted as if the invalid, void or illegal provision did not exist.

40.13. Each of the covenants, conditions and agreements herein contained shall inure to the benefit of and shall apply to and be binding upon the parties hereto and their respective heirs; legatees; devisees; executors; administrators; and permitted successors and assigns. This Lease is for the sole benefit of the parties and their respective heirs, legatees, devisees, executors, administrators and permitted successors and assigns, and nothing in this Lease shall give or be construed to give any other person or entity any legal or equitable rights. Nothing in this Section shall in any way alter the provisions of this Lease restricting assignment or subletting.

40.14. This Lease shall be governed by, construed and enforced in accordance with the laws of the state in which the Premises are located, without regard to such state's conflict of law principles.

40.15. Tenant guarantees, warrants and represents that the individual or individuals signing this Lease have the power, authority and legal capacity to sign this Lease on behalf of and to bind all entities, corporations, partnerships, limited liability companies, joint venturers or other organizations and entities on whose behalf such individual or individuals have signed.

40.16. This Lease may be executed in one or more counterparts, each of which, when taken together, shall constitute one and the same document.

40.17. No provision of this Lease may be modified, amended or supplemented except by an agreement in writing signed by Landlord and Tenant.

40.18. No waiver of any term, covenant or condition of this Lease shall be binding upon Landlord unless executed in writing by Landlord. The waiver by Landlord of any breach or default of any term, covenant or condition contained in this Lease shall not be deemed to be a waiver of any preceding or subsequent breach or default of such term, covenant or condition or any other term, covenant or condition of this Lease.

40.19. To the extent permitted by Applicable Laws, the parties waive trial by jury in any action, proceeding or counterclaim brought by the other party hereto related to matters arising out of or in any way connected with this Lease; the relationship between Landlord and Tenant; Tenant's use or occupancy of the Premises; or any claim of injury or damage related to this Lease or the Premises.

41. Rooftop Installation Area.

41.1. Tenant shall have the right, subject to Landlord's prior written approval (not to be unreasonably withheld, conditioned or delayed), to use certain portions of the Building roof in a location designated by Landlord (the "<u>Rooftop Installation Area</u>") solely to operate, maintain, repair and replace rooftop antennae, mechanical equipment, communications antennas and other equipment installed by Tenant in the Rooftop Installation Area in accordance with this Article ("<u>Tenant's Rooftop Equipment</u>"). Tenant's Rooftop Equipment shall be only for Tenant's use of the Premises for the Permitted Use. The parties acknowledge that as of the Execution Date, Tenant does not have any Tenant's Rooftop Equipment requiring the designation of a Rooftop Installation Area.

41.2. Tenant shall install Tenant's Rooftop Equipment at its sole cost and expense, at such times and in such manner as Landlord may reasonably designate, and in accordance with this Article and the applicable provisions of this Lease regarding Alterations. Tenant's Rooftop Equipment and the installation thereof shall be subject to Landlord's prior written approval, which approval shall not be unreasonably withheld. Among other reasons, Landlord may withhold approval if the installation or operation of Tenant's Rooftop Equipment could reasonably be expected to damage the structural integrity of the Building or to transmit vibrations or noise or cause other adverse effects beyond the Premises to an extent not customary in first class laboratory buildings, unless Tenant implements measures that are acceptable to Landlord in its reasonable discretion to avoid any such damage or transmission.

41.3. Tenant shall comply with any roof or roof-related warranties. Tenant shall obtain a letter from Landlord's roofing contractor within thirty (30) days after completion of any Tenant

work on the rooftop stating that such work did not affect any such warranties. Tenant, at its sole cost and expense, shall inspect the Rooftop Installation Area at least annually, and correct any loose bolts, fittings or other appurtenances and repair any damage to the roof caused by the installation or operation of Tenant's Rooftop Equipment. Tenant shall not permit the installation, maintenance or operation of Tenant's Rooftop Equipment to violate any Applicable Laws or constitute a nuisance. Tenant shall pay Landlord within thirty (30) days after demand (a) all applicable taxes, charges, fees or impositions imposed on Landlord by Governmental Authorities as the result of Tenant's use of the Rooftop Installation Areas in excess of those for which Landlord would otherwise be responsible for the use or installation of Tenant's Rooftop Equipment and (b) the amount of any increase in Landlord's insurance premiums as a result of the installation of Tenant's Rooftop Equipment. Upon Tenant's Rooftop Equipment caused by any such tenants' equipment installed after the applicable piece of Tenant's Rooftop Equipment; provided, however, that Landlord shall not be required to request that such tenants waive their rights under their respective leases.

41.4. If Tenant's Equipment (a) causes physical damage to the structural integrity of the Building, (b) interferes with any telecommunications, mechanical or other systems located at or near or servicing the Building or the Project that were installed prior to the installation of Tenant's Rooftop Equipment, (c) interferes with any other service provided to other tenants in the Building or the Project by rooftop or penthouse installations that were installed prior to the installation of Tenant's Rooftop Equipment or (d) interferes with any other tenants' business, in each case in excess of that permissible under Federal Communications Commission regulations, then Tenant shall cooperate with Landlord to determine the source of the damage or interference and promptly repair such damage and eliminate such interference, in each case at Tenant's sole cost and expense, within thirty (30) days after receipt of notice of such damage or interference (which notice may be oral; provided that Landlord also delivers to Tenant written notice of such damage or interference within twenty-four (24) hours after providing oral notice).

41.5. Landlord reserves the right to cause Tenant to relocate Tenant's Rooftop Equipment to comparably functional space on the roof or in the penthouse of the Building by giving Tenant prior written notice thereof. Landlord agrees to pay the reasonable costs thereof. Tenant shall arrange for the relocation of Tenant's Rooftop Equipment within sixty (60) days after receipt of Landlord's notification of such relocation. In the event Tenant fails to arrange for relocation within such sixty (60)-day period, Landlord shall have the right to arrange for the relocation of Tenant's Rooftop Equipment in a manner that does not unnecessarily interrupt or interfere with Tenant's use of the Premises for the Permitted Use.

42. <u>Option to Extend Term</u>. Tenant shall have the option ("<u>Option</u>") to extend the Term by three (3) years as to the entire Premises (and no less than the entire Premises) upon the following terms and conditions. The Option is personal to Intellia Therapeutics, Inc., and may not be exercised by any party that becomes the tenant under this Lease, unless such party became the tenant as a result of an Exempt Transfer. Any extension of the Term pursuant to the Option shall be on all the same terms and conditions as this Lease, except as follows:

42.1. Base Rent at the commencement of the Option term shall equal the greater of (a) the then-current Base Rent and (b) the then-current fair market value for comparable Class A office and laboratory space in the Mass Ave. Corridor submarket of comparable age, quality, level of finish and proximity to amenities and public transit ("FMV"), and shall be further increased on each annual anniversary of the Option term commencement date by three percent (3%). Tenant may, no more than thirteen (13) months prior to the date the Term is then scheduled to expire, request Landlord's estimate of the FMV for the Option term. Landlord shall, within fifteen (15) days after receipt of such request, give Tenant a written proposal of such FMV. If Tenant gives written notice to exercise the Option, such notice shall specify whether Tenant accepts Landlord's proposed estimate of FMV. If Tenant does not accept the FMV, then the parties shall endeavor to agree upon the FMV, taking into account all relevant factors, including (a) the size of the Premises, (b) the length of the Option term, (c) rent in comparable buildings in the relevant submarket, including concessions offered to new tenants, such as free rent, tenant improvement allowances and moving allowances, (d) Tenant's creditworthiness and (e) the quality and location of the Building and the Project. In the event that the parties are unable to agree upon the FMV within thirty (30) days after Tenant notifies Landlord that Tenant is exercising the Option, then either party may request that the same be determined as follows: a senior officer of a nationally recognized leasing brokerage firm with local knowledge of the Mass Ave. Corridor laboratory/research and development leasing submarket (the "Baseball Arbitrator") shall be selected and paid for jointly by Landlord and Tenant. If Landlord and Tenant are unable to agree upon the Baseball Arbitrator, then the same shall be designated by the local chapter of the Judicial Arbitration and Mediation Services or any successor organization thereto (the "JAMS"). The Baseball Arbitrator selected by the parties or designated by JAMS shall (y) have at least ten (10) years' experience in the leasing of laboratory/research and development space in the Mass Ave. Corridor submarket and (z) not have been employed or retained by either Landlord or Tenant or any affiliate of either for a period of at least ten (10) years prior to appointment pursuant hereto. Each of Landlord and Tenant shall submit to the Baseball Arbitrator and to the other party its determination of the FMV. The Baseball Arbitrator shall grant to Landlord and Tenant a hearing and the right to submit evidence. The Baseball Arbitrator shall determine which of the two (2) FMV determinations more closely represents the actual FMV. The arbitrator may not select any other FMV for the Premises other than one submitted by Landlord or Tenant. The FMV selected by the Baseball Arbitrator shall be binding upon Landlord and Tenant and shall serve as the basis for determination of Base Rent payable for the Option term. If, as of the commencement date of the Option term, the amount of Base Rent payable during the Option term shall not have been determined, then, pending such determination, Tenant shall pay Base Rent equal to the Base Rent payable with respect to the last year of the then-current Term. After the final determination of Base Rent payable for the Option term, the parties shall promptly execute a written amendment to this Lease specifying the amount of Base Rent to be paid during the Option term. Any failure of the parties to execute such amendment shall not affect the validity of the FMV determined pursuant to this Section.

42.2. The Option is not assignable separate and apart from this Lease.

42.3. The Option is conditional upon Tenant giving Landlord written notice of its election to exercise the Option at least twelve (12) months prior to the end of the expiration of the then-current Term. Time shall be of the essence as to Tenant's exercise of the Option. Tenant assumes full responsibility for maintaining a record of the deadlines to exercise the Option. Tenant acknowledges that it would be inequitable to require Landlord to accept any exercise of the Option after the date provided for in this Section.

42.4. Notwithstanding anything contained in this Article to the contrary, Tenant shall not have the right to exercise the Option:

(a) During the time commencing from the date Landlord delivers to Tenant a written notice that Tenant is in default under any provisions of this Lease and continuing until Tenant has cured the specified default to Landlord's reasonable satisfaction; or

(b) At any time after any Default as described in <u>Article 31</u> of the Lease (<u>provided</u>, however, that, for purposes of this <u>Section 42.4(b)</u>, Landlord shall not be required to provide Tenant with notice of such Default) and continuing until Tenant cures any such Default, if such Default is susceptible to being cured; or

(c) Tenant has assigned this Lease prior to the exercise of the Option or at the commencement of the Option term (except an assignment that is an Exempt Transfer); or

(d) Tenant has subleased more than twenty percent (20%) of the Premises as of the exercise of the Option or at the commencement of the Option term (unless such sublease constituted an Exempt Transfer); or

(e) In the event that Tenant has defaulted in the performance of any monetary obligations or material non-monetary obligations under this Lease two (2) or more times during the twelve (12)-month period immediately prior to the date that Tenant intends to exercise the Option, whether or not Tenant has cured such defaults.

42.5. The period of time within which Tenant may exercise the Option shall not be extended or enlarged by reason of Tenant's inability to exercise such Option because of the provisions of <u>Section 42.4</u>.

42.6. All of Tenant's rights under the provisions of the Option shall terminate and be of no further force or effect even after Tenant's due and timely exercise of the Option if, after such exercise, but prior to the commencement date of the new term, (a) Tenant fails to pay to Landlord a monetary obligation of Tenant for a period of twenty (20) days after written notice from Landlord to Tenant or (b) Tenant fails to commence to cure a default (other than a monetary default) within thirty (30) days after the date Landlord gives notice to Tenant of such default.

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⁶⁹

IN WITNESS WHEREOF, the parties hereto have executed this Lease as a sealed Massachusetts instrument as of the date first above written.

LANDLORD:

BMR-SIDNEY RESEARCH CAMPUS LLC, a Delaware limited liability company

/s/ William Kane

By:	
Name:	William Kane
Title:	Senior Vice President, Boston Market Lead

TENANT:

INTELLIA THERAPEUTICS, INC., a Delaware corporation

By:	
Name:	
Title:	

IN WITNESS WHEREOF, the parties hereto have executed this Lease as a sealed Massachusetts instrument as of the date first above written.

