

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933
ELEVEN BIOTHERAPEUTICS, INC.**

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

2834
(Primary Standard Industrial
Classification Code Number)
215 First Street, Suite 400
Cambridge, MA 02142
(617) 871-9911

26-2025616
(I.R.S. Employer
Identification Number)

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Abbie C. Celniker, Ph.D.
President and Chief Executive Officer
Eleven Biotherapeutics, Inc.
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Approximate date of commencement of proposed sale to public: As soon as practicable after this Registration Statement is declared effective.

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

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

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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

Smaller reporting company

(Do not check if a smaller reporting company)

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities To Be Registered	Proposed Maximum Aggregate Offering Price(1)	Amount of Registration Fee(2)
Common Stock, \$0.001 par value 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) Calculated pursuant to Rule 457(o) based on an estimate of the proposed maximum aggregate offering price.

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

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

SUBJECT TO COMPLETION, DATED _____, 2013

PRELIMINARY PROSPECTUS



Shares

Eleven Biotherapeutics, Inc.

Common Stock
\$ _____
per share

This is the initial public offering of our common stock. We are selling _____ shares of common stock in this offering. We currently expect the initial public offering price to be between \$ _____ and \$ _____ per share of common stock.

We have granted the underwriters an option to purchase up to _____ additional shares of common stock to cover over-allotments.

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

Investing in our common stock involves risks. See "[Risk Factors](#)" beginning on page 11.

We are an "emerging growth company" under applicable Securities and Exchange Commission rules and will be eligible for reduced public company disclosure requirements. See "Summary—Implications of Being an Emerging Growth Company."

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.

	<u>Per Share</u>	<u>Total</u>
Public Offering Price	\$ _____	\$ _____
Underwriting Discount(1)	\$ _____	\$ _____
Proceeds to Eleven Biotherapeutics, Inc. (before expenses)	\$ _____	\$ _____

(1) We refer you to "Underwriting" beginning on page 148 for additional information regarding underwriting compensation.

The underwriters expect to deliver the shares to purchasers on or about _____, 2014 through the book-entry facilities of The Depository Trust Company.

Citigroup

Cowen and Company

Leerink Swann

_____, 2014

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We are responsible for the information contained in this prospectus. We have not authorized anyone to provide you with different information, and we take no responsibility for any other information others may give you. If anyone provides you with different or inconsistent information, you should not rely on it. We are not, and the underwriters are not, making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should not assume that the information contained in this prospectus is accurate as of any date other than the date on the front of this prospectus.

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SUMMARY

This summary highlights information contained elsewhere in this prospectus. This summary does not contain all of the information you should consider before investing in our common stock. You should read this entire prospectus carefully, especially the “Risk Factors” section and our financial statements and the related notes appearing at the end of this prospectus, before making an investment decision.

Company Overview

We are a clinical-stage biopharmaceutical company with a proprietary protein engineering platform, called AMP-Rx, that we apply to the discovery and development of protein therapeutics to treat diseases of the eye. Our therapeutic approach is based on the role of cytokines in diseases of the eye, our understanding of the structural biology of cytokines and our ability to rationally design and engineer proteins to modulate the effects of cytokines. Cytokines are cell signaling molecules found in the body that can have important inflammatory effects. We believe cytokines play a major role in the pathology underlying many eye diseases and that protein therapeutics are an effective means of modulating the effects of cytokines in diseases of the eye. We have used our AMP-Rx platform to rationally design, engineer and generate a pipeline of innovative protein therapeutic candidates that target cytokines we believe are central to diseases of the eye. We are conducting research and development programs directed at both diseases of the front of the eye, such as dry eye disease and allergic conjunctivitis, and diseases of the back of the eye, such as diabetic macular edema, or DME, and uveitis.

Our most advanced product candidate is EBI-005. We designed, engineered and generated EBI-005 using our AMP-Rx platform and are developing EBI-005 as a topical treatment for dry eye disease and allergic conjunctivitis. Our EBI-005 program is based on the role that elevated levels of the inflammatory cytokine interleukin-1, or IL-1, play in the initiation and maintenance of the inflammation and pain associated with dry eye disease and the redness and itching associated with allergic conjunctivitis. We hold worldwide commercialization rights to EBI-005.

In 2013, we completed a Phase 1b/2a clinical trial of EBI-005 in patients with moderate to severe dry eye disease. We believe that the results of this trial, together with the results of a separate Phase 1/2 clinical trial conducted by our scientific founder using another IL-1 receptor antagonist in patients with moderate to severe dry eye disease and published in the peer-reviewed journal *JAMA Ophthalmology* in 2013, support our plan to initiate a pivotal Phase 3 clinical program evaluating EBI-005 in early 2014.

Our planned pivotal Phase 3 clinical program will consist of two Phase 3 clinical trials evaluating the safety and efficacy of EBI-005 for the treatment of moderate to severe dry eye disease and a separate clinical trial evaluating the safety of treatment with EBI-005 for one year. Based on our estimates regarding patient enrollment, if this clinical program is successful, we plan to submit a Biologics License Application, or BLA, to the U.S. Food and Drug Administration, or FDA, seeking approval of EBI-005 for the treatment of dry eye disease in the United States before the end of 2016. We also plan to initiate a Phase 2 clinical trial to evaluate the use of EBI-005 in patients with allergic conjunctivitis in 2014. We believe that the net proceeds from this offering, together with our existing cash and cash equivalents, will be sufficient to fund both our Phase 3 clinical program evaluating EBI-005 for the treatment of dry eye disease and our Phase 2 trial evaluating EBI-005 for the treatment of allergic conjunctivitis.

Our preclinical product candidates include EBI-029 for the treatment of DME, a serious disease of the central portion of the retina known as the macula, and EBI-028 for the treatment of uveitis, which is an inflammatory disease of the middle layer of the eye known as the uvea. We plan to continue to study both EBI-029 and EBI-028 in preclinical models to further optimize these product candidates for potential use in humans.

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The following table summarizes key information about our product development programs.

PROGRAM	TARGET	INDICATION	OUR COMMERCIAL RIGHTS	DEVELOPMENT STAGE				
				DISCOVERY	PRE-CLINICAL	PHASE 1	PHASE 2	PHASE 3
EBI-005 (Topical)	IL-1 Receptor	Dry Eye Disease	Worldwide	▶				Planned initiation in early 2014
		Allergic Conjunctivitis	Worldwide	▶			Planned initiation in 2014	
EBI-029 (Intravitreal Injection)	IL-6	Diabetic Macular Edema	Worldwide	▶				
EBI-028 (Intravitreal Injection)	IL-17	Uveitis	Worldwide	▶				

We are led by a management team with extensive experience in the pharmaceutical industry. Our President and Chief Executive Officer, Abbie C. Celniker, Ph.D., brings more than 20 years of experience in leading protein therapeutic discovery and development companies and programs. The cornerstone of our biological approach is based on the research of one of our co-founders, Reza Dana, M.D., who is currently a Professor of Ophthalmology and the Claes Dohlman Chair in Ophthalmology at Harvard Medical School. Our principal investors are funds managed by Third Rock Ventures, LLC, Flagship Ventures Management, Inc. and JAFCO Co. Ltd.

Our Approach

Until recently, ocular therapies generally have been developed based on a limited understanding of the biology underlying the initiation and maintenance of the disease state. As a result, many of the therapies for eye diseases were not the result of rational drug design, but instead were ophthalmic formulations of pharmaceuticals that were originally developed and approved for non-ocular diseases, such as steroids and antihistamines. We believe that this limited understanding of the biology of eye diseases impeded the discovery and development of innovative ophthalmic therapeutics.

Over the past 15 years, researchers have been developing a greater understanding of the key proteins and pathways involved in ocular disease. For instance, the understanding of the protein pathways involved in the retinal disease wet age-related macular degeneration, or wet AMD, has led to the successful development of drugs such as Lucentis and Eylea that have dramatically improved the outcomes for many patients. We believe that we can apply similar advances in the understanding of other protein pathways involved in eye diseases to the discovery and development of new treatments for these diseases.

We apply a rational, biology-based approach to the discovery and development of novel protein therapeutics for patients suffering from eye diseases. Our therapeutic approach is based on the role of cytokines in diseases of the eye, our understanding of the structural biology of cytokines and our ability to rationally design proteins to modulate the effects of cytokines.

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AMP-Rx is our proprietary platform that we use to design, engineer and generate novel protein therapies that modulate key molecular targets we believe are responsible for the initiation or maintenance of an ocular disease. We begin by analyzing the target and identifying the protein-based approaches we may use to modulate the target. We then generate protein candidates and model protein/target interactions to inform an iterative protein optimization technique. We use this process to modify protein drugs to meet design specifications for improved biological and drug-like properties. We have established a collaboration with ThromboGenics, N.V., or ThromboGenics, in which we apply our AMP-Rx platform to design and engineer innovative ophthalmic medicines.

Dry Eye Disease

Dry eye disease affects the ocular surface and is characterized by symptoms of dryness, pain, discomfort and irritation. If dry eye disease is left untreated or becomes severe, patients may suffer chronic ocular pain and distortion of vision that can significantly reduce their quality of life. Dry eye disease often is classified as mild, moderate or severe based on clinical symptom severity. Dry eye disease is one of the leading causes of patient visits to eye care professionals in the United States. According to Market Scope, LLC, or Market Scope, a publisher of research and analysis on the ophthalmic market, approximately 68 million people in the United States, European Union, Japan and other developed markets have dry eye disease, including approximately 26 million people who suffer from the moderate to severe form of dry eye disease. According to Market Scope, approximately 19 million people in the United States have dry eye disease, including approximately seven million people who suffer from the moderate to severe form of dry eye disease.

The current standard of care for moderate to severe dry eye disease includes artificial tears and topical anti-inflammatory and immune-modulating drugs. The anti-inflammatory and immune-modulating drug market for the treatment of moderate to severe dry eye disease consists primarily of Restasis, which is approved for use in the United States, and off-label use of corticosteroids. Restasis, which had annual worldwide sales of approximately \$792 million in 2012, is not approved for the treatment of the symptoms of dry eye disease, but only for increasing tear production in patients whose tear production is presumed to be suppressed due to ocular inflammation associated with dry eye disease. In clinical trials, approximately 17% of patients reported ocular burning following the use of Restasis. We believe that there remains a significant unmet medical need for new treatments for patients suffering from moderate to severe dry eye disease.

EBI-005 – a Novel IL-1 Receptor Antagonist

Our most advanced product candidate is EBI-005, a recombinant protein which binds with the IL-1 receptor and blocks, or antagonizes, IL-1 receptor signaling on many cell types in the eye. We are developing EBI-005 as a topical, eye-drop treatment for dry eye disease and allergic conjunctivitis. When the IL-1 receptor is blocked by EBI-005, the IL-1 receptor is unable to transmit the biological signals that we believe are responsible for many of the signs and symptoms of ocular surface diseases, such as pain, discomfort, itching and inflammation. We have designed, engineered and generated EBI-005 using our AMP-Rx platform to have the following product attributes that we believe improve its utility as a topical therapeutic:

- *Rapid onset of action.* We have designed EBI-005 to be a potent blocker of IL-1. In a biochemical study of receptor binding, EBI-005 bound more rapidly and up to 500 times more strongly to the IL-1 receptor than the natural ligands IL-1 β and IL-1Ra. We believe this may result in a rapid onset of symptomatic relief.
- *Comfortable for patients.* We have optimized EBI-005 for topical, ophthalmic delivery and have formulated it with a preservative-free comfortable solution, or vehicle, for delivery as an eye drop. We believe patient comfort is an important factor in patient compliance and physician recommendation of a topical drug for diseases of the ocular surface.
- *Convenient dosing.* We have designed EBI-005 to bind tightly to the IL-1 receptor and block it for an extended period of time. We have measured the duration of this receptor binding in biochemical studies

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outside the body, or *in vitro*. Based on these tests and our understanding of the natural cycling of the IL-1 receptor from the cell surface to the cell interior, we believe EBI-005 remains bound to an IL-1 receptor during the entire period the receptor is present on the surface of a cell. We believe a long duration of receptor binding may allow for a convenient dosing schedule.

- *Stable dosage form.* We designed EBI-005 to be a thermally stable protein product. In analytical tests, EBI-005 was stable for up to six months at room temperature. We believe room temperature stability without the need for refrigeration is an important convenience for patients.

In 2012, we submitted an investigational new drug application, or IND, to the FDA for purposes of conducting clinical trials of EBI-005 for the treatment of dry eye disease. In 2013, we completed a Phase 1b/2a clinical trial of EBI-005 in patients with moderate to severe dry eye disease. We designed our Phase 1b/2a clinical trial of EBI-005 principally to assess safety in dry eye disease patients and secondarily, to measure efficacy in order to inform the design of our pivotal clinical trials. In our Phase 1b/2a trial, EBI-005 was generally well tolerated. While we did not power our Phase 1b/2a trial to measure efficacy with statistical significance, and the differences from baseline that we observed in the EBI-005 treatment groups were not statistically significant when compared to differences from baseline in patients who received vehicle control, we observed the following results, among others, in this trial:

- on the primary efficacy endpoint of change in patient symptoms as assessed by a patient questionnaire called the ocular surface disease index, or OSDI, an improvement in patients treated with EBI-005 from baseline at six weeks;
- on the secondary efficacy endpoint of change in total corneal fluorescein staining, or CFS, a measure of ocular surface injury, an improvement in patients treated with EBI-005 from baseline at six weeks;
- on the painful or sore eyes question of the OSDI, a greater improvement from baseline at six weeks in patients treated with EBI-005 compared to improvement from baseline at six weeks in patients in the vehicle control group; and
- fewer artificial tears used by patients treated with EBI-005 compared with patients in the vehicle control group, and this difference was statistically significant.

We believe these results were clinically relevant.

In early 2014, we plan to initiate a pivotal Phase 3 clinical program that will consist of two Phase 3 clinical trials to evaluate the safety and efficacy of EBI-005 from baseline at 12 weeks at a concentration of 5 mg/ml for the treatment of moderate to severe dry eye disease and a separate clinical trial evaluating the safety of treatment with EBI-005 at the same concentration for one year. We have designed our pivotal Phase 3 clinical program based on the results we observed in our Phase 1b/2a clinical trial of EBI-005. Based on our estimates regarding patient enrollment, we expect to have top-line data from our first Phase 3 trial available in early 2015. We currently intend to initiate our second Phase 3 trial after reviewing top-line data from our first Phase 3 trial, although we may later decide to initiate our second Phase 3 trial while our first Phase 3 trial is ongoing. If the results of both of our Phase 3 trials and our separate safety trial are favorable, we plan to submit a BLA with the FDA seeking approval of EBI-005 for the treatment of dry eye disease in the United States before the end of 2016.

In addition to our clinical development of EBI-005 in dry eye disease, we plan to initiate a Phase 2 clinical trial in 2014 of EBI-005 in patients with allergic conjunctivitis who have not responded adequately to antihistamines or mast cell stabilizers. Allergic conjunctivitis is an inflammatory disease of the conjunctiva, the membrane covering the inside of the eyelids and white part of the eye, primarily from a reaction to allergy-causing substances such as pollen or pet dander.

Our Strategy

Our goal is to become a leading biopharmaceutical company focused on developing and commercializing novel protein therapeutics to treat diseases of the eye. The key elements of our strategy in support of this goal are to:

- *Complete clinical development of and seek marketing approval for EBI-005 for the treatment of dry eye disease.* If the results of both of our Phase 3 trials and our separate safety trial are favorable, we plan to submit a BLA to the FDA seeking approval of EBI-005 for the treatment of dry eye disease in the United States before the end of 2016.
- *Expand the use of EBI-005 for additional ocular indications.* In 2014, we plan to initiate a Phase 2 clinical trial to assess the potential therapeutic benefit of EBI-005 for the treatment of allergic conjunctivitis in patients who have not responded adequately to antihistamines or mast cell stabilizers.
- *Maximize commercial potential of EBI-005.* We hold worldwide commercialization rights to EBI-005 and may decide to build our own focused, specialty sales force in order to commercialize EBI-005 in the United States ourselves. We intend to enter into strategic collaborations for the development and commercialization of EBI-005 outside of the United States.
- *Apply AMP-Rx platform to build a pipeline of product candidates for the treatment of eye diseases.* We use our AMP-Rx platform to rationally design, engineer and generate a pipeline of innovative protein therapeutic candidates that target cytokines that we believe are central to diseases of the eye.
- *Pursue collaborative and other strategic opportunities.* We have established a collaboration with ThromboGenics, a European based, publicly held biopharmaceutical company focused on developing and commercializing innovative ophthalmic medicines. We plan to evaluate opportunities to enter into other collaborations that may contribute to our ability to advance our product candidates and to progress concurrently a range of discovery and development programs.

Risks Associated with Our Business

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

- We depend heavily on the success of EBI-005. Our ability to generate product revenues, which we do not expect will occur before 2017, if ever, will depend heavily on our obtaining marketing approval for and commercializing EBI-005.
- Our Phase 3 clinical program evaluating EBI-005 may not be successful. In our Phase 1b/2a trial of EBI-005, neither of the doses of EBI-005 tested achieved statistically significant superiority compared to vehicle control based on any primary or secondary efficacy endpoints, including those we intend to use for our planned Phase 3 clinical trials. We have based many elements of the design of the protocol for our planned Phase 3 clinical trials, including key eligibility criteria and the co-primary endpoints we expect to use, on retrospective subgroup analyses that we performed on the results of our Phase 1b/2a clinical trial. These retrospective subgroup analyses may not be predictive of the results of these Phase 3 trials.
- We are an early stage company. We currently have no commercial products, and all of our product candidates, other than EBI-005, are still in preclinical development.
- We have not yet demonstrated our ability to successfully complete a pivotal Phase 3 clinical trial, obtain marketing approvals, manufacture at commercial scale, or arrange for a third party to do so on our behalf, or conduct sales, marketing and distribution activities necessary for successful product commercialization. If we are unable to obtain required marketing approvals for, commercialize, obtain

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and maintain patent protection for or gain market acceptance by physicians, patients and third-party payors of EBI-005 or any of our other product candidates, or experience significant delays in doing so, our business will be materially harmed.

- We face substantial competition. There are a number of products and therapies in preclinical research and clinical development by third parties to treat dry eye disease. Some patients with moderate to severe dry eye disease are effectively treated by the current standard of care therapies, some of which are available in generic form or offered at relatively low prices. We also would face competition with respect to EBI-005 if anakinra, another IL-1 blocker approved for subcutaneous administration for the treatment of rheumatoid arthritis, was available commercially for the treatment of dry eye disease.
- We have incurred significant losses since our inception and will need substantial additional funding. As of September 30, 2013, we had an accumulated deficit of \$52.5 million. We expect to incur significant expenses and operating losses over the next several years.

Our Corporate Information

We were incorporated under the laws of the state of Delaware on February 25, 2008 under the name NewCo LS14, Inc. We subsequently changed our name to DeNovo Therapeutics, Inc. in September 2008 and again to Eleven Biotherapeutics, Inc. in February 2010. Our principal executive offices are located at 215 First Street, Suite 400, Cambridge, Massachusetts 02142, and our telephone number is (617) 871-9911. Our website address is www.elevenbio.com. The information contained on, or that can be accessed through, our website is not a part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

In this prospectus, unless otherwise stated or the context otherwise requires, references to “Eleven,” “we,” “us,” “our” and similar references refer to Eleven Biotherapeutics, Inc. Eleven Biotherapeutics, AMP-Rx and the Eleven logo are our trademarks. The copyright to the Ocular Surface Disease Index and the registered trademark Restasis are the property of Allergan, Inc. The registered trademark Kineret is the property of Swedish Orphan Biovitrum AB. The other trademarks, trade names and service marks appearing in this prospectus are the property of their respective owners.

Implications of Being an Emerging Growth Company

As a company with less than \$1 billion in revenue during our last fiscal year, we qualify as an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, and we may remain an emerging growth company for up to five years. For so long as we remain an emerging growth company, we are permitted and intend to rely on exemptions from certain disclosure and other requirements that are applicable to other public companies that are not emerging growth companies. In particular, in this prospectus, we have provided only two years of audited financial statements and have not included all of the executive compensation related information that would be required if we were not an emerging growth company. Accordingly, the information contained herein may be different than the information you receive from other public companies in which you hold stock.

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THE OFFERING

Common stock offered	shares
Common stock to be outstanding immediately following this offering	shares
Over-allotment option	shares
Use of proceeds	<p>We currently estimate that we will use the net proceeds from this offering, together with our existing cash and cash equivalents, to fund our pivotal Phase 3 clinical program for EBI-005 in patients with moderate to severe dry eye disease and our Phase 2 clinical trial of EBI-005 in patients with allergic conjunctivitis and for working capital and other general corporate purposes, including development of our preclinical product candidates and pursuit of our other research and discovery efforts.</p> <p>See the “Use of Proceeds” section in this prospectus for a more complete description of the intended use of proceeds from this offering.</p>
Risk Factors	<p>You should read the “Risk Factors” section of this prospectus for a discussion of factors to consider carefully before deciding to invest in shares of our common stock.</p>
Proposed NASDAQ Global Market symbol	“EBIO”

The number of shares of our common stock to be outstanding after this offering is based on 10,483,205 shares of our common stock outstanding as of December 6, 2013, 51,882,416 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 2,892,855 shares of our common stock issuable upon the exercise of outstanding warrants held by some of our preferred stockholders, at an exercise price of \$0.01 per share, which otherwise expire upon the closing of this offering.

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

- 7,450,610 shares of our common stock issuable upon the exercise of stock options outstanding as of December 6, 2013 at a weighted average exercise price of \$0.30 per share;
- 195,000 shares of our common stock issuable following the closing of this offering upon the exercise of warrants outstanding as of December 6, 2013 held by our venture debt lender, Silicon Valley Bank, or SVB, at an exercise price of \$1.00 per share;

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- 1,135,569 shares of our common stock available for future issuance under our 2009 Stock Incentive Plan, or the 2009 Plan, as of December 6, 2013; and
- additional shares of our common stock that will become available for future issuance under our equity compensation plans upon the closing of this offering.