LANDLORD:

BMR-SIDNEY RESEARCH CAMPUS LLC, a Delaware limited liability company

By:	
Name:	
Title:	

TENANT:

INTELLIA THERAPEUTICS, INC., a Delaware corporation

/s/ Nessan Bermingham

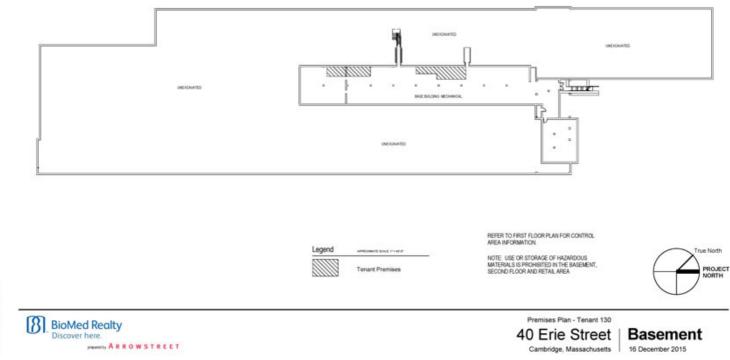
By:	
Name:	Nessan Bermingham
Title:	President & CEO

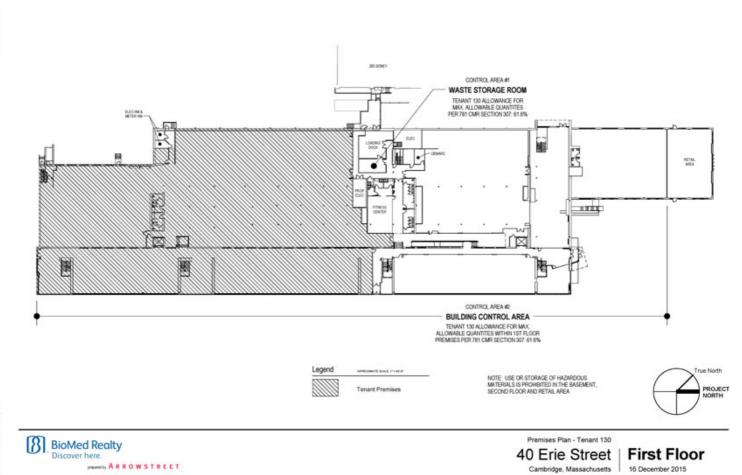
EXHIBIT A

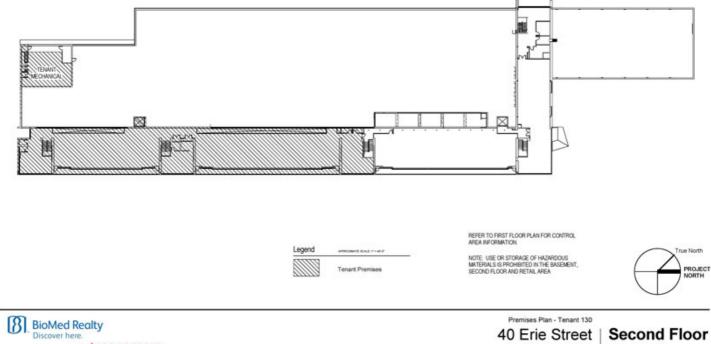
PREMISES

[See attached]

A-1







prevently ARROWSTREET

Cambridge, Massachusetts 16 December 2015



EXHIBIT B

WORK LETTER

This Work Letter (this "<u>Work Letter</u>") is made and entered into as of the 6th day of January, 2016, by and between BMR-SIDNEY RESEARCH CAMPUS LLC, a Delaware limited liability company ("<u>Landlord</u>"), and INTELLIA THERAPEUTICS, INC., a Delaware corporation ("<u>Tenant</u>"), and is attached to and made a part of that certain Lease dated as of January 6, 2016 (as the same may be amended, amended and restated, supplemented or otherwise modified from time to time, the "<u>Lease</u>"), by and between Landlord and Tenant for the Premises located at 40 Erie Street, Cambridge, Massachusetts. All capitalized terms used but not otherwise defined herein shall have the meanings given them in the Lease.

1. General Requirements.

1.1. Authorized Representatives.

(a) Landlord designates, as Landlord's authorized representative ("<u>Landlord's Authorized Representative</u>"), (i) Salvatore Zinno as the person authorized to initial plans, drawings, approvals and to sign change orders pursuant to this Work Letter and (ii) an officer of Landlord as the person authorized to sign any amendments to this Work Letter or the Lease. Tenant shall not be obligated to respond to or act upon any such item until such item has been initialed or signed (as applicable) by the appropriate Landlord's Authorized Representative. Landlord may change either Landlord's Authorized Representative upon one (1) business day's prior written notice to Tenant.

(b) Tenant designates Nicole Ouellette, Jose Rivera and Rick Donovan ("<u>Tenant's Authorized Representative</u>") as the persons authorized to initial and sign all plans, drawings, change orders and approvals pursuant to this Work Letter. Landlord shall not be obligated to respond to or act upon any such item until such item has been initialed or signed (as applicable) by one of Tenant's Authorized Representative. Tenant may change Tenant's Authorized Representative upon one (1) business day's prior written notice to Landlord.

1.2. <u>Schedule</u>. The schedule for design and development of the Tenant Improvements, including the time periods for preparation and review of construction documents, approvals and performance, shall be in accordance with the schedule attached hereto as <u>Attachment 1</u> (the "<u>Schedule</u>"). The Schedule shall be subject to adjustment as mutually agreed upon in writing by the parties, or as otherwise provided in this Work Letter.

1.3. <u>Landlord's Architects, Contractors and Consultants</u>. The architect, engineering consultants, design team, general contractor and subcontractors responsible for the construction of the Tenant Improvements shall be selected by Landlord. Landlord and Tenant acknowledge that the general contractor for the Tenant Improvements will be The Richmond Group and the architect for the Tenant Improvements will be Arrowstreet Inc. Landlord acknowledges that the construction contract for the Tenant Improvements shall be on an "open book" basis with a guaranteed maximum price for the cost of such construction, subject to change orders and other

customary adjustments. Notwithstanding the foregoing, Tenant shall have the right to review invoices and requisitions related to the Tenant Improvements upon Tenant's request, but Tenant shall not have the right to approve such information or any other documentation available to Landlord under the construction contract.

2. Tenant Improvements. All Tenant Improvements shall be performed by Landlord's contractor, at Tenant's sole cost and expense (subject to Landlord's obligations with respect to any portion of the TI Allowance used by Landlord in completing the Tenant Improvements) and in substantial accordance with the Approved Plans (as defined below), the Lease and this Work Letter. To the extent that the total projected cost of the Tenant Improvements (as projected by Landlord) exceeds the TI Allowance (such excess, the "Excess TI Costs"), Tenant shall advance to Landlord any Excess TI Costs within ten (10) days after receipt of an invoice therefor. The parties agree that the Excess TI Costs shall be advanced in three (3) tranches pursuant to invoices issued by Landlord; the first tranche shall be in an amount equal to 25% of the Excess TI Costs and shall be advanced before Landlord commences the Tenant Improvements, the second tranche shall be in an amount equal to 50% of the Excess TI Costs and shall be advanced when the Tenant Improvements are approximately 50% complete; the third tranche shall be in an amount equal to 25% of the Excess TI Costs and shall be advanced when the Tenant Improvements are approximately 75% complete. If Landlord is delayed in commencing the Tenant Improvements due to Tenant's failure to timely pay the Excess TI Costs to Landlord, Landlord shall be entitled to a day-for-day extension to achieve Substantial Completion of the Tenant Improvements for the period of such delay. If the actual Excess TI Costs are less than the Excess TI Costs paid by Tenant to Landlord, Landlord shall credit Tenant with the overage paid by Tenant against Tenant's Rent obligations, beginning after Landlord has completed the final accounting for the Tenant Improvements. If the cost of the Tenant Improvements (as projected by Landlord) increases over Landlord's initial projection and said increase has not been included in the calculation of the tranches mentioned above, then Landlord may notify Tenant and Tenant shall advance such additional Excess TI Costs within ten (10) days after receipt of an invoice therefor. If Tenant fails to pay, or is late in paying, any sum due to Landlord under this Work Letter, then Landlord shall have all of the rights and remedies set forth in the Lease for nonpayment of Rent (including the right to interest and the right to assess a late charge), and for purposes of any litigation instituted with regard to such amounts the same shall be considered Rent. All material and equipment furnished by Landlord or its contractors as the Tenant Improvements shall be new or "like new," and the Tenant Improvements shall be performed in a first-class, workmanlike manner.

2.1. <u>Work Plans</u>. The parties agree that the initial schematic plans for the Tenant Improvements are attached as <u>Attachment 2</u> to this Work Letter (the "<u>Initial Schematic Plans</u>"). Landlord shall prepare and submit to Tenant for approval schematics covering the Tenant Improvements prepared in conformity with the applicable provisions of this Work Letter and which are consistent with and logical evolutions of the Initial Schematic Plans (the "<u>Draft Schematic Plans</u>"). The Draft Schematic Plans shall contain sufficient information and detail to accurately describe the proposed design to Tenant. Tenant shall notify Landlord in writing within five (5) business days after receipt of the Draft Schematic Plans whether Tenant approves or objects to the Draft Schematic Plans and of the manner, if any, in which the Draft Schematic Plans are unacceptable. Tenant's failure to respond within such five (5) business day period shall

be deemed approval by Tenant. If Tenant reasonably objects to the Draft Schematic Plans, then Landlord shall revise the Draft Schematic Plans and cause Tenant's objections to be remedied in the revised Draft Schematic Plans. Landlord shall then resubmit the revised Draft Schematic Plans to Tenant for approval, such approval not to be unreasonably withheld, conditioned or delayed. Tenant's approval of or objection to revised Draft Schematic Plans and Landlord's correction of the same shall be in accordance with this Section until Tenant has approved the Draft Schematic Plans in writing or been deemed to have approved them. The iteration of the Draft Schematic Plans that is approved or deemed approved by Tenant without objection shall be referred to herein as the "<u>Approved Schematic Plans</u>." In the event that Draft Schematic Plans are not approved by Tenant in accordance with this Section prior to [January 29, 2016], then, notwithstanding anything in the Lease or this Work Letter to the contrary, it shall be deemed a delay by Tenant, and in accordance with <u>Section 4.2</u> of the Lease, the Substantial Completion of the Tenant Improvements shall be the date that the Substantial Completion of the Tenant Improvements would have occurred, as determined by Landlord, but for such delay.

2.2. <u>Construction TI Plans</u>. Landlord shall prepare final plans and specifications for the Tenant Improvements that (a) are consistent with and are logical evolutions of the Approved Schematic Plans and (b) incorporate any other Tenant-requested (and Landlord-approved) Changes (as defined below). As soon as such final plans and specifications ("<u>Construction Plans</u>") are completed, Landlord shall deliver the same to Tenant for Tenant's approval, which approval shall not be unreasonably withheld, conditioned or delayed. Such Construction Plans shall be approved or disapproved by Tenant within five (5) days after delivery to Tenant. Tenant's failure to respond within such five (5) day period shall be deemed approval by Tenant. If the Construction Plans are disapproved by Tenant, then Tenant shall notify Landlord in writing of its reasonable objections to such Construction Plans, and the parties shall confer and negotiate in good faith to reach agreement on the Construction Plans. Promptly after the Construction Plans are approved by Landlord and Tenant, two (2) copies of such Construction Plans shall be initialed and dated by Landlord and Tenant, and Landlord shall promptly submit such Construction Plans to all appropriate Governmental Authorities for approval. The Construction Plans so approved, and all change orders specifically permitted by this Work Letter, are referred to herein as the "Approved Plans."

2.3. <u>Changes to the Tenant Improvements</u>. Any changes to the Approved TI Plans (each, a "<u>TI Change</u>") shall be requested and instituted in accordance with the provisions of this <u>Article 3</u> and shall be subject to the written approval of the non-requesting party in accordance with this Work Letter.

(a) <u>Change Request</u>. Either Landlord or Tenant may request Changes after Tenant approves the Approved Plans by notifying the other party thereof in writing in substantially the same form as the AIA standard change order form (a "<u>Change Request</u>"), which Change Request shall detail the nature and extent of any requested Changes, including (a) the Change, (b) the party required to perform the Change and (c) any modification of the Approved Plans and the Schedule, as applicable, necessitated by the Change. If the nature of a Change requires revisions to the Approved Plans, then the requesting party shall be solely responsible for the cost and expense of such revisions and any increases in the cost of the Tenant Improvements as a result of such Change. Change Requests shall be signed by the requesting party's Authorized Representative.

(b) <u>Approval of TI Changes</u>. All TI Change Requests shall be subject to the other party's prior written approval, which approval shall not be unreasonably withheld, conditioned or delayed. The non-requesting party shall have five (5) business days after receipt of a TI Change Request to notify the requesting party in writing of the non-requesting party's decision either to approve or object to the TI Change Request. The non-requesting party's failure to respond within such five (5) business day period shall be deemed approval by the non-requesting party.

3. <u>Requests for Consent</u>. Except as otherwise provided in this Work Letter, Tenant shall respond to all requests for consents, approvals or directions made by Landlord pursuant to this Work Letter within five (5) days following Tenant's receipt of such request. Tenant's failure to respond within such five (5) day period shall be deemed approval by Tenant.

4. TI Allowance.

4.1. <u>Application of TI Allowance</u>. Landlord shall contribute the TI Allowance toward the costs and expenses incurred in connection with the performance of the Tenant Improvements, in accordance with <u>Article 4</u> of the Lease. If the entire TI Allowance is not applied toward or reserved for the costs of the Tenant Improvements, then Tenant shall not be entitled to a credit of such unused portion of the TI Allowance. If the entire Excess TI Costs advanced by Tenant to Landlord are not applied toward the costs of the Tenant Improvements, then Landlord shall promptly return such excess to Tenant following completion of the Tenant Improvements.

4.2. <u>Approval of Budget for the Tenant Improvements</u>. The parties agree that the initial budget for the Tenant Improvements is attached hereto as <u>Attachment 3</u> (the "<u>Approved Budget</u>"). Tenant shall promptly reimburse Landlord for costs or expenses relating to the Tenant Improvements that exceed the amount of the TI Allowance.

5. Miscellaneous.

5.1. <u>Incorporation of Lease Provisions</u>. <u>Sections 40.6</u> through <u>40.19</u> of the Lease are incorporated into this Work Letter by reference, and shall apply to this Work Letter in the same way that they apply to the Lease.

5.2. <u>General</u>. Except as otherwise set forth in the Lease or this Work Letter, this Work Letter shall not apply to improvements performed in any additional premises added to the Premises at any time or from time to time, whether by any options under the Lease or otherwise; or to any portion of the Premises or any additions to the Premises in the event of a renewal or extension of the original Term, whether by any options under the Lease or otherwise, unless the Lease or any amendment or supplement to the Lease expressly provides that such additional premises are to be delivered to Tenant in the same condition as the initial Premises.