Unless otherwise indicated, all information in this prospectus assumes:

- no exercise of the outstanding options described above;
- no exercise of the warrants held by SVB;
- no exercise by the underwriters of their option to purchase up to _____ shares of our common stock to cover over-allotments;
- the automatic conversion of all outstanding shares of our preferred stock into an aggregate of 51,882,416 shares of our common stock upon the closing of this offering;
- the warrants outstanding as of December 6, 2013 held by SVB to purchase 195,000 shares of our preferred stock, at an exercise price of \$1.00 per share, become exercisable for 195,000 shares of our common stock, at an exercise price of \$1.00 per share, upon the closing of this offering; and
- the restatement of our certificate of incorporation and the amendment and restatement of our bylaws upon the closing of this offering.

SUMMARY FINANCIAL DATA

You should read the following summary financial data together with our financial statements and the related notes appearing at the end of this prospectus and the “Selected Financial Data” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” sections of this prospectus. We have derived the statement of operations data for the years ended December 31, 2011 and 2012 from our audited financial statements included in this prospectus. We have derived the statement of operations data for the nine months ended September 30, 2012 and 2013 and the balance sheet data as of September 30, 2013 from our unaudited financial statements included in this prospectus. The unaudited financial data include, in the opinion of our management, all adjustments, consisting of normal recurring adjustments, that are necessary for a fair statement of our financial position and results of operations for these periods. Our historical results for any prior period are not necessarily indicative of results to be expected in any future period, and our results for any interim period are not necessarily indicative of results to be expected for a full fiscal year.

	Year Ended December 31,		Nine Months Ended September 30,	
	2011	2012	2012	2013
	(in thousands, except per share data)			
Statement of Operations Data:				
Collaboration revenue	\$ —	\$ —	\$ —	\$ 824
Operating expenses:				
Research and development	9,411	15,263	11,367	10,576
General and administrative	3,267	4,213	3,081	2,606
Total operating expenses	<u>12,678</u>	<u>19,476</u>	<u>14,448</u>	<u>13,182</u>
Loss from operations	(12,678)	(19,476)	(14,448)	(12,358)
Other income (expense):				
Other income (expense), net	3	(13)	7	(96)
Interest expense	(151)	(168)	(122)	(505)
Total other expense, net	<u>(148)</u>	<u>(181)</u>	<u>(115)</u>	<u>(601)</u>
Net loss and comprehensive loss	<u>\$ (12,826)</u>	<u>\$ (19,657)</u>	<u>\$ (14,563)</u>	<u>\$ (12,959)</u>
Cumulative preferred stock dividends	(1,452)	(3,111)	(2,201)	(2,715)
Net loss applicable to common stockholders	<u>\$ (14,278)</u>	<u>\$ (22,768)</u>	<u>\$ (16,764)</u>	<u>\$ (15,674)</u>
Net loss per share applicable to common stockholders—basic and diluted	<u>\$ (2.80)</u>	<u>\$ (3.61)</u>	<u>\$ (2.81)</u>	<u>\$ (1.87)</u>
Weighted-average number of common shares used in net loss per share applicable to common stockholders—basic and diluted	<u>5,092</u>	<u>6,308</u>	<u>5,971</u>	<u>8,384</u>
Pro forma net loss per share—basic and diluted (unaudited)		<u>\$ (0.43)</u>		<u>\$ (0.24)</u>
Weighted average number of common shares used in pro forma net loss per share—basic and diluted (unaudited)		<u>45,199</u>		<u>54,224</u>

See Note 2 within the notes to our financial statements appearing at the end of this prospectus for a description of the method used to calculate basic and diluted net loss applicable to common stockholders and pro forma basic and diluted net loss per share.

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	As of September 30, 2013		
	Actual	Pro forma (in thousands)	Pro forma As adjusted
Balance Sheet Data:			
Cash and cash equivalents	\$ 3,881	\$ 11,910	\$
Working capital	(2,948)	8,482	
Total assets	5,051	13,080	
Notes payable, net of current portion	3,287	3,287	
Preferred stock warrant liability	246	—	
Preferred stock	45,035	—	
Accumulated deficit	(52,528)	(52,734)	
Total stockholders' (deficit) equity	\$(51,184)	\$ 5,527	\$

The unaudited pro forma balance sheet data give effect to:

- the completion of our series B preferred stock financing in December 2013 in which we issued and sold an aggregate of 6,632,416 shares of our series B preferred stock and warrants to purchase 1,142,855 shares of our common stock for an aggregate purchase price of \$11.6 million, consisting of \$8.0 million in cash and \$3.6 million for the conversion of outstanding convertible promissory notes, including accrued interest;
- the automatic conversion of all outstanding shares of our preferred stock, including the shares of our series B preferred stock that we issued in December 2013, into an aggregate of 51,882,416 shares of our common stock upon the closing of this offering;
- the reclassification of our warrant liability to stockholders' equity as a result of warrants to purchase preferred stock becoming warrants to purchase common stock upon the closing of this offering; and
- the issuance of 2,892,855 shares of our common stock upon the exercise of outstanding warrants held by some of our preferred stockholders, at an exercise price of \$0.01, including shares of our common stock issuable upon the exercise of the warrants that we issued in December 2013, which otherwise expire upon the closing of this offering.

The unaudited pro forma as adjusted balance sheet data give further effect to our issuance and sale of _____ shares of our common stock in this offering at an assumed initial public offering price of \$ _____ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

A \$1.00 increase or decrease in the assumed initial public offering price of \$ _____ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease each of cash and cash equivalents, working capital and total stockholders' equity on a pro forma as adjusted basis by approximately \$ _____ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below together with all of the other information contained in this prospectus, including our financial statements and the related notes appearing at the end of this prospectus, before deciding to invest in our common stock. If any of the following risks actually occur, our business, prospects, operating results and financial condition could suffer materially. In such event, the trading price of our common stock could decline and you might lose all or part of your investment.

Risks Related to Our Financial Position and Need For Additional Capital

We have incurred significant losses since our inception. We expect to incur losses over the next several years and may never achieve or maintain profitability.

Since inception, we have incurred significant operating losses. Our net loss was \$12.8 million for the year ended December 31, 2011, \$19.7 million for the year ended December 31, 2012 and \$13.0 million for the nine months ended September 30, 2013. As of September 30, 2013, we had an accumulated deficit of \$52.5 million. To date, we have financed our operations primarily through private placements of our preferred stock and convertible bridge notes, venture debt borrowings and, to a lesser extent, from a collaboration. All of our revenue to date has been collaboration revenue, which we first began to generate in 2013. We have devoted substantially all of our financial resources and efforts to research and development, including preclinical studies and, beginning in 2012, clinical trials. We are still in the early stages of development of our product candidates, and we have not completed development of any drugs. 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 compared to prior periods in connection with conducting our planned pivotal Phase 3 clinical program, consisting of two Phase 3 clinical trials evaluating the safety and efficacy of EBI-005, our most advanced product candidate, for the treatment of moderate to severe dry eye disease and a separate clinical trial evaluating the safety of treatment with EBI-005 for one year, and seeking marketing approval for EBI-005 for this indication in the United States and, whether alone or in collaboration with third parties, in the European Union and other jurisdictions. We plan to initiate our pivotal Phase 3 clinical program in early 2014.

Our expenses will also increase if and as we:

- pursue the development of EBI-005 for the treatment of allergic conjunctivitis or additional indications or for use in other patient populations or, if it is approved, seek to broaden the label for EBI-005;
- continue the research and development of our other product candidates;
- seek to discover and develop additional product candidates;
- in-license or acquire the rights to other products, product candidates or technologies for the treatment of ophthalmic diseases;
- seek marketing approvals for any product candidates that successfully complete clinical trials;
- establish sales, marketing and distribution capabilities and scale up and validate external manufacturing capabilities to commercialize any products for which we may obtain marketing approval;
- maintain, expand and protect our intellectual property portfolio;
- hire additional clinical, quality control, scientific and management personnel;
- expand our operational, financial and management systems and personnel, including personnel to support our clinical development, manufacturing and planned future commercialization efforts and our operations as a public company; and

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- increase our insurance coverage as we expand our clinical trials and commence commercialization of EBI-005.

Because of the numerous risks and uncertainties associated with pharmaceutical product development, we are unable to accurately predict the timing or amount of increased expenses or when, or if, we will be able to achieve profitability. Our expenses will increase if:

- we are required by the United States Food and Drug Administration, or FDA, or the European Medicines Agency, or EMA, to perform studies in addition to those currently expected;
- if there are any delays in receipt of regulatory clearance to begin our planned pivotal Phase 3 clinical program; or
- if there are any delays in enrollment of patients in or completing our clinical trials or the development of EBI-005 or any other product candidates that we may develop.

Our ability to become and remain profitable depends on our ability to generate revenue. We do not expect to generate significant revenue unless and until we obtain marketing approval for, and commercialize, EBI-005, which we do not expect will occur before 2017, if ever. This will require us to be successful in a range of challenging activities, including:

- initiating and obtaining favorable results from our planned pivotal Phase 3 clinical program for EBI-005 for the treatment of moderate to severe dry eye disease;
- subject to obtaining favorable results from our planned pivotal Phase 3 clinical program for EBI-005, applying for and obtaining marketing approval for EBI-005;
- establishing sales, marketing and distribution capabilities, either ourselves or through collaboration or other arrangements with third parties, to effectively market and sell EBI-005 in the United States;
- establishing collaboration, distribution or other marketing arrangements with third parties to commercialize EBI-005 in markets outside the United States;
- achieving an adequate level of market acceptance of EBI-005;
- protecting our rights to our intellectual property portfolio related to EBI-005; and
- ensuring the manufacture of commercial quantities of EBI-005.

Even 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 depress the value of our company and could impair our ability to raise capital, expand our business, maintain our research and development efforts, diversify our product offerings or even continue our operations. A decline in the value of our company could also cause you to lose all or part of your investment.

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

We expect to devote substantial financial resources to our ongoing and planned activities, particularly preparing for, initiating and completing our planned pivotal Phase 3 clinical program evaluating EBI-005 for the treatment of moderate to severe dry eye disease and, if successful, seeking marketing approval for EBI-005. We expect to devote additional financial resources to the clinical development of EBI-005 as we initiate and conduct additional clinical trials of EBI-005 for the treatment of allergic conjunctivitis or other diseases and to functions associated with operating as a public company. We also expect to devote additional financial resources to conducting research and development, if we determine to proceed into clinical development, initiating clinical trials of, and seeking regulatory approval for, our other product candidates. In addition, if we obtain regulatory approval for any of our product candidates, we would need to devote substantial financial resources to

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commercialization efforts, including product manufacturing, marketing, sales and distribution. Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. If we are unable to raise capital when needed or on attractive terms, we could be forced to delay, reduce or eliminate our research and development programs or any future commercialization efforts.

Our future capital requirements will depend on many factors, including:

- the progress, costs and outcome of our planned pivotal Phase 3 clinical program for EBI-005 and of any clinical activities for regulatory review of EBI-005 outside of the United States;
- the costs and timing of process development and manufacturing scale up and validation activities associated with EBI-005;
- the costs, timing and outcome of regulatory review of EBI-005 in the United States, the European Union and in other jurisdictions;
- the costs and timing of commercialization activities for EBI-005 if we receive, or expect to receive, marketing approval, including the costs and timing of establishing product sales, marketing, distribution and outsourced manufacturing capabilities;
- subject to receipt of marketing approval, the amount of revenue received from commercial sales of EBI-005;
- the progress, costs and outcome of developing EBI-005 for the treatment of additional indications or for use in other patient populations, including our planned Phase 2 clinical trial to assess the potential therapeutic benefit of EBI-005 for the treatment of allergic conjunctivitis in patients who do not respond adequately to antihistamines;
- our ability to establish collaborations on favorable terms, if at all, particularly manufacturing, marketing and distribution arrangements for our product candidates;
- the scope, progress, results and costs of preclinical development, laboratory testing and, if we determine to proceed into clinical development, clinical trials for our other product candidates;
- the success of our collaboration with ThromboGenics N.V., or ThromboGenics;
- the costs and timing of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending any intellectual property-related claims; and
- the extent to which we in-license or acquire rights to other products, product candidates or technologies for the treatment of ophthalmic diseases.

As of September 30, 2013, we had cash and cash equivalents of \$3.9 million. We believe that the net proceeds from this offering, together with our cash and cash equivalents as of September 30, 2013 and the \$8.0 million in cash proceeds from our series B preferred stock financing that we completed in December 2013, will enable us to fund our operating expenses, debt service obligations and capital expenditure requirements at least through _____, without giving effect to any potential milestone payments we may receive under our existing collaboration and license agreement with ThromboGenics. We have based this estimate on assumptions that may prove to be wrong, and we could use our capital resources sooner than we currently expect.

We estimate that we will incur external research and development expenses of approximately \$ _____ million to complete our planned pivotal Phase 3 clinical program for EBI-005 and to submit a Biologics License Application, or BLA, to the FDA seeking approval of EBI-005 for the treatment of dry eye disease in the United States before the end of 2016. We estimate that we will incur additional external research and development expenses of approximately \$ _____ million to complete our planned Phase 2 clinical trial to evaluate the use of EBI-005 in patients with allergic conjunctivitis. We expect that additional funds of approximately \$ _____ million will be required to fund our internal research and development expenses for EBI-005, internal and external research and development expenses for our preclinical and research and discovery programs and for working capital and other general corporate purposes during the period from the completion of this offering until we file our BLA for EBI-005 for the treatment of dry eye disease. At this time, we cannot reasonably estimate the

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remaining costs necessary to commercialize EBI-005 for the treatment of dry eye disease, including commercial manufacturing of EBI-005, or the nature, timing or costs of the efforts necessary to complete the development of any other product candidate.

Identifying potential product candidates and conducting preclinical testing and clinical trials is a time-consuming, expensive and uncertain process that takes years to complete, and we may never generate the necessary data or results required to obtain regulatory approval and achieve product sales. Our commercial revenues, if any, will be derived from sales of EBI-005 or any other products that we successfully develop, none of which we expect to be commercially available for several years, if at all. In addition, if approved, EBI-005 or any other product candidate that we develop or any product that we in-license may not achieve commercial success. Accordingly, we will need to obtain substantial additional financing to achieve our business objectives. Adequate additional financing may not be available to us on acceptable terms, or at all. In addition, we may seek additional capital due to favorable market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans.

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

Until such time, if ever, as we can generate substantial product revenues, we expect to finance our cash needs through a combination of equity offerings, debt financings, government or other third-party funding, collaborations, strategic alliances, licensing arrangements and marketing and distribution arrangements. We do not have any committed external source of funds other than funding under our existing collaboration and license agreement with ThromboGenics in the form of research funding. Under this collaboration, we also may receive potential milestone payments upon the achievement of specified development, regulatory and other milestones and royalties with respect to future sales of collaboration products by ThromboGenics. ThromboGenics may terminate our existing collaboration for convenience on short notice. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will 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. Our pledge of specified assets as collateral to secure our obligations under our loan and security agreement with our venture debt lender, Silicon Valley Bank, or SVB, may limit our ability to obtain additional debt financing.

If we raise additional funds through government or other third-party funding, collaborations, strategic alliances, licensing arrangements or marketing and distribution arrangements, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs 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 products or product candidates that we would otherwise prefer to develop and market ourselves.

Our limited operating history may make it difficult for you to evaluate the success of our business to date and to assess our future viability.

We are an early-stage company. We were incorporated and commenced active operations in early 2008, and our operations to date have been limited to organizing and staffing our company, acquiring rights to intellectual property, business planning, raising capital, developing our technology, identifying potential product candidates, undertaking preclinical studies and, beginning in 2012, conducting clinical trials of EBI-005. All of our product candidates, other than EBI-005, are still in preclinical development. We have not yet demonstrated our ability to successfully complete a pivotal Phase 3 clinical trial, obtain marketing approvals, manufacture at commercial

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scale, or arrange for a third party to do so on our behalf, or conduct sales, marketing and distribution activities necessary for successful product commercialization. Consequently, any predictions you make about our future success or viability may not be as accurate as they could be if we had a longer operating history.

In addition, as a new business, we may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown factors. We will need to transition at some point from a company with a research and development focus to a company capable of supporting commercial activities. We may not be successful in such a transition.

We expect our financial condition and operating results to continue to fluctuate significantly from quarter-to-quarter and year-to-year due to a variety of factors, many of which are beyond our control. Accordingly, you should not rely upon the results of any quarterly or annual periods as indications of future operating performance.

Risks Related to the Discovery and Development of Our Product Candidates

We depend heavily on the success of EBI-005, our most advanced product candidate, which we are developing for the treatment of moderate to severe dry eye disease. If we are unable to successfully complete our planned pivotal Phase 3 clinical program and obtain marketing approvals for EBI-005, or experience significant delays in doing so, or if after obtaining marketing approvals, we fail to commercialize EBI-005, our business will be materially harmed.

We have invested a significant portion of our efforts and financial resources in the development of EBI-005 for the treatment of patients with moderate to severe dry eye disease and for other disease indications. There remains a significant risk that we will fail to successfully develop EBI-005. In 2013, we completed a Phase 1b/2a clinical trial to evaluate the safety, tolerability and biological activity of EBI-005 in patients with moderate to severe dry eye disease. In early 2014, we plan to initiate a pivotal Phase 3 clinical program consisting of two Phase 3 clinical trials evaluating EBI-005 for the treatment of moderate to severe dry eye disease and a separate clinical trial evaluating the safety of treatment with EBI-005 for one year. We do not expect to have initial, top-line data from our first Phase 3 clinical trial available until early in 2015. The timing of the availability of such top-line data and the completion of our planned pivotal Phase 3 clinical program is dependent, in part, on our ability to locate and enroll a sufficient number of eligible patients in our planned pivotal Phase 3 clinical program on a timely basis. Even if the results of both of our Phase 3 clinical trials evaluating EBI-005 for the treatment of moderate to severe dry eye disease and our separate safety trial are favorable, we do not plan to submit a BLA to the FDA seeking approval of EBI-005 for the treatment of dry eye disease in the United States before the end of 2016. We cannot accurately predict when or if EBI-005 will prove effective or safe in humans or whether it will receive marketing approval. Our ability to generate product revenues, which we do not expect will occur before 2017, if ever, will depend heavily on our obtaining marketing approval for and commercializing EBI-005.

The success of EBI-005 will depend on several factors, including the following:

- initiating and obtaining favorable results from our planned pivotal Phase 3 clinical program for EBI-005;
- applying for and receiving marketing approvals from applicable regulatory authorities for EBI-005;
- making arrangements with third-party manufacturers for commercial quantities of EBI-005 and receiving regulatory approval of our manufacturing processes and our third-party manufacturers' facilities from applicable regulatory authorities;
- establishing sales, marketing and distribution capabilities and launching commercial sales of EBI-005, if and when approved, whether alone or in collaboration with others;
- acceptance of EBI-005, if and when approved, by patients, the medical community and third-party payors;

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- effectively competing with other therapies, including the existing standard of care;
- maintaining a continued acceptable safety profile of EBI-005 following approval;
- obtaining and maintaining coverage and adequate reimbursement from third-party payors;
- obtaining and maintaining patent and trade secret protection and regulatory exclusivity; and
- protecting our rights in our intellectual property portfolio related to EBI-005.

Successful development of EBI-005 for additional indications, if any, or for use in broader patient populations and our ability, if it is approved, to broaden the label for EBI-005 will depend on similar factors. If we do not achieve one or more of these factors in a timely manner or at all, we could experience significant delays or an inability to successfully commercialize EBI-005, which would materially harm our business.

If clinical trials of EBI-005 or any other product candidate that we develop fail to demonstrate safety and efficacy to the satisfaction of the FDA, the EMA or other regulatory authorities or do not otherwise produce favorable results, we may incur additional costs or experience delays in completing, or ultimately be delayed or unable to complete, the development and commercialization of EBI-005 or any other product candidate.

Before obtaining marketing approval from regulatory authorities for the sale of any product candidate, including EBI-005, we must complete preclinical development and then conduct extensive clinical trials to demonstrate the safety and efficacy of our product candidates in humans. Clinical testing is expensive, difficult to design and implement, can take many years to complete and is uncertain as to outcome. A failure of one or more clinical trials can occur 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.

We will be required to demonstrate the safety of treatment with EBI-005 for one year in a separate safety trial in order to support marketing approval of EBI-005 for the treatment of dry eye disease in the United States. To meet this requirement, we plan to conduct a safety trial with no fewer than 100 patients who will be treated with EBI-005 for one year. We cannot predict the results of this safety trial because we have no clinical data on the safety of EBI-005 when administered for a period longer than six weeks and no clinical safety data on the effects of EBI-005 when formulated with the vehicle we intend to use in our pivotal Phase 3 clinical program.

In general, the FDA requires two adequate and well controlled clinical trials demonstrating effectiveness on two primary endpoints for marketing approval of a dry eye disease drug. One of these co-primary endpoints must be a sign of dry eye disease and the other must be a symptom of dry eye disease. We are not aware of any investigational dry eye disease drug in development that has met these criteria. Regulatory authorities outside the United States, in particular in the European Union, have not issued guidance on the requirements for approval of a dry eye drug. Our planned pivotal Phase 3 clinical program may not be sufficient to support an application for marketing approval outside the United States.

Our Phase 1b/2a trial evaluated EBI-005 for the treatment of moderate to severe dry eye disease. In our Phase 1b/2a trial, neither of the doses of EBI-005 tested achieved statistically significant superiority compared to vehicle control based on any primary or secondary efficacy endpoints, including those we intend to use for our planned Phase 3 clinical trials.