5.3. Warranties. To the extent assignable, Landlord will assign all warranties obtained by Landlord in connection with the Tenant Improvements, including, without limitation, a

warranty of the general contractor's work for a period of one (1) year from the date of final completion of the Tenant Improvements (including any punch-list items), and any equipment for the Premises installed by Landlord; <u>provided</u>, however, that, notwithstanding any such assignment, Landlord shall also retain the right to enforce such warranties against the applicable contractor, at Landlord's sole option, and further provided that if any such warranties are not assignable, then Landlord, upon written notice from Tenant, shall use commercially reasonable efforts to enforce such non-assignable warranties. With respect to those warranties that have been assigned to Tenant, upon Tenant's written request of Landlord and at Tenant's sole cost and expense, Landlord shall reasonably cooperate with Tenant in enforcing such warranties; <u>provided</u>, however, that Landlord shall no have obligations under this sentence in connection with any litigation between Tenant and the provider of such warranty.

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IN WITNESS WHEREOF, Landlord and Tenant have executed this Work Letter as a sealed Massachusetts instrument to be effective on the date first above written.

LANDLORD:

BMR-SIDNEY RESEARCH CAMPUS LLC, a Delaware limited liability company

By:	/s/ William Kane
Name:	William Kane
Title:	Senior Vice President, Boston Market Lead

TENANT:

INTELLIA THERAPEUTICS, INC., a Delaware corporation

/s/ Nessan Bermingham
Nessan Bermingham
President & CEO

Attachment 1 to Work Letter

<u>Schedule</u>

[See attached]

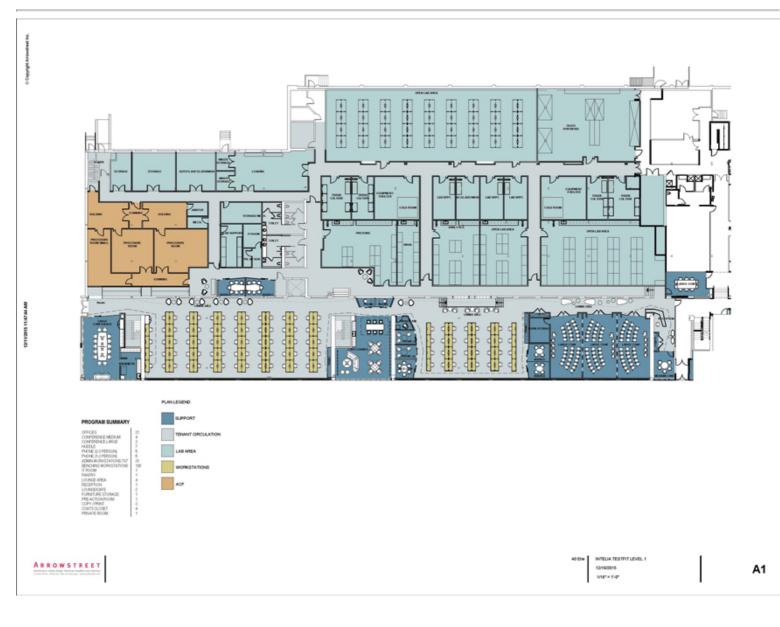
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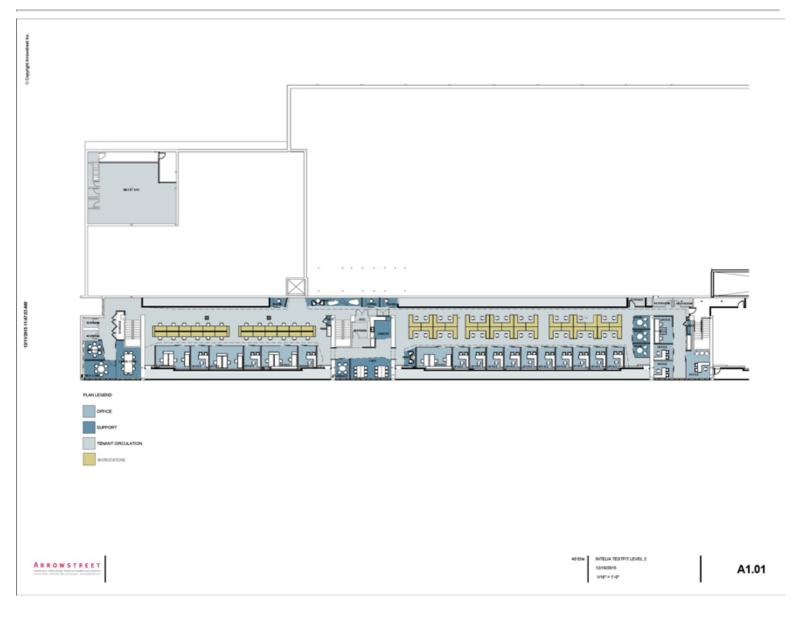
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2	Bid and Procure Milwork B				85 days	Wed 3/16/16			3/16		Bid and Proc	ure Millwork Bid packag	e
53	Bid and Procure Doors / Fr				80 days	Wed 3/16/16	Tue 7/5/16	1	3/16		Bid and Procus	e Doors / Frames / Hard	ware
	eoantigen Construction				126 days	Thu 4/7/16	Fri 9/30/16		4/7 😜			Neoantigen Const	ruction
55	Receive Building Permit				0 days	Thu 4/7/16	Thu 4/7/16			Receive Build			
56	Disconnect Makesafe				5 days	Fri 4/8/16	Thu 4/14/16			Disconnect M			
57	Selective Demolition				10 days	Fri 4/15/16	Thu 4/28/16			Selective			
58	Coring for Lab Wast and utility	Distributin			8 days	Fri 4/29/16			4		for Lab Wast and uti		
50	Receive Coordinated Ductwork	ĸ			0 days	Fri 5/13/16					ve Coordinated Duct		
60	Rough Ductwork				30 days	Mon 5/16/16	Fri 6/24/16			5/16	Rough Ductwork		
\$1	Rough Plumbing				25 days	Mon 5/16/16	Fri 6/17/16			5/16	Rough Plumbing		
52	Rough Electrical				25 days	Mon 5/16/16				5/16	Rough Electrical		
53	Rough sprinkler				25 days	Mon 5/16/16	Fri 6/17/16			5/16	Rough sprinkler		
64	Steel stud				15 days	Mon 5/23/16				5/23	Steel stud		
65	Rough Plumbing and Electric	walls			20 days	Tue 6/7/16						ng and Electric walls	
66	Rough Wall Inspection				4 days	Tue 7/5/16					7/5 👗 Rough Wall Is		
67	Drywail and Tape				19 days	Mon 7/11/16	Thu 8/4/16				7/11 Drywal		
68	Prime Walls				4 days	Fri 7/29/16	Wed 8/3/16				7/29 Prime V		
69	Ceiling Grid				4 days	Mon 8/1/16	Thu 8/4/16				8/1 Ceiling		
70	Lab Casework Delivery				0 days	Tue 7/26/16	Tue 7/26/16				7/26 Lab Case		1
71	Lab Casework Installation				15 days	Wed 7/27/16	Tue 8/16/16					Casework Installation	1
72	Milwork Delivery				0 days	Tue 7/12/16	Tue 7/12/16				7/12 Millwork Del	livery	
73	Milwork Installation				15 days	Wed 7/13/16	Tue 8/2/16				7/13 Millwork	Installation	
74	Cold Room Delivery				0 days	Tue 7/5/16	Tue 7/5/16			7	7/5 Cold Room D	elivery	
75	Install Cold Room				20 days	Wed 7/6/16	Tue 8/2/16				7/6 install C	old Room	
76	Door & Hardware Delivery				0 days	Tue 7/5/16	Tue 7/5/16				7/5 .Door & Hardw		
77	Door and Hardware Installation	n			15 days	Wed 7/6/16	Tue 7/26/16				7/6 Door and	Hardware Installation	
78	Glazing				15 days	Wed 7/6/16	Tue 7/26/16				7/6 Glazing		
79	Specialty Installation				15 days	Wed 7/6/16	Tue 7/26/16	1			7/6 🎽 Specialty	Installation	
80	Sprinkler Heads				20 days	Wed 8/3/16	Tue 8/30/16	1			8/3 👗 8	Sprinkler Heads sh HVAC	
81	Finish HVAC				40 days	Tue 6/21/16	Tue 8/16/16	1		6/21	Fini		
82	Finish HVAC				20 days	Wed 7/20/16	Tue 8/16/16				7/20 Finis	h HVAC	
83	VAV Boxe Delivery				0 days	Tue 6/21/16	Tue 6/21/16			6/21	VAV Boxe Delive		
84	RGD's and misc HVAC De	ivery			0 days	Tue 7/19/16	Tue 7/19/16					misc HVAC Delivery	
85	HVAC Controls				20 days	Wed 7/20/16					7/20 HVA	C Controls	
86	Finish Plumbing				40 days	Tue 6/21/16	Tue 8/16/16			6/21	7/20 Finis	sh Plumbing	
87	Finish plumbing				20 days	Wed 7/20/16					7/20 Finis	th plumbing	
88	Emergency Shower / Sink.	/ Fodure Delivery			0 days	Tue 6/21/16						ver / Sink / Fixture Delive	ny.
89	Finish Electrical				52 days	Tue 7/5/16	Thu 9/15/16			3	7/6 🖵	Finish Electrical	1
90	Finish Electrical				30 days	Fri 8/5/16	Thu 9/15/16					Finish Electrical	
91	Lighting Delivery				0 days	Tue 7/5/16					7/5 Lighting Deliv		
92	Specialty Electrical Items				0 days	Tue 7/5/16	Tue 7/5/16			;	7/5 Specialty Elec		
93	Ceiling Tile				8 days	Wed 8/3/16	Fri 8/12/16				8/3 Ceili		
94	Painting				16 days	Thu 8/25/16	Thu 9/15/16					Painting	
95	Flooring				10 days	Mon 9/12/16	Fri 9/23/16					Flooring	
96	Final Clean-up				4 days	Mon 9/26/16						26 🚺 Final Clean-up	
97	Final Inspections				5 days	Mon 9/26/16	Fri 9/30/16					26 🚡 Final Inspections	
98	Occupancy				0 days	Fri 9/30/16	Fri 9/30/16		1		9	30 🗸 Occupancy	
		Task		Split			Inactive Mileston	6 w		Start-only	E		
											2		
		Milestone	•	External Tasks	Contract of the	and the second second	Inactive Summar	4 5	~	Finish-only	-		
	Intellia Preliminary Schedule 1	Summary	÷	Project Summary	Ç.		Manual Task	C		Progress		and the local division of the local division	
	ed 1/6/16	Rolled Up Task		Group By Summary	-		Duration-only	-	10000	Deadline	÷		
		Rolled Up Milestone	0	Inactive Task			Manual Summan	v Roluo					
		Rolled Up Progress	-	Inactive Task	_		Manual Summan						

Attachment 2 to Work Letter

Initial Schematic Plans

[See attached]





Attachment 3 to Work Letter

<u>Budget</u>

[See attached]

INTELLIA TI BUDGET

RSF			
Premises		65,319	
TIALLOWANCE			
Base LLW/TI Allowance	\$150.00/SF	\$ 9,797,850.00	\$150/RSF
	+	+ -, ,	
DETAILED CONSTRUCTION BUDGET	* * * * * * *	*	
Design Fee's	\$ 10.18 /SF	\$ 665,000.00	AST proposal dated 11/16/15
A/E Reimburseables	\$ 0.25 /SF	\$ 16,625.00	Allowance (2.5% of design fees)
Other Consultants	\$ — /SF	\$ —	Str., lighting, acoustical, and equip. inc. in AST prop.
Commissioning	\$ 0.69 /SF	\$ 45,000.00	Allowance
			Gen. liability included in CM proposal, builder's risk
Insurance	\$ — /SF	\$ —	excluded
Bond	\$ — /SF	\$ —	Excluded
Building Permit	\$ — /SF	\$ —	Included in CM proposal
Misc. Soft Costs	\$ — /SF	\$ —	Excluded
Soft Cost Contingency	\$ 0.52 /SF	\$ 34,081.25	5% of design fees and A/E reimbursables
Project Management Fee	\$ 6.17 /SF	\$ 403,114.95	3% of total TI costs
Total Soft Costs	\$ 17.82 /SF	\$ 1,163,821.20	
CM Proposal	\$182.84 /SF	\$11,942,818.00	TRG budget dated 11/10/15 (includes add/alts 1-5)
CM Contingency	\$ — /SF	\$ —	Included in CM proposal
FF&E	\$ — /SF	\$ —	Excluded
Security	\$ 0.69 /SF	\$ 45,000.00	Allowance
Tel/data	\$ — /SF	\$ —	Excluded
Furniture	\$ — /SF	\$ —	Excluded
Other	\$ 1.30 /SF	\$ 85,000.00	Allowance for window treatments
Hard Cost Contingency	\$ 9.24 /SF	\$ 603,640.90	5% of hard costs
Total Hard Costs	\$194.07 /SF	\$12,676,458.90	
BUDGET SUMMARY			
Total Soft Costs	\$ 17.82 /SF	\$ 1,163,821.20	
Total Hard Costs	\$194.07 /SF	\$12,676,458.90	
Total	\$211.89 /SF	\$13,840,280.10	
1000	φ 211.0 5/0Γ	ψ10,040,200,10	
Cost Above LLW/TI Allowance	\$ 61.89 /SF	\$ 4,042,430.10	

40 ERIE STREET

EXHIBIT B-1

TENANT WORK INSURANCE SCHEDULE

Tenant shall be responsible for requiring all of Tenant contractors doing construction or renovation work to purchase and maintain such insurance as shall protect it from the claims set forth below which may arise out of or result from any Tenant Work whether such Tenant Work is completed by Tenant or by any Tenant contractors or by any person directly or indirectly employed by Tenant or any Tenant contractors, or by any person for whose acts Tenant or any Tenant contractors may be liable:

1. Claims under workers' compensation, disability benefit and other similar employee benefit acts which are applicable to the Tenant Work to be performed.