Retrospective subgroup analyses that we performed on the results of our Phase 1b/2a clinical trial may not be predictive of the results of our planned pivotal Phase 3 clinical program. We have based many elements of the design of the protocol for our planned Phase 3 clinical trials on retrospective subgroup analyses, including our expected use of improvement in pain and discomfort as measured by the painful or sore eyes question of the

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ocular surface disease index, or OSDI, as the co-primary endpoint measuring a patient symptom. In our Phase 1b/2a trial, we used total OSDI scores as a secondary efficacy endpoint. Although we believe that the retrospective analyses support our protocol design for our planned Phase 3 clinical trials and our proposed mechanism of action, retrospective analyses performed after unmasking trial results can result in the introduction of bias and are given less weight by regulatory authorities than pre-specified analyses.

We may fail to achieve success in our planned pivotal Phase 3 clinical program evaluating EBI-005 for the treatment of moderate to severe dry eye disease for a variety of potential reasons.

- The efficacy endpoints in our Phase 1b/2a trial were measured six weeks after the first dose of EBI-005. The co-primary efficacy endpoints in our planned pivotal Phase 3 clinical program will be measured 12 weeks after the first dose of EBI-005. We have no clinical data on EBI-005 in any clinical trial longer than six weeks.
- We have made changes to the vehicle we use to formulate EBI-005 for topical, ophthalmic delivery in our planned Phase 3 clinical trials from the vehicle used in our Phase 1b/2a trial. The most significant change to the vehicle is the removal of carboxymethyl cellulose, or CMC. CMC is a common ingredient in artificial tears. We have no clinical data on our new formulation. In addition, if the new formulation is not comfortable to patients, patients may discontinue their participation in our planned Phase 3 clinical trials. Such discontinuations would harm our ability to complete the trial on a timely basis.
- We plan to prohibit the use of rescue artificial tears by patients in our planned Phase 3 clinical trials. If the prohibition on the use of artificial tears causes discomfort to patients and results in patients' discontinuing their participation in our Phase 3 clinical trials, such discontinuations would harm our ability to complete our Phase 3 clinical trials on a timely basis.
- We plan to change the eligibility criteria in our Phase 3 clinical trial from the criteria we used in our Phase 1b/2a trial with regard to patient scores on the OSDI. We cannot predict the impact these changes will have on the rate at which patients will be enrolled or randomized in our Phase 3 clinical trials. If these changes slow the rate at which patients are enrolled or randomized compared to the rate we anticipate, the availability of top-line clinical data from our first Phase 3 clinical trial and our completion of our planned pivotal Phase 3 clinical program will be delayed.
- We plan to conduct our Phase 3 clinical trials at many clinical centers that were not included in our Phase 1b/2a trial. The introduction of new centers, and the resulting involvement of new treating physicians, can introduce additional variability into the conduct of the trials in accordance with their protocols and may result in greater variability of patient outcomes, which could adversely affect our ability to detect statistically significant differences between patients treated with EBI-005 and vehicle control.

If, in our first Phase 3 clinical trial, we do not demonstrate a statistically significant improvement from baseline in the EBI-005 treatment group on a pre-specified co-primary endpoint, but we do demonstrate a statistically significant improvement from baseline in the EBI-005 treatment group on one of our secondary endpoints, we may decide to substitute that secondary endpoint for the co-primary endpoint in our second Phase 3 clinical trial prior to initiation of our second Phase 3 clinical trial. Whether this substitution and combination of results would be an acceptable means of meeting the FDA's requirement that we duplicate in two adequate and well controlled clinical trials a statistically significant improvement on a clinically relevant sign and symptom would be a review issue at the time of our application for marketing approval. If the FDA does not find this to be an acceptable means of meeting the requirements for marketing approval, we will not receive marketing approval for EBI-005, and we will have to conduct another Phase 3 clinical trial if we wish to seek marketing approval for EBI-005 in the future. Additionally, if we initiate our second Phase 3 clinical trial of EBI-005 before we have completed our first Phase 3 clinical trial, the option to substitute a secondary endpoint from the first Phase 3 clinical trial for a co-primary endpoint in the second Phase 3 clinical trial would not be available to us.

The protocols for our planned pivotal Phase 3 clinical program and other supporting information are subject to review by the FDA and regulatory authorities outside the United States. The FDA or other regulatory

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authorities may request additional information, require us to conduct additional non-clinical trials or require us to modify our planned pivotal Phase 3 clinical program, including its endpoints or patient enrollment criteria, to receive clearance to initiate such program or to continue such program once initiated. If our Phase 3 program is placed on clinical hold by the FDA, we may be significantly delayed and incur significantly greater expense in our proposed development program. For example, our Phase 1b/2a trial of EBI-005 was placed on clinical hold between September 6, 2012 and October 29, 2012 until we provided particular manufacturing stability information regarding the drug product lots intended to be used in our clinical studies. The FDA is not obligated to comment on our protocols within any specified time period or at all or to affirmatively clear or approve our planned pivotal Phase 3 clinical program. We intend to submit the protocols for our planned pivotal Phase 3 clinical program to the FDA. We may initiate our planned pivotal Phase 3 clinical program in the United States without waiting for comments, clearance or approval from the FDA. We have not received guidance from the EMA or other regulatory authorities outside the United States regarding the design of our planned pivotal Phase 3 clinical program. We may not receive clearance from the EMA or other regulatory authorities to initiate our planned pivotal Phase 3 clinical program on a timely basis, if at all.

If we experience any of a number of possible unforeseen events in connection with our clinical trials, potential marketing approval or commercialization of our product candidates could be delayed or prevented.

We may experience numerous unforeseen events during, or as a result of, clinical trials that could delay or prevent our ability to receive marketing approval or commercialize EBI-005 or any other product candidates that we may develop, including:

- clinical trials of our product candidates may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical trials or abandon product development programs;
- the number of patients required for clinical trials of our 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 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;
- the change in the vialing of EBI-005 to blow-fill-seal vials for our planned pivotal Phase 3 clinical program in place of single-use, screw-top vials as used in our Phase 1b/2a trial may result in unforeseen difficulties or delays;
- regulators or institutional review boards 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 clinical trial contracts or clinical trial protocols with prospective trial sites;
- we may decide, or regulators or institutional review boards may require us, to suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements or a finding that the participants are being exposed to unacceptable health risks;
- the cost of clinical trials of our 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; and
- our product candidates may have undesirable side effects or other unexpected characteristics, causing us or our investigators, regulators or institutional review boards to suspend or terminate the trials.

If we are required to conduct additional clinical trials or other testing of our product candidates beyond those that we currently contemplate, if we are unable to successfully complete clinical trials of our product

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candidates or other testing, if the results of these trials or tests are not favorable or are only modestly favorable or if there are safety concerns, we may:

- be delayed in obtaining marketing approval for our product candidates;
- not obtain marketing approval at all;
- obtain approval for indications or patient populations that are not as broad as intended or desired;
- obtain approval with labeling that includes significant use or distribution restrictions or safety warnings;
- be subject to additional post-marketing testing requirements; or
- have the product removed from the market after obtaining marketing approval.

Our product development costs will also increase if we experience delays in 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 or allow our competitors to bring products to market before we do and impair our ability to successfully commercialize our product candidates.

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

We may not be able to initiate or continue clinical trials for EBI-005 or our other product candidates that we may develop 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. In addition, some of our competitors have ongoing clinical trials for product candidates that treat the same indications as EBI-005, and patients who would otherwise be eligible for our clinical trials may instead enroll in clinical trials of our competitors' product candidates.

Patient enrollment is affected by other factors including:

- the severity of the disease under investigation;
- the eligibility criteria for the study in question;
- the perceived risks and benefits of the product candidate under study;
- the efforts to facilitate timely enrollment in 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 our clinical trials would result in significant delays, could require us to abandon one or more clinical trials altogether and could delay or prevent our receipt of necessary regulatory approvals. Enrollment delays in our clinical trials may result in increased development costs for our product candidates, which would cause the value of our company to decline and limit our ability to obtain additional financing.

If serious adverse or unacceptable side effects are identified during the development of EBI-005 or any other product candidates that we may develop, we may need to abandon or limit our development of EBI-005 or such other product candidates.

If EBI-005 or any of our other product candidates are associated with serious adverse events or undesirable side effects in clinical trials or have characteristics that are unexpected, we may need to abandon their

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development or limit development to more narrow uses or subpopulations in which the serious adverse events, undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective. Although EBI-005 was generally well tolerated in our Phase 1b/2a trial, we have no clinical safety data on or patient exposure to EBI-005 for longer than six weeks. We have no clinical safety data on patient exposure to EBI-005 formulated with the vehicle we intend to use in our Phase 3 clinical trials. Many compounds that initially showed promise in clinical or early stage testing for treating ophthalmic disease have later been found to cause side effects that prevented further development of the compound.

We may not be successful in our efforts to use our AMP-Rx platform to build a pipeline of product candidates.

A key element of our strategy is to use our proprietary AMP-Rx platform to rationally design, engineer and generate a pipeline of novel protein therapies and progress these therapies through clinical development for the treatment of a variety of ophthalmic diseases. Our research and development efforts to date have resulted in a pipeline of additional product candidates directed at the treatment of ophthalmic diseases. Other than EBI-005, our product candidates all are in early preclinical research and have not been tested in humans. These and any other potential product candidates that we identify may not be suitable for continued preclinical or clinical development, including as a result of being shown to have harmful side effects or other characteristics that indicate that they are unlikely to be products that will receive marketing approval and achieve market acceptance. If we do not successfully develop and commercialize our product candidates that we develop based upon our technological approach, we will not be able to obtain product revenues in future periods.

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

Because we have limited financial and managerial resources, we focus on research programs and product candidates that we identify for specific indications. As a result, we may forego or delay pursuit of opportunities with other product candidates or for other indications that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on current and future research and development programs and product candidates for specific indications may not yield any commercially viable products. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate.

Risks Related to the Commercialization of Our Product Candidates

Even if EBI-005 or any other product candidate that we develop receives marketing approval, it may fail to achieve the degree of market acceptance by physicians, patients, third-party payors and others in the medical community necessary for commercial success and the market opportunity for EBI-005 may be smaller than we estimate.

If EBI-005 or any other product candidate that we develop receives marketing approval, it may nonetheless fail to gain sufficient market acceptance by physicians, patients, third-party payors and others in the medical community. Current treatments that are used for moderate to severe dry eye disease include low cost artificial tears, Restasis and low cost, off-label use of corticosteroids. These treatments are well established in the medical community, and doctors may continue to rely on these treatments rather than EBI-005, if and when it is approved for marketing by the FDA. In addition, it is possible that the FDA may approve generic versions of Restasis in the foreseeable future. The patent on Restasis expires on May 17, 2014. If generic versions of Restasis are approved for marketing by the FDA, they would likely be offered at a substantially lower price than EBI-005. As a result, healthcare professionals and third-party

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payors may choose to rely on such products rather than EBI-005. If EBI-005 does not achieve an adequate level of acceptance, we may not generate significant product revenues and we may not become profitable.