2. Claims for damages because of bodily injury, occupational sickness or disease, or death of employees under any applicable employer's liability law.

3. Claims for damages because of bodily injury, or death of any person other than Tenant's or any Tenant contractors' employees.

4. Claims for damages insured by usual personal injury liability coverage which are sustained (a) by any person as a result of an offense directly or indirectly related to the employment of such person by Tenant or any Tenant contractors or (b) by any other person.

5. Claims for damages, other than to the Tenant Work itself, because of injury to or destruction of tangible property, including loss of use therefrom.

6. Claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

Tenant contractors' Commercial General Liability Insurance shall include premises/operations (including explosion, collapse and underground coverage if such Tenant Work involves any underground work), elevators, independent contractors, products and completed operations, and blanket contractual liability on all written contracts, all including broad form property damage coverage.

Tenant contractors' Commercial General, Automobile, Employers and Umbrella Liability Insurance shall be written for not less than limits of liability as follows:

a. Commercial General Liability:

Bodily Injury and Property Damage

Commercially reasonable amounts, but in any event no less than \$1,000,000 per occurrence and \$2,000,000 general aggregate, with \$2,000,000 products and completed operations aggregate.

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b.	Commercial Automobile Liability:	\$1,000,000 per accident
	Bodily Injury and Property Damage	
с.	Employer's Liability:	
	Each Accident Disease – Policy Limit Disease – Each Employee	\$500,000 \$500,000 \$500,000
d.	Umbrella Liability: Bodily Injury and Property Damage	Commercially reasonable amounts (excess of coverages a, b and c above), but in any event no less than \$5,000,000 per occurrence /
		aggregate.

All subcontractors for Tenant contractors shall carry the same coverages and limits as specified above, unless different limits are reasonably approved by Landlord. The foregoing policies shall contain a provision that coverages afforded under the policies shall not be canceled or not renewed until at least thirty (30) days' prior written notice has been given to the Landlord. Certificates of insurance including required endorsements showing such coverages to be in force shall be filed with Landlord prior to the commencement of any Tenant Work and prior to each renewal. Coverage for completed operations must be maintained for the lesser of ten (10) years and the applicable statue of repose following completion of the Tenant Work, and certificates evidencing this coverage must be provided to Landlord. The minimum A.M. Best's rating of each insurer shall be A- VII. Landlord and its mortgagees shall be named as an additional insureds under Tenant contractors' Commercial General Liability, Commercial Automobile Liability and Umbrella Liability Insurance policies as respects liability arising from work or operations performed, or ownership, maintenance or use of autos, by or on behalf of such contractors. Each contractor and its insurers shall provide waivers of subrogation with respect to any claims covered or that should have been covered by valid and collectible insurance, including any deductibles or self-insurance maintained thereunder.

If any contractor's work involves the handling or removal of asbestos (as determined by Landlord in its sole and absolute discretion), such contractor shall also carry Pollution Legal Liability insurance. Such coverage shall include bodily injury, sickness, disease, death or mental anguish or shock sustained by any person; property damage, including physical injury to or destruction of tangible property (including the resulting loss of use thereof), clean-up costs and the loss of use of tangible property that has not been physically injured or destroyed; and defense costs, charges and expenses incurred in the investigation, adjustment or defense of claims for such damages. Coverage shall apply to both sudden and non-sudden pollution conditions including the discharge, dispersal, release or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids or gases, waste materials or other irritants, contaminants or pollutants into or upon land, the atmosphere or any watercourse or body of water. Claims-made coverage is permitted, <u>provided</u> the policy retroactive date is continuously maintained prior to the Term

B-1-2

Commencement Date, and coverage is continuously maintained during all periods in which Tenant occupies the Premises. Coverage shall be maintained with limits of not less than \$1,000,000 per incident with a \$2,000,000 policy aggregate.

EXHIBIT C

ACKNOWLEDGEMENT OF TERM COMMENCEMENT DATE AND TERM EXPIRATION DATE

THIS ACKNOWLEDGEMENT OF TERM COMMENCEMENT DATE AND TERM EXPIRATION DATE is entered into as of [], 20[], with reference to that certain Lease (the "Lease") dated as of [], 2015, by Intellia Therapeutics, Inc., a Delaware corporation ("Tenant"), in favor of BMR-Sidney Research Campus LLC, a Delaware limited liability company ("Landlord"). All capitalized terms used herein without definition shall have the meanings ascribed to them in the Lease.

Tenant hereby confirms the following:

 1. [Tenant accepted possession of the Premises for use in accordance with the Permitted Use on [
], 20[
]. Tenant first occupied the Premises for the

2. The Premises are in good order, condition and repair.

3. The Tenant Improvements are Substantially Complete.

4. All conditions of the Lease to be performed by Landlord as a condition to the full effectiveness of the Lease have been satisfied, and Landlord has fulfilled all of its duties in the nature of inducements offered to Tenant to lease the Premises.

5. In accordance with the provisions of <u>Article 4</u> of the Lease, the Term Commencement Date is [], 20[], and, unless the Lease is terminated prior to the Term Expiration Date pursuant to its terms, the Term Expiration Date shall be [], 20[].

6. The Lease is in full force and effect, and the same represents the entire agreement between Landlord and Tenant concerning the Premises.

7. To Tenant's knowledge, Tenant has no existing defenses against the enforcement of the Lease by Landlord, and there exist no offsets or credits against Rent owed or to be owed by Tenant.

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8. The obligation to pay Rent is presently in effect and all Rent obligations on the part of Tenant under the Lease commenced to accrue on [], 20[], with Base Rent payable on the dates and amounts set forth in the chart below:

<u>Dates</u>	Approximate Square Feet of Rentable Area	Rent per Sq ot of Rentab Area		Mon Base l		Annual Rer	
[]/[]/[]-[]/[]/[]	[]	\$ []	\$[]	\$[]

9. The undersigned Tenant has not made any prior assignment, transfer, hypothecation or pledge of the Lease or of the rents thereunder or sublease of the Premises or any portion thereof.

[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, Tenant has executed this Acknowledgment of Term Commencement Date and Term Expiration Date as of the date first written above.

TENANT:

INTELLIA THERAPEUTICS, INC., a Delaware corporation

By:	
Name:	
Title:	

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EXHIBIT D

LANDLORD'S WORK

1) <u>Architectural</u>

a) Exterior

- i) New canopy and entry vestibule at main entrance.
- ii) Improvements to Waverly and Erie Street facades.
- iii) Landscape improvements at the corner of Waverly and Erie Streets.

b) Interior

- i) New main lobby at Erie Street entrance. Includes all finishes.
- ii) New common restrooms, janitor's closet, waste storage room, fitness center, and two (2) shower rooms at core area adjacent to northern-most loading dock.
- iii) Upgrade common stairs.
- iv) Refurbish interior of elevator No. 1 (northern-most elevator). Improvements to elevator No. 2 excluded.
- v) Tenant demising from common areas or other tenant spaces excluded.
- vi) Remaining core and shell components to remain as is.

2) <u>Structural</u>

a) As required to facilitate the scope of worked outlined in this document.

3) <u>Fire Protection</u>

- a) Install new distribution mains up to zone valves.
- b) Branch lines excluded

4) <u>Plumbing</u>

- a) Existing plumbing systems will remain with the following exceptions:
 - i) Refurbish existing lab waste treatment system to serve the entire building.
 - ii) Provide shared reverse osmosis, compressed air, tempered water, and VAC systems. Distribution excluded.

5) <u>HVAC</u>

- a) Two (2) new shared fifty thousand (50,000) CFM AHU's
- b) Hot water (HW) system including new boilers and flus.
- c) Chilled water (CHW) system including 900 ton chiller and cooling tower

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- d) Tenant specific FCU's, HW distribution, and CHW distribution excluded.
- e) New one-hundred thousand (100,000) CFM energy recover unit.
- f) Ductwork excluded.

6) <u>Electrical</u>

- a) Main switchgear to remain.
- b) Distribution from main switchgear excluded.
- c) Common area and exterior lighting.
- d) Tel/data and security excluded.
- e) Provide a new rooftop 650 KW gas fired generator with automatic transfer switch for base building equipment. 315 kW available for tenant use. Tenant specific transfer switches excluded.

EXHIBIT E

FORM OF LETTER OF CREDIT

[On letterhead or L/C letterhead of Issuer]

LETTER OF CREDIT

Date: , 20

(the "<u>Beneficiary</u>")

 Attention:

 L/C. No.:

 Loan No.:

Ladies and Gentlemen:

We establish in favor of Beneficiary our irrevocable and unconditional Letter of Credit numbered as identified above (the "<u>L/C</u>") for an aggregate amount of \$, expiring at :00 p.m. on or, if such day is not a Banking Day, then the next succeeding Banking Day (such date, as extended from time to time, the "<u>Expiry Date</u>"). "<u>Banking Day</u>" means a weekday except a weekday when commercial banks in are authorized or required to close.

We authorize Beneficiary to draw on us (the "Issuer") for the account of

(the "Account Party"), under the terms and conditions of this L/C.

Funds under this L/C are available by presenting the following documentation (the "<u>Drawing Documentation</u>"): (a) the original L/C and (b) a sight draft substantially in the form of <u>Attachment 1</u>, with blanks filled in and bracketed items provided as appropriate. No other evidence of authority, certificate, or documentation is required.

Drawing Documentation must be presented at Issuer's office at on or before the Expiry Date by personal presentation, courier or messenger service, or fax. Presentation by fax shall be effective upon electronic confirmation of transmission as evidenced by a printed report from the sender's fax machine. After any fax presentation, but not as a condition to its effectiveness, Beneficiary shall with reasonable promptness deliver the original Drawing Documentation by any other means. Issuer will on request issue a receipt for Drawing Documentation.

We agree, irrevocably, and irrespective of any claim by any other person, to honor drafts drawn under and in conformity with this L/C, within the maximum amount of this L/C, presented to us on or before the Expiry Date, <u>provided</u> we also receive (on or before the Expiry Date) any other Drawing Documentation this L/C requires.

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We shall pay this L/C only from our own funds by check or wire transfer, in compliance with the Drawing Documentation.

If Beneficiary presents proper Drawing Documentation to us on or before the Expiry Date, then we shall pay under this L/C at or before the following time (the "<u>Payment Deadline</u>"): (a) if presentment is made at or before noon of any Banking Day, then the close of such Banking Day; and (b) otherwise, the close of the next Banking Day. We waive any right to delay payment beyond the Payment Deadline. If we determine that Drawing Documentation is not proper, then we shall so advise Beneficiary in writing, specifying all grounds for our determination, within one Banking Day after the Payment Deadline.

Partial drawings are permitted. This L/C shall, except to the extent reduced thereby, survive any partial drawings.

We shall have no duty or right to inquire into the validity of or basis for any draw under this L/C or any Drawing Documentation. We waive any defense based on fraud or any claim of fraud.

The Expiry Date shall automatically be extended by one year (but never beyond (the "<u>Outside Date</u>")) unless, on or before the date 90 days before any Expiry Date, we have given Beneficiary notice that the Expiry Date shall not be so extended (a "<u>Nonrenewal Notice</u>"). We shall promptly upon request confirm any extension of the Expiry Date under the preceding sentence by issuing an amendment to this L/C, but such an amendment is not required for the extension to be effective. We need not give any notice of the Outside Date.

Beneficiary may from time to time without charge transfer this L/C, in whole but not in part, to any transferee (the "<u>Transferee</u>"). Issuer shall look solely to Account Party for payment of any fee for any transfer of this L/C. Such payment is not a condition to any such transfer. Beneficiary or Transferee shall consummate such transfer by delivering to Issuer the original of this L/C and a Transfer Notice substantially in the form of <u>Attachment 2</u>, purportedly signed by Beneficiary, and designating Transferee. Issuer shall promptly reissue or amend this L/C in favor of Transferee as Beneficiary. Upon any transfer, all references to Beneficiary shall automatically refer to Transferee, who may then exercise all rights of Beneficiary. Issuer expressly consents to any transfers made from time to time in compliance with this paragraph.

Any notice to Beneficiary shall be in writing and delivered by hand with receipt acknowledged or by overnight delivery service such as FedEx (with proof of delivery) at the above address, or such other address as Beneficiary may specify by written notice to Issuer. A copy of any such notice shall also be delivered, as a condition to the effectiveness of such notice, to: (or such replacement as Beneficiary designates from time to time by written notice).

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No amendment that adversely affects Beneficiary shall be effective without Beneficiary's written consent.

This L/C is subject to and incorporates by reference: (a) the International Standby Practices 98 ("ISP 98"); and (b) to the extent not inconsistent with ISP 98, Article 5 of the Uniform Commercial Code of the State of New York.

Very truly yours,

[Issuer Signature]

ATTACHMENT 1 TO EXHIBIT E

FORM OF SIGHT DRAFT

[BENEFICIARY LETTERHEAD]

TO:

[Name and Address of Issuer]

SIGHT DRAFT

AT SIGHT, pay to the Order of	, the sum of	United States Dollars (\$). Drawn under [Issuer] Letter of Credit No.	dated
•				
[Issuer is hereby directed to pay the procee	eds of this Sight Draft	solely to the following account:	.]	
[Name and signature block, with signature	or purported signature	e of Beneficiary]		
Date:		-		

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ATTACHMENT 2 TO EXHIBIT E

FORM OF TRANSFER NOTICE

[BENEFICIARY LETTERHEAD]

TO:

[Name and Address of Issuer] (the "<u>Issuer</u>")

TRANSFER NOTICE

By signing below, the undersigned, Beneficiary (the "<u>Beneficiary</u>") under Issuer's Letter of Credit No. dated (the "<u>L/C</u>"), transfers the L/C to the following transferee (the "<u>Transferee</u>"):

[Transferee Name and Address]

The original L/C is enclosed. Beneficiary directs Issuer to reissue or amend the L/C in favor of Transferee as Beneficiary. Beneficiary represents and warrants that Beneficiary has not transferred, assigned, or encumbered the L/C or any interest in the L/C, which transfer, assignment, or encumbrance remains in effect.

[Name and signature block, with signature or purported signature of Beneficiary]

Date:

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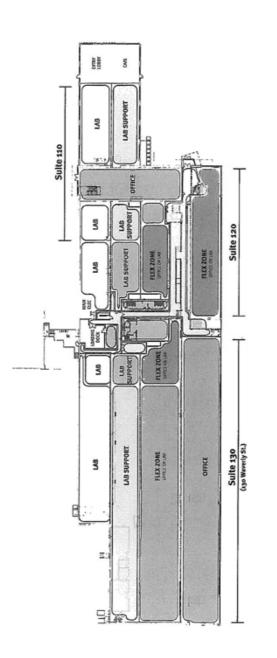
]

EXHIBIT F

PLAN OF PREMISES LAYOUT ZONE

[See attached]

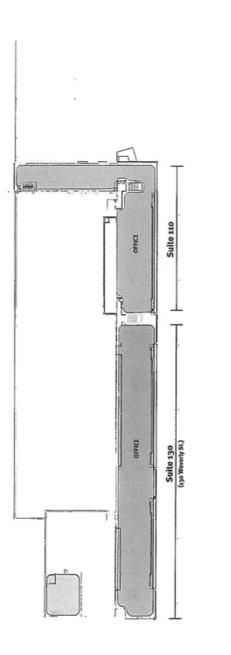
F-1





TENANT LAYOUT ZONES - FIRST FLOOR 29 September 2015

L N T T



A R R O W S T R E E T // 40 ERIE STREET

TENANT LAYOUT ZONES - SECOND FLOOR 29 September 2015

I // 40 ERIE SIREET

EXHIBIT G

RULES AND REGULATIONS

NOTHING IN THESE RULES AND REGULATIONS ("<u>RULES AND REGULATIONS</u>") SHALL SUPPLANT ANY PROVISION OF THE LEASE. IN THE EVENT OF A CONFLICT OR INCONSISTENCY BETWEEN THESE RULES AND REGULATIONS AND THE LEASE, THE LEASE SHALL PREVAIL.

1. No Tenant Party shall encumber or obstruct the common entrances, lobbies, elevators, sidewalks and stairways of the Building(s) or the Project or use them for any purposes other than ingress or egress to and from the Building(s) or the Project.

2. Except as specifically provided in the Lease, no sign, placard, picture, advertisement, name or notice shall be installed or displayed on any part of the outside of the Premises or the Building(s) without Landlord's prior written consent. Landlord shall have the right to remove, at Tenant's sole cost and expense and without notice, any sign installed or displayed in violation of this rule.

3. If Landlord objects in writing to any curtains, blinds, shades, screens, hanging plants or other similar objects attached to or used in connection with any window or door of the Premises or placed on any windowsill, and (a) such window, door or windowsill is visible from the exterior of the Premises and (b) such curtain, blind, shade, screen, hanging plant or other object is not included in plans approved by Landlord, then Tenant shall promptly remove such curtains, blinds, shades, screens, hanging plants or other similar objects at its sole cost and expense.

4. Deliveries shall be made no earlier than 7 a.m. or later than 6 p.m. No deliveries shall be made that impede or interfere with other tenants in or the operation of the Project. Movement of furniture, office equipment or any other large or bulky material(s) through the Common Area shall be restricted to such hours as Landlord may designate and shall be subject to reasonable restrictions that Landlord may impose. A temporary loading permit is required for all temporary parking and such permit, which permit Landlord may provide in its sole and absolute discretion.

5. Tenant shall not place a load upon any floor of the Premises that exceeds the load per square foot that (a) such floor was designed to carry or (b) is allowed by Applicable Laws. Fixtures and equipment that cause noises or vibrations that may be transmitted to the structure of the Building(s) to such a degree as to be objectionable to other tenants shall be placed and maintained by Tenant, at Tenant's sole cost and expense, on vibration eliminators or other devices sufficient to eliminate such noises and vibrations to levels reasonably acceptable to Landlord and the affected tenants of the Project.

6. Tenant shall not use any method of HVAC other than that approved in writing by Landlord.

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7. Tenant shall not install any radio, television or other antennae; cell or other communications equipment; or other devices on the roof or exterior walls of the Premises except in accordance with the Lease. Tenant shall not interfere with radio, television or other digital or electronic communications at the Project or elsewhere.

8. Canvassing, peddling, soliciting and distributing handbills or any other written material within, on or around the Project (other than within the Premises) are prohibited. Tenant shall cooperate with Landlord to prevent such activities by any Tenant Party.

9. Tenant shall store all of its trash, garbage and Hazardous Materials in receptacles within its Premises or in receptacles designated by Landlord outside of the Premises. Tenant shall not place in any such receptacle any material that cannot be disposed of in the ordinary and customary manner of trash, garbage and Hazardous Materials disposal. Any Hazardous Materials transported through Common Area shall be held in secondary containment devices. Tenant shall be responsible, at its sole cost and expense, for Tenant's removal of its trash, garbage and Hazardous Materials. Tenant is encouraged to participate in the waste removal and recycling program in place at the Project.

10. The Premises shall not be used for lodging or for any improper, immoral or objectionable purpose. No cooking shall be done or permitted in the Premises; <u>provided</u>, however, that Tenant may use (a) equipment approved in accordance with the requirements of insurance policies that Landlord or Tenant is required to purchase and maintain pursuant to the Lease for brewing coffee, tea, hot chocolate and similar beverages, (b) microwave ovens for employees' use and (c) equipment shown on plans approved by Landlord; <u>provided</u>, further, that any such equipment and microwave ovens are used in accordance with Applicable Laws.

11. Tenant shall not, without Landlord's prior written consent, use the name of the Project, if any, in connection with or in promoting or advertising Tenant's business except as Tenant's address.

12. Tenant shall comply with all safety, fire protection and evacuation procedures and regulations established by Landlord or any Governmental Authority.

13. Tenant assumes any and all responsibility for protecting the Premises from theft, robbery and pilferage, which responsibility includes keeping doors locked and other means of entry to the Premises closed.

14. Tenant shall not modify any locks to the Premises without Landlord's prior written consent, which consent Landlord shall not unreasonably withhold, condition or delay. Tenant shall furnish Landlord with copies of keys, pass cards or similar devices for locks to the Premises.

15. Tenant shall cooperate and participate in all reasonable security programs affecting the Premises.

G-2

16. Tenant shall not permit any animals in the Project, other than for guide animals or for use in laboratory experiments.

17. Bicycles shall not be taken into the Building(s) (including the elevators and stairways of the Building) except into areas designated by Landlord.

18. The water and wash closets and other plumbing fixtures shall not be used for any purposes other than those for which they were constructed, and no sweepings, rubbish, rags or other substances shall be deposited therein.

19. Discharge of industrial sewage shall only be permitted if Tenant, at its sole expense, first obtains all necessary permits and licenses therefor from all applicable Governmental Authorities.

20. Smoking is prohibited inside the Building, except in designated outdoor areas of the Project (if any).

21. The Project's hours of operation are currently 24 hours per day, seven (7) days per week.

22. Tenant shall comply with all orders, requirements and conditions now or hereafter imposed by Applicable Laws or Landlord ("<u>Waste Regulations</u>") regarding the collection, sorting, separation and recycling of waste products, garbage, refuse and trash generated by Tenant (collectively, "<u>Waste Products</u>"), including (without limitation) the separation of Waste Products into receptacles reasonably approved by Landlord and the removal of such receptacles in accordance with any collection schedules prescribed by Waste Regulations.

23. Tenant, at Tenant's sole cost and expense, shall cause the Premises to be exterminated on a monthly basis to Landlord's reasonable satisfaction and shall cause all portions of the Premises used for the storage, preparation, service or consumption of food or beverages to be cleaned daily in a manner reasonably satisfactory to Landlord, and to be treated against infestation by insects, rodents and other vermin and pests whenever there is evidence of any infestation. Tenant shall not permit any person to enter the Premises or the Project for the purpose of providing such extermination services, unless such persons have been approved by Landlord. If requested by Landlord, Tenant shall, at Tenant's sole cost and expense, store any refuse generated in the Premises by the consumption of food or beverages in a cold box or similar facility.

24. If Tenant desires to use any portion of the Common Area for a Tenant-related event, Tenant must notify Landlord in writing at least thirty (30) days prior to such event on the form attached as <u>Attachment 1</u> to this Exhibit, which use shall be subject to Landlord's prior written consent, not to be unreasonably withheld, conditioned or delayed. Notwithstanding anything in this Lease or the completed and executed Attachment to the contrary, Tenant shall be solely responsible for setting up and taking down any equipment or other materials required for the event, and shall promptly pick up any litter and report any property damage to Landlord related to the event. Any use of the Common Area pursuant to this Section shall be subject to the provisions of <u>Article 28</u> of the Lease.

G-3

Landlord may waive any one or more of these Rules and Regulations for the benefit of Tenant or any other tenant, but no such waiver by Landlord shall be construed as a waiver of such Rules and Regulations in favor of Tenant or any other tenant, nor prevent Landlord from thereafter enforcing any such Rules and Regulations against any or all of the tenants of the Project, including Tenant. These Rules and Regulations are in addition to, and shall not be construed to in any way modify or amend, in whole or in part, the terms covenants, agreements and conditions of the Lease. Landlord reserves the right to make such other and reasonable additional rules and regulations as, in its judgment, may from time to time be needed for safety and security, the care and cleanliness of the Project, or the preservation of good order therein; provided, however, that Tenant shall not be obligated to adhere to such additional rules or regulations until Landlord has provided Tenant with written notice thereof. Tenant agrees to abide by these Rules and Regulations and any such additional rules and regulations issued or adopted by Landlord. Tenant shall be responsible for the observance of these Rules and Regulations by all Tenant Parties.

ATTACHMENT 1 TO EXHIBIT G

REQUEST FOR USE OF COMMON AREA

REQUEST FOR USE OF COMMON AREA

Date of Request:
Landlord/Owner:
Tenant/Requestor:
Property Location:
Event Description:
Proposed Plan for Security & Cleaning:
· · · · · · · · · · · · · · · · · · ·
Date of Event:
Hours of Event: (to include set-up and take down):
Location at Property (see attached map):
Number of Attendees:
Open to the Public? [] YES [] NO
Food and/or Beverages? [] YES [] NO
If YES:
Will food be prepared on site? [] YES [] NO
Please describe:
Will alcohol be served? [] YES [] NO
Please describe:

G-1-1

•	Will attendees be charged for alcohol?] YES [] NO Is alcohol license or permit required? [] YES [] NO
•	Does caterer have alcohol license or permit: [] YES [] NO [] N/A
Other Ame	enities (tent, booths, band, food trucks, bounce house, etc.):
Other Ever	nt Details or Special Circumstances:

The undersigned certifies that the foregoing is true, accurate and complete and he/she is duly authorized to sign and submit this request on behalf of the Tenant/Requestor named above.

[INSERT NAME OF TENANT/REQUESTOR]

By:	
Name:	
Title:	
Date:	

G-1-2

EXHIBIT H

PTDM

[See attached]

H-1

PARKING AND TRAFFIC DEMAND MANAGEMENT

FORT WASHINGTON REALTY TRUST

47 ERIE STREET AND RELATED PARKING

CAMBRIDGE, MA

April 28, 1999

Table of Contents

- I. General Project Description
- II. Commitment to Mode Split
- III. General Transportation Demand Management Programs
- IV. Alternative Mode Promotions and Incentives
- V. Alternative Work Programs
- VI. Parking Management and SOV Disincentives
- VII. Marketing Programs
- VIII. Monitoring and Reporting Plan
- IX. Office of workplace Development Commitment
- X. Corporate Offices Commercial Parking Certification

Attachments:

- 1. Registration
- 2. Certification
- 3. Vehicle Trips
- 4. Site Plan
- 5. Guaranteed Ride Home Program

I. General Project Description

The garage at 47 Erie Street (the "Garage") is being constructed and will be owned by Fort Washington Realty Trust ("FWRT") whose address is in care of Lyme Properties, 101 Main Street, 18th Floor, Cambridge, MA 02142. The Garage and 77 surface spaces located at 40 Erie Street and 270 Albany Street will provide the accessory parking spaces pursuant to the Cambridge Zoning Ordinance for 270 Albany Street, 21 Erie Street, 40 Erie Street (also known as 130 Waverly Street and Fort Washington Research Park Phase 1) and 200 Sidney Street (Fort Washington Research Park Phase 2) (together, the "Buildings"). Of these four Buildings, all but Fort Washington Phase 2 are built and occupied. All of the occupied buildings received certificates of occupancy prior to the enactment of the PTDM ordinance. The Garage contains a total of 447 accessory parking spaces. The 447 Garage spaces are allocated among the four Buildings as follows:

270 Albany Street	Building <u>Square Footage</u> 70.000	<u># Spaces</u> 90
21 Erie Street	52,000	63
40 Erie Street (130 Waverly Street)	109,000	125
200 Sidney Street	135,000	169

The existing surface spaces serve 40 Erie Street. A "Non-Commercial Parking Space Registration Form" for the Garage and existing surface spaces at 270 Albany and 40 Erie Street (a total of 524 spaces), a copy of which is attached, was filed with the Cambridge Department of Traffic, Parking and Transportation and approved by the Director on October 28, 1997 (Attachment 1).