The degree of market acceptance of EBI-005 or any other product candidate that we may develop, if approved for commercial sale, will depend on a number of factors, including:

- the efficacy and potential advantages compared to alternative treatments, including the existing standard of care;
- our ability to offer our products for sale at competitive prices, particularly in light of the lower cost of alternative treatments;
- the convenience and ease of administration compared to alternative treatments;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;
- the strength of our marketing and distribution support;
- timing of market introduction of competitive products;
- the availability of third-party coverage and adequate reimbursement, particularly by Medicare in light of the prevalence of dry eye disease in persons over age 55;
- the prevalence and severity of any side effects; and
- any restrictions on the use of our products together with other medications.

Our assessment of the potential market opportunity for EBI-005 is based on 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. While we believe these industry publications and third-party research, surveys and studies are reliable, we have not independently verified such data. If the actual market for EBI-005 is smaller than we expect, our product revenue may be limited and it may be more difficult for us to achieve or maintain profitability.

If we are unable to establish sales, marketing and distribution capabilities, we may not be successful in commercializing EBI-005 or any other product candidates that we may develop if and when they are approved.

We do not have a sales or marketing infrastructure and have no experience in the sale, marketing or distribution of therapeutic products. To achieve commercial success for any product for which we have obtained marketing approval, we will need to establish sales, marketing and distribution capabilities, either ourselves or through collaborations or other arrangements with third parties.

In the future, we plan to build a focused sales and marketing infrastructure to market or co-promote EBI-005 and possibly other product candidates that we develop in the United States, if and when they are approved. There are risks involved with establishing our own sales, marketing and distribution capabilities. For example, recruiting and training a sales force is expensive and time consuming and could delay any product launch. If the commercial launch of EBI-005 or any other 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 EBI-005 or any other 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 our products;

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- the lack of complementary products to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines; and
- unforeseen costs and expenses associated with creating an independent sales and marketing organization.

We expect to enter into arrangements with third parties to perform sales, marketing and distribution services in markets outside the United States. We may also enter into arrangements with third parties to perform these services in the United States if we do not establish our own sales, marketing and distribution capabilities in the United States or if we determine that such third-party arrangements are otherwise beneficial. Our product revenues and our profitability, if any, under any such third-party sales, marketing or distribution arrangements are likely to be lower than if we were to market, sell and distribute EBI-005 or any other product candidates that we may develop ourselves. In addition, we may not be successful in entering into arrangements with third parties to sell, market and distribute EBI-005 or any other 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 EBI-005 or our other product candidates effectively. If we do not establish sales, marketing and distribution capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing EBI-005 or any other product candidates that we may develop.

We face substantial competition, which may result in others discovering, developing or commercializing products before or more successfully than we do.

The development and commercialization of new drug products is highly competitive. We face competition with respect to EBI-005 and our other current product candidates, and will face competition with respect to any product candidates that we may seek to develop or commercialize in the future, from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide. There are a number of large pharmaceutical and biotechnology companies that currently market and sell products or are pursuing the development of products for the treatment of the disease indications for which we are developing our product candidates. Potential competitors also include academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and commercialization.

The current standard of care for dry eye disease includes artificial tears and topical anti-inflammatory and immune-modulating drugs. The anti-inflammatory and immune-modulating drug market for the treatment of moderate to severe dry eye disease consists primarily of Restasis, which is approved for use in the United States, and off-label use of corticosteroids. Some patients with moderate to severe dry eye disease are effectively treated by the current standard of care therapies, some of which are available in generic form or offered at relatively low prices. There are also a number of products and therapies in preclinical research and clinical development by third parties to treat dry eye disease. Some of these competitive products and therapies are based on scientific approaches that are the same as or similar to our approach, and others are based on entirely different approaches. These companies include pharmaceutical companies, biotechnology companies, and specialty pharmaceutical and generic drug companies of various sizes, such as Shire Plc (lifitegrast), Acucela Inc., in collaboration with Otsuka Pharmaceutical Co., Ltd. (rebamipide), Mimetogen Pharmaceuticals Inc., in collaboration with Bausch + Lomb Corporation (MIM-D3), OphthaliX Inc. (CF101), Rigel Pharmaceuticals, Inc. (R9348) and Allergan, Inc. (AGN-195263). See “Business—Competition” for additional information regarding our competitors.

In 2013, the peer-reviewed journal *JAMA Ophthalmology* published the results of an exploratory clinical trial in 75 patients conducted by our co-founder Dr. Reza Dana at the Massachusetts Eye and Ear Infirmary using anakinra to treat patients with moderate to severe dry eye disease. Interleukin-1, or IL-1, is the therapeutic target of both anakinra and EBI-005, and the mechanisms of action of anakinra and EBI-005 are very similar. For this proof-of-concept study, the investigators compounded, or reformulated, anakinra in eye drops at two different concentrations for topical administration. The investigators reported positive results from this trial. We believe

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that the investigators continue to treat dry eye patients using reformulated anakinra. We would face competition with respect to EBI-005 if reformulated anakinra was available commercially through compounding pharmacies or if a third party successfully completed pivotal clinical trials of, and received marketing approval for, reformulated anakinra for the treatment of dry eye disease.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than EBI-005 or other product candidates that we may develop. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market.

In addition, our ability to compete may be affected in many cases by insurers or other third-party payors, particularly Medicare, seeking to encourage the use of generic products. Generic products are currently being used for the indications that we are pursuing, and additional products are expected to become available on a generic basis over the coming years. For example, the FDA's Office of Generic Drugs recently released guidance for the development of generic versions of Restasis. If EBI-005 or any other product candidate that we may develop achieves marketing approval, we expect that it will be priced at a significant premium over competitive generic products.

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

Even if we are able to commercialize EBI-005 or any other product candidate that we may develop, the products may become subject to unfavorable pricing regulations, third-party coverage or reimbursement practices or healthcare reform initiatives, which could harm our business.

Our ability to commercialize EBI-005 or any other product candidates that we may develop successfully will depend, in part, on the extent to which coverage and adequate reimbursement for these products and related treatments will be available from government healthcare programs, private health insurers, managed care plans and other organizations. Government authorities and third-party payors, such as private health insurers and health maintenance organizations, decide which medications they will pay for and establish reimbursement levels. A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. Coverage and reimbursement may not be available for EBI-005 or any other product that we commercialize and, even if they are available, the level of reimbursement may not be satisfactory.

Inadequate reimbursement may adversely affect the demand for, or the price of, any product candidate for which we obtain marketing approval. Obtaining and maintaining adequate reimbursement for our products may be difficult. We may be required to conduct expensive pharmacoeconomic studies to justify coverage and reimbursement or the level of reimbursement relative to other therapies. If coverage and adequate reimbursement are not available or reimbursement is available only to limited levels, we may not be able to successfully commercialize EBI-005 or any other product candidate for which we obtain marketing approval.

There may be significant delays in obtaining coverage and reimbursement for newly approved drugs, and coverage may be more limited than the indications for which the drug is approved by the FDA or similar

regulatory authorities outside the United States. Moreover, eligibility for coverage and reimbursement does not imply that a drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution expenses. Interim reimbursement levels for new drugs, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on reimbursement levels already set for lower cost drugs and may be incorporated into existing payments for other services. Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement policies. Our inability to promptly obtain coverage and adequate reimbursement rates from both government-funded and private payors for any approved products that we develop would compromise our ability to generate revenues and become profitable.

The regulations that govern marketing approvals, pricing, coverage and reimbursement for new drug products vary widely from country to country. Current and future legislation may significantly change the approval requirements in ways that could involve additional costs and cause delays in obtaining approvals. Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after marketing or product licensing approval is granted. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we might obtain marketing approval for a product in a particular country, but then be subject to price regulations that delay our commercial launch of the product, possibly for lengthy time periods, and negatively impact the revenues we are able to generate from the sale of the product in that country. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our product candidate to other available therapies. Adverse pricing limitations may hinder our ability to recoup our investment in one or more product candidates, even if our product candidates obtain marketing approval.

There can be no assurance that our product candidates or any products that we may in-license, if they are approved for sale in the United States or in other countries, will be considered medically reasonable and necessary for a specific indication, that they will be considered cost-effective by third-party payors, that coverage and an adequate level of reimbursement will be available, or that third-party payors' reimbursement policies will not adversely affect our ability to sell our product candidates profitably.

Our strategy of obtaining rights to product candidates and approved products for the treatment of a range of ophthalmic diseases through in-licenses and acquisitions may not be successful.

We may expand our product pipeline through opportunistically in-licensing or acquiring the rights to other products, product candidates or technologies for the treatment of ophthalmic diseases. The future growth of our business may depend in part on our ability to in-license or acquire the rights to approved products, additional product candidates or technologies. However, we may be unable to in-license or acquire the rights to any such products, product candidates or technologies from third parties. The in-licensing and acquisition of pharmaceutical products is a competitive area, and a number of more established companies are also pursuing strategies to license or acquire products, product candidates or technologies that we may consider attractive. These established companies may have a competitive advantage over us due to their size, cash resources and greater clinical development and commercialization capabilities.

In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We also may be unable to in-license or acquire the rights to the relevant product, product candidate or technology on terms that would allow us to make an appropriate return on our investment. Furthermore, we may be unable to identify suitable products, product candidates or technologies within our area of focus. If we are unable to successfully obtain rights to suitable products, product candidates or technologies, our ability to pursue this element of our strategy could be impaired.

Product liability lawsuits against us could cause us to incur substantial liabilities and to limit commercialization of any products that we develop.

We face an inherent risk of product liability exposure related to the use of EBI-005 and any other product candidates that we develop in human clinical trials and will face an even greater risk if we commercially sell any products that we develop. If we cannot successfully defend ourselves against claims that our product candidates or products caused injuries, we will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidates or products that we develop;
- injury to our reputation and significant negative media attention;
- withdrawal of clinical trial participants;
- significant costs to defend the related litigation;
- substantial monetary awards to trial participants or patients;
- loss of revenue;
- reduced time and attention of our management to pursue our business strategy; and
- the inability to commercialize any products that we develop.

We currently hold \$5.0 million in product liability insurance coverage in the aggregate, with a per incident limit of \$5.0 million, which may not be adequate to cover all liabilities that we may incur. We will need to increase our insurance coverage as we expand our clinical trials. We will need to further increase our insurance coverage if we commence commercialization of EBI-005 or any other product candidate that receives marketing approval. Insurance coverage is increasingly expensive. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise.

Risks Related to Our Dependence on Third Parties

We have entered into one collaboration and in the future may enter into collaborations with other third parties for the development or commercialization of our product candidates, including EBI-005. If our collaborations are not successful, we may not be able to capitalize on the market potential of these product candidates.

In May 2013, we entered into a collaboration and license agreement with ThromboGenics. Under the agreement, we and ThromboGenics are collaborating to identify protein or peptide therapeutics that directly modulate any of a specified set of targets in a novel pathway in retinal disease. This collaboration generally prohibits us, our affiliates and any entities which become affiliates of ours as a result of an acquisition of us by a third party, from researching, developing, manufacturing or commercializing any protein or peptide therapeutic that directly modulates one of the specified targets, except as otherwise provided in the agreement. This restriction may have the effect of preventing us from undertaking development and other efforts that may appear to be attractive to us.

We expect to utilize a variety of types of collaboration, distribution and other marketing arrangements with third parties to commercialize EBI-005 in markets outside the United States. We also may enter into arrangements with third parties to perform these services in the United States if we do not establish our own sales, marketing and distribution capabilities in the United States or if we determine that such third-party arrangements are otherwise beneficial. We also may seek third-party collaborators for development and commercialization of other product candidates. Our likely collaborators for any sales, marketing, distribution, development, licensing or broader collaboration arrangements include large and mid-size pharmaceutical companies, regional and national pharmaceutical companies and biotechnology companies. We are not currently party to any such arrangement. Our ability to generate revenues from these arrangements will depend on our collaborators' abilities and efforts to successfully perform the functions assigned to them in these arrangements.

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Our existing collaboration with ThromboGenics and any future collaborations that we enter into, may pose a number of risks, including the following:

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

Collaboration agreements may not lead to development or commercialization of product candidates in the most efficient manner, or at all. If our existing collaboration and license agreement with ThromboGenics, and any future collaborations that we enter into, do not result in the successful 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 product candidates could be delayed and we may need additional resources to develop our product candidates. All of the risks relating to product development, regulatory approval and commercialization described in this prospectus also apply to the activities of our collaborators.

Additionally, subject to its contractual obligations to us, if a collaborator of ours were to be involved in a business combination, it might deemphasize or terminate the development or commercialization of any product

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candidate licensed to it by us. 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 harmed.

If we are not able to establish additional collaborations, we may have to alter our development and commercialization plans and our business could be adversely affected.

For some of our product candidates, we may decide to collaborate with pharmaceutical and biotechnology companies for the development and potential commercialization of therapeutic products. We face significant competition in seeking appropriate collaborators. Whether we reach a definitive agreement for a collaboration will depend, among other things, upon our assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator's evaluation of a number of factors. Those factors may include the design or results of clinical trials, the likelihood of approval by the FDA or similar regulatory authorities outside the United States, the potential market for the subject product candidate, the costs and complexities of manufacturing and delivering such product candidate to patients, the potential of competing products, the existence of uncertainty with respect to our ownership of technology, which can exist if there is a challenge to such ownership without regard to the merits of the challenge, and industry and market conditions generally. The collaborator may also consider alternative product candidates or technologies for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than the one with us for our product candidate. We may also be restricted under future license agreements from entering into agreements on certain terms with potential collaborators. Collaborations are complex and time-consuming to negotiate and document. In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators.

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

We rely, and expect to continue to rely, on third parties to conduct our clinical trials, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such trials.

We have relied on third parties, such as contract research organizations, or CROs, to conduct our completed Phase 1 and Phase 1b/2a trials of EBI-005 and do not plan to independently conduct clinical trials of EBI-005 or our other product candidates, including our planned Phase 3 clinical trials of EBI-005. We expect to continue to rely on third parties, such as CROs, clinical data management organizations, medical institutions and clinical investigators, to conduct our clinical trials. These agreements might terminate for a variety of reasons, including a failure to perform by the third parties. If we need to enter into alternative arrangements, that would delay our product development activities.

Our reliance on these third parties for research and development activities will reduce our control over these activities but will not relieve us of our responsibilities. For example, we will remain responsible for ensuring that each of our clinical trials is conducted in accordance with the general investigational plan and protocols for the trial. Moreover, the FDA requires us to comply with standards, commonly referred to as good clinical practices for conducting, recording and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity and confidentiality of trial participants are protected. We also

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are required to register ongoing clinical trials and post the results of completed clinical trials on a government-sponsored database, ClinicalTrials.gov, within specified timeframes. Failure to do so can result in fines, adverse publicity and civil and criminal sanctions.

Furthermore, these third parties may also have relationships with other entities, some of which may be our competitors. If these third parties do not successfully carry out their contractual duties, meet expected deadlines or conduct our clinical trials in accordance with regulatory requirements or our stated protocols, we will not be able to obtain, or may be delayed in obtaining, marketing approvals for our product candidates and will not be able to, or may be delayed in our efforts to, successfully commercialize our product candidates.

We contract with third parties for the manufacture of EBI-005 for clinical trials and expect to continue to do so in connection with the commercialization of EBI-005 and for clinical trials and commercialization of any other product candidates that we may develop. This reliance on third parties increases the risk that we will not have sufficient quantities of our product candidates or products or such quantities at an acceptable cost, which could delay, prevent or impair our development or commercialization efforts

We do not currently own or operate manufacturing facilities for the production of clinical or commercial quantities of EBI-005 or any other of our product candidates. We rely, and expect to continue to rely, on third parties to manufacture clinical and commercial supplies of EBI-005, preclinical and clinical supplies of our other product candidates that we may develop and commercial supplies of products if and when any of our product candidates receives marketing approval. Our current and anticipated future dependence upon others for the manufacture of EBI-005 and any other product candidate or product that we develop may adversely affect our future profit margins and our ability to commercialize any products that receive marketing approval on a timely and competitive basis. In addition, any performance failure on the part of our existing or future manufacturers could delay clinical development or marketing approval.

We currently rely exclusively on one third-party manufacturer to supply us with EBI-005 drug substance on a purchase order basis. We also rely on another third-party manufacturer to conduct fill-finish services on a purchase order basis. We do not currently have any contractual commitments for commercial supply of bulk drug substance for EBI-005 or for fill-finish services. We also do not currently have arrangements in place for redundant supply or a second source for bulk drug substance for EBI-005 or for fill-finish services. The prices at which we are able to obtain supplies of EBI-005 drug substance and fill-finish services may vary substantially over time and adversely affect our financial results.

If our third-party manufacturer for EBI-005 drug substance fails to fulfill our purchase orders or should become unavailable to us for any reason, we believe that there are a limited number of potential replacement manufacturers, and we likely would incur added costs and delays in identifying or qualifying such replacements. We could also incur additional costs and delays in identifying or qualifying a replacement manufacturer for fill-finish services if our existing third-party manufacturer should become unavailable for any reason. We may be unable to establish any agreements with such replacement manufacturers or to do so on acceptable terms. Even if we could transfer manufacturing to a different third party, the shift would likely be expensive and time consuming, particularly since the new facility would need to comply with the necessary regulatory requirements and we would need FDA approval before using or selling any products manufactured at that facility.

The FDA maintains strict requirements governing the manufacturing process for biologics. When a manufacturer seeks to modify or make even seemingly minor changes to that process, the FDA may require the applicant to conduct a comparability study that evaluates the potential differences in the product resulting from the change in the manufacturing process. The agency has issued several guidances on this point. In connection with our application for a license to market EBI-005 or other product candidates in the United States, we may be required to conduct a comparability study if the product we intend to market is supplied by a manufacturer different from the one who supplied the product evaluated in our clinical studies. Delays in designing and completing this study to the satisfaction of the FDA could delay or preclude our development and commercialization plans and thereby limit our revenues and growth.

Reliance on third-party manufacturers entails additional risks, including:

- EBI-005 and any other product candidates that we may develop may compete with other product candidates and products for access to a limited number of suitable manufacturing facilities that operate under current good manufacturing practices, or cGMP, regulations;
- reliance on the third party for regulatory compliance and quality assurance;
- the possible breach of the manufacturing agreement by the third party;
- the possible misappropriation of our proprietary information, including our trade secrets and know-how; and
- the possible termination or nonrenewal of the agreement by the third party at a time that is costly or inconvenient for us.

Third-party manufacturers may not be able to comply with cGMP regulations or similar regulatory requirements outside the United States. Our failure, or the failure of our third-party manufacturers, to comply with applicable regulations could result in sanctions being imposed on us, including clinical holds, fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of product candidates or products, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect supplies of our products.

Risks Related to Our Intellectual Property

If we are unable to obtain and maintain patent protection for our technology and products, or if our licensors are unable to obtain and maintain patent protection for the technology or products that we license from them, or if the scope of the patent protection obtained is not sufficiently broad, our competitors could develop and commercialize technology and products similar or identical to ours, and our ability to successfully commercialize our technology and products may be impaired.

Our success depends in large part on our and our licensors' ability to obtain and maintain patent protection in the United States and other countries with respect to our proprietary technology and products. We and our licensors have sought to protect our proprietary position by filing patent applications in the United States and abroad related to our novel technologies and product candidates. 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 or in a timely manner. 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. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business. If such licensors fail to maintain such patents, or lose rights to those patents, the rights we have licensed may be reduced or eliminated.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions and has in recent years been the subject of much litigation. As a result, the issuance, scope, validity, enforceability and commercial value of our and our licensors' patent rights are highly uncertain. Our and our licensors' pending and future patent applications may not result in patents being issued which protect our technology or products or which effectively prevent others from commercializing competitive technologies and products. In addition, the laws of foreign countries may not protect our rights to the same extent as the laws of the United States. 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 cannot know with certainty whether we or our licensors were the first to make the inventions claimed in our owned or licensed patents or pending patent applications, or that we or our licensors were the first to file for

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patent protection of such inventions. As a result, the issuance, scope, validity, enforceability and commercial value of our owned or licensed patent rights are highly uncertain. Our pending and future patent applications may not result in patents being issued which protect our technology or products, in whole or in part, or which effectively prevent others from commercializing competitive technologies and products. In particular, during prosecution of any patent application, the issuance of any patents based on the application may depend upon our ability to generate additional preclinical or clinical data that support the patentability of our proposed claims. We may not be able to generate sufficient additional data on a timely basis, or at all. Moreover, 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.

Recent patent reform legislation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents. On September 16, 2011, the Leahy-Smith America Invents Act, or the Leahy-Smith Act, was signed into law. The Leahy-Smith Act includes a number of significant changes to United States patent law. These include provisions that affect the way patent applications are prosecuted and may also affect patent litigation. The United States Patent Office recently developed new regulations and procedures to govern administration of the Leahy-Smith Act, and many of the substantive changes to patent law associated with the Leahy-Smith Act, and in particular, the first to file provisions, only became effective on March 16, 2013. Accordingly, it is not clear what, if any, impact the Leahy-Smith Act will have on the operation of our business. However, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents.

Moreover, we may be subject to a third-party preissuance submission of prior art to the U.S. Patent and Trademark Office, or become involved in opposition, derivation, reexamination, *inter partes* review, post-grant review or interference proceedings challenging our patent rights or the patent rights of others. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our patent rights, allow third parties to commercialize our technology or products and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize products without infringing third-party patent rights. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates.

Even if our owned and licensed patent applications issue as patents, they may not issue in a form that will provide us with any meaningful protection, prevent competitors from competing with us or otherwise provide us with any competitive advantage. Our competitors may be able to circumvent our owned or licensed patents by developing similar or alternative technologies or products in a non-infringing manner.