A building permit for the garage was issued November 4, 1997 (#0997154), and construction will be complete on or about April 30, 1999.

The 447 accessory parking spaces in the Garage are located on six levels and served by two elevators. All of the Garage and surface spaces arc employee spaces. There are no commercial spaces in the Garage or surface lots. The gross size of the garage is 121,000 gross square feet.

The tenants located in the Buildings served by the Garage and surface lots are:

- 270 Albany Street:
 - Millennium Pharmaceuticals, Inc. ("Millennium") 200 employees
 - Plex, LLC ("Plex") 2 employees
- 21 Erie Street:

•

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•

- Heliotrope Studios Ltd. ("Heliotrope") 3 employees
- Reprogensis, Inc. ("Reprogensis") 33 employees
- TVisions, Inc. ("TVisions") 100 employees
- 40 Erie Street:
 - Vertex Pharmaceuticals, Incorporated ("Vertex") 261 employees
 - Millennium 50 employees
- 200 Sidney Street:
 - Not yet leased, but expected to be 540 employees based on a projection of 4 persons per 1000 square feel

Average daily vehicle trips expected to be generated by the Buildings are set forth in the attached schedule (Attachment 3).

The nearest public transit is Central Square, approximately 7 miles away. The nearest bicycle paths or lanes are on Mass. Ave. in Central Square, along the Charles River at Memorial Drive and on the MIT campus.

Bicycle lanes are planned for the Sidney/Waverly/Vasser "Cambridge Roadway Improvements". A site plan is attached showing the location of the Garage and the Buildings (Attachment 4).

The contact person for this project is Robert L. Green, Lyme Properties 18th Floor, 101 Main St., Cambridge, MA 02142, telephone, (617) 225-0909.

II. Commitment to Mode Split

FWRT has agreed to a mode split goal of 61% for single occupancy vehicles.

III. General Transportation Demand Management Programs

A. <u>Membership in Transportation Management Association</u>

A Transportation Management Association is a private not-for-profit organization whose objective is to coordinate member business and other resources to improve transportation. The local organization, the Charles River Transportation Management Association (CRTMA), works with employers to develop voluntary, cost effective measures that benefit the members of the organization. The CRTMA assists businesses in developing internal transportation policies and programs that offer employees commute options at reduced costs. The CRTMA can facilitate the development of joint programs between groups of businesses. The CRTMA provides a connection with local, state and federal agencies to inform participating members of recent developments in transportation and assist in compliance with regulations. Services by the CRTMA include:

- Corporate transportation policy analysis
- Monitoring of government policy
- Guaranteed ride home program
- RideSource car and van matching
- Information resource for commute alternative
- Marketing of commute choices
- Development of incentive programs
- Employer transportation advisor and training program
- Pedestrian and bicycle incentive program
- Local shuttle bus service for members

FWRT or an affiliate will join the CRTMA. FWRT will include provisions in all future tenant leases informing them of the programs available under the CRTMA and encouraging participation by tenants.

B. Guaranteed Ride Home

Many employees drive to work because of concern that they cannot get home quickly in the event of an emergency or need a car for unexpected travel. Either directly or through its leases with tenants, FWRT will provide a guaranteed ride home to employees in such an event. The attached CRTMA Guaranteed Ride Home Program or a similar one will be provided (Attachment 5).

C. Employee Transportation Coordinator

FWRT will designate a full-time employee as Employee Transportation Coordinator (ETC) to assist in the day to day administration of TDM programs. The ETC will be responsible for coordination with CRTMA and tenants and staffing an on-site commuter services desk that will sell transit passes, tokens, and commuter checks; distribute marketing materials; and administer the guaranteed ride home program.

D. Initial Tenant Survey

In all future tenant leases, FWRT will include a provision encouraging tenants to provide an initial survey upon occupancy including information about the characteristics and attitudes of employees and customers in order to refine existing TDM programs and develop new ones.

4	
4	

E. Electric Vehicle Recharging Facility

Promptly upon a request therefor by any tenant or employee of the Buildings, FWRT will install an electric vehicle recharging facility in the garage and will distribute information on the availability and use to tenants and visitors.

IV. Alternative Mode Promotions and Incentives

A. MBTA Corporate Pass Program and Subsidized Transit Passes

On-site sales of MBTA transit passes and commuter vouchers through the MBTA Corporate Pass Program will begin after at least 50% of the tenants have occupied 200 Sidney Street. Working with MBTA and CARAVAN, unsold passes will be carried over into the next month or returned for credit on future purchases. Sales will be monitored for several months to establish the appropriate number of passes to be purchased in subsequent months. FWRT will exercise reasonable efforts to negotiate lease provisions in future leases regarding tenants who do not presently subsidize MBTA passes to do so in the future.

B. <u>Participation in Private Bus Shuttle Service</u>

FWRT has also met with CRTMA to discuss establishing shuttle service for the Buildings. The current CRTMA routes do not provide service to the Red Line or Central Square. With new membership and additional shuttle participation by its members, CRTMA has indicated that it might assume responsibility for operating shuttles that could provide service between the buildings and Central Square. However, because leases for substantially all of the space in the Buildings are already in effect and shuttle costs cannot be passed on tenants, FWRT is not able to unconditionally commit to such service unless it can be provided cost efficiently and the tenants voluntarily agree to pay for it. However working with CRTMA, FWRT will exercise reasonable efforts to convince tenants to participate and implement Red Line shuttle service.

⁵

C. Green Line Shuttle Study

Within twelve months of 90% occupancy of 200 Sidney Street, FWRT or CRTMA will complete a study on the feasibility of providing service connecting the Buildings to the B, C, and D Green Line branches. This study will be undertaken by FWRT alone or in combination with others including perhaps tenants of the Buildings or CRTMA and will include estimates of demand and cost. The study will be presented to the PDTM Planning Officer along with FWRT's recommendations

D. <u>Ridesharing Vehicles</u>

FWRT will provide up to 10% of accessory parking in convenient locations in order to encourage ridesharing. The actual number of spaces will be adjusted based on usage, but additional preferential spaces will be available as needed for new ridesharing vehicles. The Employee Transportation Coordinator will administer, monitor, and adapt the preferential parking as needed.

All site employees will be provided with access to CARAVAN for Commuter's Ridesource regional ridesource matching database. Also, a project ridematching database will be developed.

E. Bicycle and Pedestrian Programs

FWRT will provide secure bicycle parking in the garage and in exterior locations and such garage bicycle parking will be covered and secured. No less than the minimum parking required by zoning will be provided. Short term bicycle parking will be provided near building entrances for visitors, customers, and couriers.

Set forth below is a chart summarizing existing TDM programs for the Garage and lots:

Shuttle Participation	Millennium ü	Vertex	TVisions 4	FWRT on behalf of 200 Sidney
MBTA Pass Program ¹	ü			ü
Guaranteed Ride Home ²	ü			ü
Carpooling and Caravan Ride matching				ü
Flexible Work Schedules	ü	ü		
Publicity and Marketing				ü
Bicycles/Racks/Showers	ü	ü		ü
Discount and Preferential Parking for Vanpools and Carpools				ü
Financial Incentives ³	ü			

In all cases the TDM measures described hereunder will be implemented by FWRT, individual building owners, or the tenants of the Buildings.

V. Alternative Work Programs

FWRT will include provisions in all leases giving tenants information on the advantages and benefits of telecommuting, flexible time and compressed work week programs and encouraging tenants to work directly with the City of Cambridge on such programs.

- 1. Millennium offers full payment up to \$60 per month, deducted form paychecks before taxes.
- 2. Millennium also offers free taxi vouchers for meetings.
- 3. Millennium offers \$100 per quarter to employees who elect not to commute by public transit or car.
- 4. 21 Eric Street tenants of 35 or less employees excluded.

÷.,	Department of	Traffic, Parking and	Transportation	
		57 Inman Street Cambridge, MA 02139	are shown IT	

	dress of prope	rty owner_F	AN COUTH	ON REAL	Y THENST	
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ame & addre	ess of parking	facility ope	rator			
				Telephone		
ame and add	dress of facil	1ty 47 E	RIE ST GARAGE	5, 47 ERI	e st, can	IBRIDGE MA 0213
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Lot Garage		Openi	ing of facility:	Month 6	Day	Year97
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		Number of p	arking spaces	Number	of parking a	DACAN
ps of Park	ing Spaces:	Existing	Proposed	Typel	Existing	Proposed
	Residential			Commercial		
	Employee	14	447 47 Eric	Patient		
	Customer	254	62 40 Ericit	Student		
	Client			Guest		
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FOR TRAFFIC, PARKING AND TRANSPORTATION DEPARTMENT USE ONLY ATTACHMENT 1 DO NOT WRITE BELON THIS LINE Date Received: 10/22/97 commonto: Elimination of 14 juntace lot space at MEncil to contract a 6 level 447 space ganage delimination of 220 surface lot makes at 40 Enic st. to construct a ٩ story office/ wilding. Als the revention The revention of surface lot spaces for No Eric sto and montains existing spaces at 40 Eric st A Non-Residential or Non-commercial and 230 Albung 12 ROD existing building at Category: C Residential Number of parking spaces approved: ___ residential 524 ____ non-residential or non-commercial 16-28-97 opproved: Date:_ Traffic Director Additional Comments: 447 Garage space at 47 Enil JE. ς. Lot spaces at 40 Ence St. 62 5 bruge spaces at 270 Albury St. 10 Lot spaces at 270 Albany St 524 Total Spaces for use

9/97

Certification

I hereby certify that a commercial parking permit has been obtained for each space being used for commercial parking. None of the other existing or proposed parking spaces at this parking facility have been or will be available as commercial parking spaces until a commercial parking permit therefor has been obtained.

Fort Washington Realty Trust

/s/ David M. Roby, Trustee

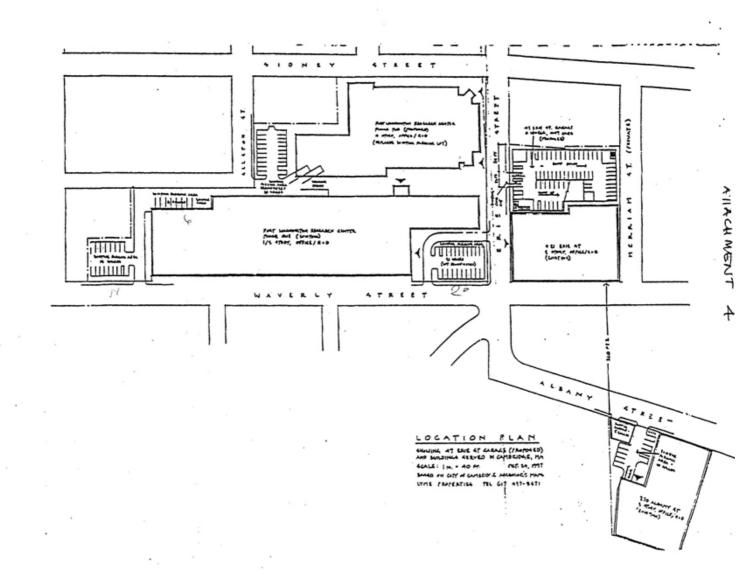
David M. Roby, Trustee
Date 3/11/99

Attachment 3

Vehicle Trips

337,000 SF of lab space @ ITE 760	
20,000 SF of office @ ITE 710	
Total trips	
3168 x 65.6	

- = 2,782 trips/day
- = 386 trips/day
- = 3168 trips/day
- = 2078 trips/day



CHARLES RIVER TRANSPORTATION MANAGEMENT ASSOCIATION



By Fax 5 Pages

April 21, 1999

Joseph Barr TDM Planner City of Cambridge Community Development 57 Inman St. Cambridge, MA 02139

Dear Joe:

Please find attached generic documentation for Charles River Transportation Management Association's Guaranteed Ride Home program.

In the past few weeks, we have worked with a number of businesses and developers who are in the process of preparing IPOP or PTDM plans. Many of these entities have indicated they will join CRTMA, and rely on us for Guaranteed Ride Home program.

The attached policies and procedures will provide you with an overview of how our program will work. The policy and procedure will be reviewed, and may be modified based on the needs of different CRTMA members, but I anticipate programs will be substantially the same.

Perhaps we should revisit City of Cambridge participation in CRTMA. We would be very interested in implementing a Guaranteed Ride Home program, and other TDM measures for city employees as well!

I will call to answer any questions that you may have about Guaranteed Ride Home.

Sincerely,

Jim Gascoigne Executive Director

- CC
- Tom Lucey Tom Ragno Debbie Black Joan Peyrebrune Bob Green

c/o Cambridge Technology Partners 304 Vassar Street Cambridge, MA 02139 Phone 617•679•5381 Fax 617•374•8300 email coinl@mit.edu Set forth below is a chart summarizing existing TDM programs for the Garage and lots:

Shuttle Participation	Millennium ü	Vertex	TVisions 4	FWRT on behalf of 200 Sidney
MBTA Pass Program ¹	ü			ü
Guaranteed Ride Home ²	ü			ü
Carpooling and Caravan Ride matching				ü
Flexible Work Schedules	ü	ü		
Publicity and Marketing				ü
Bicycles/Racks/Showers	ü	ü		ü
Discount and Preferential Parking for Vanpools and Carpools				ü
Financial Incentives ³	ü			

In all cases the TDM measures described hereunder will be implemented by FWRT, individual building owners, or the tenants of the Buildings.

V. Alternative Work Programs

FWRT will include provisions in all leases giving tenants information on the advantages and benefits of telecommuting, flexible time and compressed work week programs and encouraging tenants to work directly with the City of Cambridge on such programs.

- 1. Millennium offers full payment up to \$60 per month, deducted form paychecks before taxes.
- 2. Millennium also offers free taxi vouchers for meetings.
- 3. Millennium offers \$100 per quarter to employees who elect not to commute by public transit or car.
- 4. 21 Eric Street tenants of 35 or less employees excluded.

VI. Parking Management and SOV Disincentives

FWRT will control access to the Garage by issuance of access cards and control devices installed at entrances to the Garage.

VI. Marketing Programs

A. <u>New Employees</u>

FWRT will compile material and information on each of these measures and provide all of its tenants' employees with a commute alternatives "packet." In addition to information on each measure, the packet will include a set of guidelines explaining available options and how to establish an in-house TDM program and/or benefits of participating in the local transportation management association. The packet will also include public transportation schedules, bicycle path information, location of on-site bicycle parking and location of changing/showering facilities.

B. Commuter Newsletter

FWRT will distribute a quarterly newsletter focusing on alternative commuting. The newsletter will include information on existing the new TDM programs, discuss advantages of alternative modes, provide maps of transit and shuttle bus routes, provide a question and answer section, and provide phone numbers addresses and website addresses for alternative commute resources and programs. FWRT will designate an individual responsible for the production and distribution of the newsletter, or contract the task to a third party such as CRTMA.

C. <u>Website</u>

FWRT or CRTMA will develop and maintain a website devoted to alternative commute programs and measures or containing a section devoted to alternative commuting. At a minimum, the website will describe the programs, resources and measures provided to FWRT tenants and contain links to other websites such as City of Cambridge, MBTA and CARAVAN for Commuters that provide alternative commuter services and information.

D. Promotion of Transportation Fair/Events

FWRT will notify its tenants (via flyers or posting at kiosk, bulletin boards, etc.) of upcoming transportation fairs and events organized by others as the schedules for such events become available. FWRT or CRTMA will organize an on-site transportation information fair at least once a year.

E. <u>Commuter Information Centers</u>

Commuter Information Centers, including bus schedules and maps, ridesharing marketing forms and information about the guaranteed ride home program, will be created in a central location on site.

VII. Monitoring and Reporting Plan

The monitoring and reporting plan will include the following:

- Yearly mode split surveys, including questions about attitudes and suggestions 4/26/99 for new programs.
- Bi-yearly driveway and parking occupancy counts (starting with the first year of occupancy).
- Commitment to report this information to the city on a yearly basis for use in determining whether the project is meeting its mode split commitment.

IX. Office of Workforce Development Commitment

FWRT commits to work with the Cambridge Office of Workforce Development.

X. Corporate Office Certification

Attached is the Corporate Office Certification concerning commercial parking (Attachment 2).

EXHIBIT I

TENANT'S PROPERTY

None as of the Execution Date.

EXHIBIT J

FORM OF ESTOPPEL CERTIFICATE

To: BMR-Sidney Research Campus LLC 17190 Bernardo Center Drive San Diego, California 92128 Attention: Vice President, Real Estate Legal BioMed Realty, L.P. 17190 Bernardo Center Drive

San Diego, California 92128

Re: [PREMISES ADDRESS] (the "Premises") at 40 Erie Street, Cambridge, Massachusetts (the "Property")

The undersigned tenant ("Tenant") hereby certifies to you as follows:

 1. Tenant is a tenant at the Property under a lease (the "Lease") for the Premises dated as of [____], 20[__]. The Lease has not been cancelled, modified, assigned, extended or amended [except as follows: [____]], and there are no other agreements, written or oral, affecting or relating to Tenant's lease of the Premises or any other space at the Property. The lease term expires on [____], 20[___].

2. Tenant took possession of the Premises, currently consisting of [] square feet, on [], 20[], and commenced to pay rent on [], 20[]. Tenant has full possession of the Premises, has not assigned the Lease or sublet any part of the Premises, and does not hold the Premises under an assignment or sublease[, except as follows: []].

3. All base rent, rent escalations and additional rent under the Lease have been paid through [], 20[]. There is no prepaid rent[, except \$[]][, and the amount of security deposit is \$[] [in cash][OR][in the form of a letter of credit]]. Tenant currently has no right to any future rent abatement under the Lease.

4. Base rent is currently payable in the amount of \$[] per month.

5. Tenant is currently paying estimated payments of additional rent of \$[] per month on account of real estate taxes, insurance, management fees and Common Area maintenance expenses.

6. All work to be performed for Tenant under the Lease has been performed as required under the Lease and has been accepted by Tenant[, except []], and all allowances to be paid to Tenant, including allowances for tenant improvements, moving expenses or other items, have been paid.

J-1

7. To Tenant's knowledge, the Lease is in full force and effect, free from default and free from any event that could	l become a default under the Lease, and Tenant
has no claims against the landlord or offsets or defenses against rent, and there are no disputes with the landlord. T	enant has received no notice of prior sale,
transfer, assignment, hypothecation or pledge of the Lease or of the rents payable thereunder[, except []].

8. [Tenant has the following expansion rights or options for leasing additional space at the Property: [].][OR][Tenant has no rights or options to purchase the Property.]

9. To Tenant's knowledge, no hazardous wastes have been generated, treated, stored or disposed of by or on behalf of Tenant in, on or around the Premises or the Project in violation of any environmental laws.

10. The undersigned has executed this Estoppel Certificate with the knowledge and understanding that [INSERT NAME OF LANDLORD, PURCHASER OR LENDER, AS APPROPRIATE] or its assignee is [acquiring the Property/making a loan secured by the Property] in reliance on this certificate and that the undersigned shall be bound by this certificate. The statements contained herein may be relied upon by [INSERT NAME OF PURCHASER OR LENDER, AS APPROPRIATE], BMR-Sidney Research Campus LLC, BioMed Realty, L.P., BioMed Realty Trust, Inc., and any [other] mortgagee of the Property and their respective successors and assigns.

Any capitalized terms not defined herein shall have the respective meanings given in the Lease.

Dated this [] day of [], 20[].

INTELLIA THERAPEUTICS, INC. a Delaware corporation

By: Name:

Title:

J-2

EXHIBIT K

DEFINITION OF OBSOLETE EQUIPMENT

Obsolete equipment shall mean:

- The equipment is outdated, such that it is not reasonable to continue investing in it, and must be repaired or replaced to be fit for its expected use;
- The equipment is no longer supported by the manufacturer, and must be repaired or replaced to be fit for its expected use;
- Component or compatible parts of the equipment are no longer available;
- The equipment is no longer compatible with other equipment in the Building;
- The cost to replace the equipment is equal to or less than the cost to repair the equipment;
- The equipment poses a safety risk; and/or
- The equipment no longer meets local/state/national guidelines, and must be repaired or replaced to be fit for its expected use.

K-1

EXHIBIT L

SIGNAGE PLAN

[See attached]

L-1



ARROWSTREET 40 ERIE STREET

EXTERIOR RENDERING AT MAIN ENTRY / 17 September 2015

CERTAIN CONFIDENTIAL PORTIONS OF THIS EXHIBIT WERE OMITTED AND REPLACED WITH "[***]". A COMPLETE VERSION OF THIS EXHIBIT HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO AN APPLICATION REQUESTING CONFIDENTIAL TREATMENT PURSUANT TO RULE 406 PROMULGATED UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

AMENDMENT NO. 1 TO LICENSE AGREEMENT

This Amendment No. 1 to License Agreement (this "Amendment") is made and entered into as of February 2, 2016 (the "Amendment Date"), and amends that certain License Agreement, dated as of July 16, 2014, as amended or supplemented through the Amendment Date (the "License Agreement"), by and between Caribou Biosciences, Inc. ("Caribou") and Intellia Therapeutics, Inc. ("Intellia") (as successor in interest to Intellia, LLC under the License Agreement). Each of Caribou and Intellia may be referred to herein as a "Party" or together as "Parties." Capitalized terms not otherwise defined herein shall have the meanings ascribed to such terms in the License Agreement.

WHEREAS, Section 8.14 of the License Agreement provides that the License Agreement may be amended, supplemented, or otherwise modified only by means of a written instrument signed by both Caribou and Intellia;

[***]

WHEREAS [***] the Parties desire to amend the License Agreement as more specifically set forth in this Amendment;

NOW THEREFORE, in consideration of the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto agree as follows to be effective as of the Amendment Date:

1. Exhibit C of the License Agreement is hereby amended to delete all of the text before:

[***]

2. Section 2.7(b)(i) of the License Agreement is hereby amended by adding the following at the end of such Section:

"Furthermore, in consideration for Intellia's rights granted herein [***], Intellia will owe to Caribou a royalty [***] on Net Sales [***] of Products [***] in the Intellia Field. [***]"

3. To the extent not expressly amended by this Amendment, the License Agreement, as amended, remains in full force and effect. [***]

4. This Amendment may be executed in one or more counterparts, each of which will be deemed an original, and all of which together will be deemed to be one and the same instrument. Facsimile or PDF execution and delivery of this Amendment by either Party will constitute a legal, valid and binding execution and delivery of this Amendment by either Party will constitute a legal, valid and binding execution and delivery of this Amendment by either Party will constitute a legal, valid and binding execution and delivery of this Amendment by either Party will constitute a legal, valid and binding execution and delivery of this Amendment by either Party will constitute a legal, valid and binding execution and delivery of this Amendment by either Party will constitute a legal, valid and binding execution and delivery of this Amendment by either Party will constitute a legal, valid and binding execution and delivery of this Amendment by either Party will constitute a legal, valid and binding execution and delivery of this Amendment by either Party will constitute a legal, valid and binding execution and delivery of this Amendment by either Party will constitute a legal, valid and binding execution and delivery of this Amendment by either Party will constitute a legal, valid and binding execution and delivery of this Amendment by either Party will constitute a legal, valid and binding execution and delivery of this Amendment by either Party.

IN WITNESS WHEREOF, the Parties hereto have duly executed and delivered this Amendment No. 1 to License Agreement as of the Amendment Date.

CARIBOU BIOSCIENCES, INC.

By: <u>/s/ Rachel E. Haurwitz</u> Rachel E. Haurwitz, Ph.D President & CEO

INTELLIA THERAPEUTICS, INC.

By: /s/ Nessan Bermingham

Nessan Bermingham, Ph.D President & CEO

CERTAIN CONFIDENTIAL PORTIONS OF THIS EXHIBIT WERE OMITTED AND REPLACED WITH "[***]". A COMPLETE VERSION OF THIS EXHIBIT HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO AN APPLICATION REQUESTING CONFIDENTIAL TREATMENT PURSUANT TO RULE 406 PROMULGATED UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

ADDENDUM TO LICENSE AGREEMENT

This Addendum to License Agreement (this Addendum") is made and entered into as of February 2, 2016 (the "Addendum Date"), and amends that certain License Agreement dated as of July 16, 2014, as amended or supplemented through the Amendment Date (the "License Agreement"), by and between Caribou Biosciences, Inc. ("Caribou") and Intellia Therapeutics, Inc. (as successor in interest and assignee of Intellia, LLC, and herein thereafter referred to as "Intellia"). Each of Caribou and Intellia may be referred to herein as a "Party" or together as the "Parties." Capitalized terms not otherwise defined herein shall have the meanings ascribed to such terms in the License Agreement.

WHEREAS, Caribou and Pioneer Hi-Bred International, Inc. ("Pioneer") have entered into that certain Amended and Restated Collaboration and License Agreement, dated as of July 13, 2015, as may be amended or restated (the "Pioneer Agreement"), pursuant to which Caribou has been granted certain rights and licenses under proprietary and intellectual property rights of Pioneer and its affiliates, including E.I. du Pont de Nemours & Company ("DuPont"):

WHEREAS, the fields in which Caribou has been granted certain rights and licenses under the Pioneer Agreement include [***] the Intellia Field;

WHEREAS, pursuant to Caribou's obligations and Intellia's rights under Section 2.7(a) of the License Agreement, Caribou notified Intellia [***] of its execution of the Pioneer Agreement as a New In-License (as defined in the License Agreement), and Intellia notified Caribou [***] of its election to take the benefit of such New In-License; and

WHEREAS, the Parties wish to enter into this Addendum to memorialize the terms and conditions applicable to such New In-License.

NOW, THEREFORE, in consideration of the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto agree as follows to be effective as of the Addendum Date:

- 1. This Addendum is an Included In-License Addendum as set forth in Section 2.7(a) of the License Agreement, and, as of the Addendum Date, the Pioneer Agreement is a Caribou Included In-License, as defined in Section 2.7(a) and a Caribou In-License as defined in Section 1.7 of the License Agreement. Asterisked terms used in this Addendum shall have the meanings set forth in the Pioneer Agreement.
- 2. From the Addendum Date, DuPont Pioneer Background IP*, DuPont Pioneer Background Confidential Information,* Pioneer's and its Affiliates' rights in Program Results,* and Caribou's and its Affiliates' rights in Program Results* are added to Caribou IP and included in the scope of the licenses granted to Intellia in the Intellia Field under Section 2.1 of the License Agreement for the duration of the License Term,* and, after expiration of the Pioneer Agreement, such licenses will become non-exclusive, perpetual, irrevocable, fully paid-up and royalty-free.

- 3. Milestone Payments.
 - (a) For so long as Caribou's license in the [***] is exclusive and such payments required under the Pioneer Agreement, Intellia will pay the following milestone payments to Caribou, as a pass-through to Pioneer, for [***] of Intellia, its Affiliate or its Sublicensee in the Intellia Field. Each milestone payment shall be payable [***] upon the [***] achievement of the corresponding milestone event, except as expressly set forth in Section 3(vii).
 [***]
 - (b) Intellia acknowledges that Caribou owes the above milestone payments to Pioneer within [***] of the occurrence of the corresponding milestone events, and, if due by Intellia, agrees to pay the above milestone payments to Caribou within [***] of the occurrence of the corresponding milestone events by Intellia, its Affiliate or Sublicensee.
 - (c) Intellia will provide Caribou written notice within [***] after achievement of a milestone event set forth in Section 4(a).
- 4. Intellia's rights under Sections 4.1(h)(i), 4.2(g)(i) and 4.3 of the License Agreement will extend to all Patents within [***] as provided by the Pioneer Agreement.
- 5. Intellia's obligation to maintain the DuPont Pioneer Background Confidential Information in confidence will cease [***].
- 6. To the extent not expressly supplemented by this Addendum, the License Agreement remains in full force and effect.
- 7. This Addendum may be executed in one or more counterparts, each of which together will be deemed an original, and all of which together will be deemed to be one and the same instrument. Facsimile or PDF execution and delivery of this Addendum by either Part) will constitute a legal, valid and binding execution and delivery of this Addendum by such Party.

IN WITNESS WHEREOF, the Parties hereto have duly executed and delivered this Addendum to the License Agreement as of the Addendum Date

CARIBOU BIOSCIENCES, INC.

By: /s/ Rachel E. Haurwitz

Name: Rachel E. Haurwitz, Ph.D.

Title: President & CEO

INTELLIA THERAPEUTICS, INC.

By: /s/ Nessan Bermingham

Name: Nessan Bermingham, Ph.D.

Title: President & CEO

March 17, 2016

VIA EDGAR AND FEDERAL EXPRESS

United States Securities and Exchange Commission Division of Corporation Finance Mail Stop 4561 100 F. Street, N.E. Washington, D.C. 20549 Attention: Suzanne Hayes

Re: Intellia Therapeutics, Inc. Amendment No. 2 to Draft Registration Statement on Form S-1 Submitted December 22, 2015 CIK No. 0001652130

Dear Ms. Hayes:

This letter is confidentially submitted on behalf of Intellia Therapeutics, Inc. (the **"Company**") in response to the comments of the staff of the Division of Corporation Finance (the **"Staff**") of the U.S. Securities and Exchange Commission (the **"Commission**") with respect to the Company's Amendment No. 2 to Draft Registration Statement on Form S-1, confidentially submitted on December 22, 2015 (the **"Draft Registration Statement**"), as set forth in the Staff's letter dated January 11, 2016 addressed to Nessan Bermingham, Ph.D., President and Chief Executive Officer of the Company (the **"Comment Letter"**). The Company is concurrently confidentially submitting its Amendment No. 3 to the Draft Registration Statement **No. 3**"), which includes changes to the Draft Registration Statement in response to the Staff's comments.

For reference purposes, the text of the Comment Letter has been reproduced herein with responses below each numbered comment. For your convenience, we have italicized the reproduced Staff comments from the Comment Letter. Unless otherwise indicated, page references in the descriptions of the Staff's comments refer to the Draft Registration Statement, and page references in the responses refer to Amendment No. 3. All capitalized terms used and not otherwise defined herein shall have the meanings set forth in Amendment No. 3.

The responses provided herein are based upon information provided to Goodwin Procter LLP by the Company. In addition to confidentially submitting this letter via EDGAR, we are sending via Federal Express five (5) copies of each of this letter and Amendment No. 3 (marked to show changes from the Draft Registration Statement).

Overview, page 1

1. We note your reference of Dr. Doudna as a "co-founder" of your Company. We also note your website describes Dr. Doudna as an advisor to the company. Please revise the Prospectus Summary and other applicable sections of the registration statement to clearly explain the extent of her involvement with your company. For example, please explain what it means to be a "co-founder." The term "founder" implies that one has some control over and a financial interest in the company, yet your disclosures do not indicate that she has a significant financial interest or control. A "founder" who is not a principal stockholder or employee does not appear to have a current connection to the company. In this regard, please explain whether Dr. Doudna's has maintained or transferred her initial co-founder interests and other rights in the company. Please describe her advisory role. We note you highlight the work of Dr. Doudna, but provide no indication that she is a non-employee consultant to your company.

<u>RESPONSE</u>: In response to the Staff's comments, the Company has updated its disclosure on pages 1, 73 and 77 and provided additional disclosure regarding its scientific founders and advisors on page 76, including their current status as equity holders and active scientific advisors of the Company who are compensated for their service to the Company as scientific advisors.

2. Please also clarify the nature and scope of any engagement with Dr. Doudna to include what entitlement, if any, you have to intellectual property deriving from her research. For example, we note Dr. Doudna is a co-founder of your licensor Caribou, and is widely recognized for her contributions to the development of CRISPR/Cas9 as a genome engineering tool. Does Caribou have any claim to intellectual property derived from Dr. Doudna's research?

<u>RESPONSE</u>: In response to the Staff's comments, the Company has revised its disclosure regarding its scientific founders and advisors on page 76. Further, the Company respectfully advises the Staff that beyond the intellectual property licensed under the Company's disclosed agreements, the Company currently has no entitlement to additional intellectual property derived from Dr. Doudna's research with any third party. The Company is also not aware of any additional claims that Caribou may have to additional intellectual property derived from Dr. Doudna's research.

3. We refer to your last bullet point on page 2. Please revise your disclosure here and in your "Intellectual Property" section on page 87 to explain your leading intellectual property position in view of the competing claims concerning the intellectual property sublicensed from Caribou. In addition, please disclose whether you have any rights to issued patents relating to the CRISPR/Cas9 technology in the first bullet on page 87.

<u>RESPONSE</u>: The Company respectfully advises the Staff that despite competing claims regarding the inventions claimed in the sublicensed UC/Vienna and Dr. Charpentier application family, the Company believes it has a leading intellectual property position due to its access to several of the earliest filings describing the use of CRISPR/Cas9 for genome editing. With respect to the sublicensed UC/Vienna and Dr. Charpentier

application family, the Company has updated the disclosure on page 89 to include that the UC/Vienna/Charpentier group has been named the senior party in the interference proceeding declared by the USPTO, which means that UC/Vienna/Charpentier is currently presumed to be the first inventor, and the burden is on the Broad Institute to prove otherwise. In addition, the Company has access to the sublicensed Pioneer Hi-Bred intellectual property portfolio described at page 89. In particular, the family of applications filed by Vilnius University that is part of the Pioneer Hi-Bred intellectual property portfolio claims priority to a March 20, 2012, application and discloses the components of a CRISPR/Cas9 system required for gene editing in non-bacterial organisms. The Company currently has exclusive access to the Vilnius application in its therapeutic field as defined in the Caribou license agreement. Accordingly, the Company believes it has an advantageous position with respect to foundational CRISPR/Cas9 intellectual property.

Risks Associated With Our Business, page 6

4. Please add a risk factor to describe briefly the risks associated with your ability to obtain issued patents and to utilize the intellectual property sublicensed pursuant to the Caribou agreement. In this regard, we note your reference to certain patents issued to Broad that claim aspects of CRISPR/Cas9 systems and methods to edit genes in eukaryotic cells, a primary focus of your pipeline.

<u>RESPONSE</u>: In response to the Staff's comments, the Company has revised the disclosure on page 6 and added a corresponding risk factor at page 38 to describe certain risks associated with the Company's ability to obtain issued patents and to utilize intellectual property sublicensed pursuant to the Caribou agreement.

We face significant competition in an environment of rapid technological change,....page 21

5. We note that certain of your founders have affiliations with other gene editing companies. Please identify your founders and their current affiliations with other gene editing companies. Describe their current involvement with your company and their involvement with other gene editing companies.

<u>RESPONSE</u>: In response to the Staff's comments, the Company has provided additional disclosure regarding its scientific founders and advisors on page 76, including their current relationships with the Company. The Company respectfully advises the Staff that it is not aware of any affiliations of the Company's founders with other gene editing companies beyond (i) the involvement of Drs. Barrangou, Doudna, Haurwitz and May with Caribou Biosciences, with whom the Company has disclosed its relationship in the registration statement and (ii) the citation of Dr. Doudna as a founder of Editas Medicine, Inc., which has publicly disclosed that Dr. Doudna is no longer affiliated with their company.

The Regents of the University of California and the University of Vienna IP, page 89

6. Please clarify here and throughout your prospectus whether the material intellectual property in this "patent family" consists solely of patent applications or issued patents.

<u>RESPONSE</u>: In response to the Staff's comments, the Company has revised its disclosure at page 88 to update the status of this patent family. In particular, the Company notes that the USPTO has found claims in this family allowable pending interference. The USPTO Patent Trial and Appeal Board has declared an interference with 12 patents issued to the Broad Institute, MIT and Harvard and has named the UC/Vienna/Charpentier group as the senior party.

7. We note your disclosure on page 37 and 89 regarding the request to the USPTO, asking that an interference be declared between the UC/Vienna/Charpentier patent application and certain patents issued to the Broad Institute and Massachusetts Institute of Technology. We also note recent news accounts of the USPTO recommendation regarding this request. Please revise your disclosure to include any changes to this disclosure and briefly describe Dr. Doudna's interest in these proceedings. In addition, please add a brief description of the interference to your prospectus summary.

<u>RESPONSE</u>: The Company acknowledges the Staff's comments and has revised its disclosure at pages 38, 88 and 89 to update the status of this patent family and to provide information on the status of the interference. In particular, the Company notes that the USPTO has found claims in this family allowable pending interference and has declared an interference naming Berkeley/Vienna/Charpentier as the senior party. Further, the Company notes that Dr. Doudna has assigned her interest in this patent family to The Regents of the University of California and is therefore not a real party-in-interest to the interference proceedings.

Executive Compensation, page 114

8. Please update your disclosure to include the disclosures required by Item 402 of Regulation S-K for your last completed fiscal year.

<u>RESPONSE</u>: The Company acknowledges the Staff's comment and has updated the disclosure in the Executive Compensation section to include the disclosures required for fiscal year 2015.

Certain Relationships and Related Party Transactions, page 120

9. Caribou Biosciences' website indicates that they are also one of your co-founders. Please revise to identify them as such here and in your prospectus summary.

<u>RESPONSE</u>: In response to the Staff's comments, the Company has provided additional disclosure regarding its scientific founders and advisors on page 76, including the recognition of Dr. Rachel Haurwitz and Dr. Andrew May of Caribou Biosciences.

Notes to Consolidated Financial Statements 7. Preferred Units and Preferred Stock Merger with Intellia Therapeutics, Inc.

10. Please refer to your response to our prior comment 4. Provide us your analysis with reference to authoritative literature supporting why no change in fair value between

stockholders, individually or as a class, results in accounting for the Reorganization as a modification of the equity securities and presented as a reclassification of the components of equity as of the date of its occurrence.

<u>RESPONSE</u>: The Company acknowledges the Staff's comments and provides the following information with respect to the Reorganization:

As noted in the financial statements and throughout the Draft Registration Statement, the Reorganization resulted in the holders of equity interests in Intellia Therapeutics, LLC (the "LLC") exchanging their interests in the LLC for equity interests in Intellia Therapeutics, Inc., the LLC's wholly-owned subsidiary. As the Reorganization represented a transaction between entities with common ownership before and after the transaction, the Company believes that this transaction lacks economic substance and therefore should be accounted for in a manner consistent with a common control transaction. The Company's conclusion is based on the following:

- The LLC did not have any substantive operations. Its only assets were its investment in Intellia Therapeutics, Inc. and cash that was periodically
 raised from the sale of equity interests that was subsequently invested in the operations of Intellia Therapeutics, Inc. Because the LLC did not have
 any operations, it did not generate any liabilities.
- The Reorganization was comprised of a transaction in which the shareholders have nearly identical ownership percentages and interests before and
 after the transaction. The Company noted only nominal changes in ownership arising from the mechanics, such as rounding, resulting from the
 conversion ratio that was applied.
- There was no consideration exchanged in the Reorganization and no reallocation of value between the different classes of equity.

Based on the foregoing, the Company has concluded that the Reorganization lacks economic substance and should be accounted for as a reclassification of the components of equity based on the carrying amounts. This conclusion has historically been supported by analogy to paragraph 6 of FASB Technical Bulletin 85-5, *Issues Relating to Accounting for Business Combinations, Including Costs of Closing Duplicate Facilities of an Acquirer, Stock Transactions Between Companies Under Common Control, Downstream Mergers, Identical Common Shares for a Pooling of Interests, Pooling of Interests by Mutual and Cooperative Enterprises, which states, in part:*

[I] f the exchange lacks substance, it is not a purchase event and should be accounted for based on existing carrying amounts. That is, if the minority interest does not change and if in substance the only assets of the combined entity after the exchange are those of the partially owned subsidiary prior to the exchange, a change in ownership has not taken place, and the exchange should be accounted for based on the carrying amounts of the partially owned subsidiary's assets and liabilities.

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Although Technical Bulletin 85-5 was nullified by ASC 805, Business Combinations, we believe analogizing to this guidance remains appropriate.

In response to the Staff's comment, the Company has updated disclosure on page F-21 to further indicate that the Reorganization was determined to lack economic substance and that the transaction was accounted for in a manner consistent with a transaction between entities under common control.

If you should have any questions concerning the enclosed matters, please contact the undersigned at (617) 570-1971.

Sincerely,

/s/ Arthur R. McGivern Arthur R. McGivern

 cc: Nessan Bermingham, Ph.D., Intellia Therapeutics, Inc. José E. Rivera, Esq., Intellia Therapeutics, Inc.
 William D. Collins, Esq., Goodwin Procter LLP Joseph H. Apke, Deloitte & Touche LLP