We are the exclusive licensee of patent applications owned by The Schepens Eye Research Institute, Inc., or Schepens, that cover methods of treating diseases of the eye using an inhibitor of the inflammatory cytokine IL-1. Even if these applications issue as patents, method-of-treatment patents are more difficult to enforce than composition-of-matter patents because of the risk of off-label sale or use of a drug for the subject method. In addition, European patent law generally makes the enforcement of patents that cover methods of treatment of the human body difficult. In the United States, the FDA does not prohibit physicians from prescribing an approved product for uses that are not described in the product's labeling. Although use of a product directed by off-label prescriptions may infringe our method-of-treatment patents, the practice is common across medical specialties, particularly in the United States, and such infringement is difficult to detect, prevent or prosecute. For example, anakinra is an IL-1 inhibitor that is approved for marketing in the United States and other countries for the treatment of rheumatoid arthritis and is formulated for subcutaneous administration. Anakinra can be re-formulated, or compounded, for topical ophthalmic application. Off-label sales of anakinra or other products comprising an IL-1 inhibitor could limit our ability to generate revenue from the sale of EBI-005.

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.

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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.

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

Competitors may infringe our issued patents or other intellectual property. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time consuming. Any claims we assert against perceived infringers could provoke these parties to assert counterclaims against us alleging that we infringe their patents. In addition, in a patent infringement proceeding, a court may decide that a patent of ours is invalid or unenforceable, in whole or in part, construe the patent's claims narrowly or 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 proceeding could put one or more of our patents at risk of being invalidated or interpreted narrowly. 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.

Third parties may initiate legal proceedings alleging that we are infringing their intellectual property rights, the outcome of which would be uncertain and could have a material adverse effect on the success of our business.

Our commercial success depends upon our ability, and the ability of our collaborators, to develop, manufacture, market and sell our product candidates and use our proprietary technologies without infringing the proprietary rights of third parties. There is considerable intellectual property litigation in the biotechnology and pharmaceutical industries. We may become party to, or threatened with, future adversarial proceedings or litigation regarding intellectual property rights with respect to our products and technology, including interference or derivation proceedings before the U.S. Patent and Trademark Office. The risks of being involved in such litigation and proceedings may increase as our product candidates near commercialization and as we gain the greater visibility associated with being a public company. Third parties may assert infringement claims against us based on existing patents or patents that may be granted in the future. We may not be aware of all such intellectual property rights potentially relating to our product candidates and their uses. Thus, we do not know with certainty that EB1-005 or any other product candidate, or our commercialization thereof, does not and will not infringe or otherwise violate any third party's intellectual property.

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 or force us to cease some of our business operations. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business.

If we fail to comply with our obligations in our intellectual property licenses and funding arrangements with third parties, we could lose rights that are important to our business.

We are party to a number of license agreements and a collaboration agreement that impose, and, for a variety of purposes, we will likely enter into additional licensing and funding arrangements with third parties that may impose, diligence, development and commercialization timelines and milestone payment, royalty, insurance and other obligations on us. Under certain of our existing licensing agreements, we are obligated to pay royalties or make specified milestone payments on net product sales of product candidates or related technologies to the extent they are covered by the agreement. We also are obligated under certain of our existing license agreements to pay maintenance and other fees. We also have diligence and development obligations under certain of those agreements that we are required to satisfy. If we fail to comply with our obligations under current or future license and collaboration agreements, our counterparties may have the right to terminate these agreements, in which event we might not be able to develop, manufacture or market any product that is covered by these agreements or may face other penalties under the agreements. Such an occurrence could diminish the value of the product candidate being developed under any such agreement. Termination of these agreements or reduction or elimination of our rights under these agreements may result in our having to negotiate new or reinstated agreements with less favorable terms, or cause us to lose our rights under these agreements, including our rights to important intellectual property or technology.

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

Many of our employees were previously employed at universities or other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although we try to ensure that our employees do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that these employees or we have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such employee's former employer. Litigation may be necessary to defend against these claims.

In addition, while it is our policy to require our employees and contractors who may be involved in the development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who in fact develops intellectual property that we regard as our own. Our and their assignment agreements may not be self-executing or may be breached, and we may be forced to bring claims against third parties, or defend claims they may bring against us, to determine the ownership of what we regard as our intellectual property.

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

Intellectual property litigation could cause us to spend substantial resources and distract our personnel from their normal responsibilities.

Even if resolved in our favor, litigation or other legal proceedings relating to intellectual property claims may cause us to incur significant expenses, and could distract our technical and management personnel from their normal responsibilities. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments and 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. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities. We may not have sufficient financial or other resources to conduct such litigation or proceedings adequately. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could compromise our ability to compete in the marketplace.

If we are unable to protect the confidentiality of our trade secrets, our business and competitive position would be harmed.

In addition to seeking patents for some of our technology and product candidates, we also rely on trade secrets, including unpatented know-how, technology and other proprietary information, to maintain our competitive position. We seek to protect these trade secrets, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to them, such as our employees, corporate collaborators, outside scientific collaborators, contract manufacturers, consultants, advisors and other third parties. We also enter into confidentiality and invention or patent assignment agreements with our employees and consultants. Despite these efforts, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts inside and outside the United States are less willing or unwilling to protect trade secrets. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor, our competitive position would be harmed.

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

If we are not able to obtain required regulatory approvals, we will not be able to commercialize EBI-005 or any other product candidate that we may develop, and our ability to generate revenue will be materially impaired. The marketing approval process is expensive, time-consuming and uncertain. As a result, we cannot predict when or if we, or any collaborators we may have in the future, will obtain marketing approval to commercialize EBI-005 or any other product candidate.

The activities associated with the development and commercialization of our product candidates, including EBI-005, including design, testing, manufacture, safety, efficacy, recordkeeping, labeling, storage, approval, advertising, promotion, sale and distribution, are subject to comprehensive regulation by the FDA and other regulatory agencies in the United States and by the EMA and similar regulatory authorities outside the United States. Failure to obtain marketing approval for a product candidate will prevent us from commercializing the product candidate. We have not received approval to market EBI-005 or any other product candidate from regulatory authorities in any jurisdiction. We have only limited experience in filing and supporting the applications necessary to gain marketing approvals and expect to rely on third-party CROs to assist us in this process.

The process of obtaining marketing approvals, both in the United States and abroad, is expensive and may take many years, especially if additional clinical trials are required, if approval is obtained at all. Securing marketing approval requires the submission of extensive preclinical and clinical data and supporting information to regulatory authorities for each therapeutic indication to establish the product candidate's safety, purity and potency. Securing marketing approval also requires the submission of information about the product manufacturing process to, and inspection of manufacturing facilities by, the regulatory authorities. The FDA or other regulatory authorities may determine that EBI-005 or any other product candidate that we may develop is not safe, effective or pure, is only moderately effective or has undesirable or unintended side effects, toxicities or other characteristics that preclude our obtaining marketing approval or prevent or limit commercial use. Any marketing approval we ultimately obtain may be limited or subject to restrictions or post-approval commitments that render the approved product not commercially viable.

The regulatory process can vary substantially based upon a variety of factors, including the type, complexity and novelty of the product candidates involved. There are no drugs approved in the European Union and no drugs, other than Restasis, approved in the United States for the treatment of a sign or symptom of moderate to severe dry eye disease. The EMA has not issued any guidance on the clinical trials that would be sufficient to support an application for marketing approval of a drug to treat dry eye disease. This lack of a defined regulatory pathway in the European Union and the lack of successful development of therapies to treat dry eye disease in

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both the United States and the European Union may lengthen the regulatory review process, require us to conduct additional studies or clinical trials, increase our development costs, lead to changes in regulatory positions and interpretations, delay or prevent approval and commercialization of these product candidates or lead to significant post-approval limitations or restrictions. If we experience delays in obtaining approval, the commercial prospects for our product candidates may be harmed and our ability to generate revenues will be materially impaired.

We may not be able to obtain orphan drug exclusivity for one or more of our product candidates, and even if we do, that exclusivity may not prevent the FDA or the EMA from approving other competing products.

Under the Orphan Drug Act, the FDA may designate a product as an orphan drug if it is a drug or biologic intended to treat a rare disease or condition. A similar regulatory scheme governs approval of orphan products by the EMA in the European Union. Generally, if a product with an orphan drug designation subsequently receives the first marketing approval for the indication for which it has such designation, the product is entitled to a period of marketing exclusivity, which precludes the EMA or the FDA from approving another marketing application for the same product for the same therapeutic indication for that time period. The applicable period is seven years in the United States and ten years in the European Union. The exclusivity period in the European Union can be reduced to six years if a product no longer meets the criteria for orphan drug designation, in particular if the product is sufficiently profitable so that market exclusivity is no longer justified.

In order for the FDA to grant orphan drug exclusivity to one of our products, the agency must find that the product is indicated for the treatment of a condition or disease with a patient population of fewer than 200,000 individuals annually in the United States. The FDA may conclude that the condition or disease for which we seek orphan drug exclusivity does not meet this standard. Even if we obtain orphan drug exclusivity for a product, that exclusivity may not effectively protect the product from competition because different products can be approved for the same condition. In addition, even after an orphan drug is approved, the FDA can subsequently approve the same product for the same condition if the FDA concludes that the later product is clinically superior in that it is shown to be safer, more effective or makes a major contribution to patient care.

Our therapeutic product candidates for which we intend to seek approval as biological products may face competition sooner than expected.

With the enactment of the Biologics Price Competition and Innovation Act of 2009, or BPCIA, abbreviated pathways for approval of biosimilar and interchangeable biological products were created. The BPCIA establishes legal authority for the FDA to review and approve biosimilar biologics for marketing, as well as biosimilars that have been designated as “interchangeable” with a previously approved biologic, or reference product. Under the BPCIA, an application for a biosimilar product cannot be approved by the FDA until 12 years after the reference product was approved under a full BLA. This period of non-patent exclusivity runs concurrently with, but is independent of, periods of patent protection for the reference product.

We believe that any of our product candidates approved as a biological product under a full BLA should qualify for a 12-year period of exclusivity. However:

- the U.S. Congress could amend the BPCIA to significantly shorten this exclusivity period as has been previously proposed by President Obama in connection with the administration’s budget proposals; and
- a potential competitor could seek and obtain approval of its own BLA during our exclusivity period instead of seeking approval of a biosimilar version.

The new law is complex and is only beginning to be interpreted and implemented by the FDA. As a result, the ultimate impact, implementation and meaning of the BPCIA is subject to uncertainty. While it is uncertain when any such processes may be fully adopted by the FDA, any such processes could compromise the future commercial prospects for our biological products. Moreover, the extent to which a biosimilar, once approved,

will be substituted for any one of our reference products in a way that is similar to traditional generic substitution for non-biological products is not yet clear and will depend on a number of marketplace and regulatory factors that are still developing at both the federal and state levels of government.

Failure to obtain marketing approval in international jurisdictions would prevent our product candidates from being marketed abroad.

In order to market and sell EBI-005 and any other product candidate that we may develop in the European Union and many other jurisdictions, we or our third-party collaborators must obtain separate marketing approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and can involve additional testing. The time required to obtain approval may differ substantially from that required to obtain FDA approval. The regulatory approval process outside the United States generally includes all of the risks associated with obtaining FDA approval. In addition, in many countries outside the United States, it is required that the product be approved for reimbursement before the product can be sold in that country. We or these third parties may not obtain approvals from regulatory authorities outside the United States on a timely basis, if at all. Approval by the FDA does not ensure approval by regulatory authorities in other countries or jurisdictions, and approval by one regulatory authority outside the United States does not ensure approval by regulatory authorities in other countries or jurisdictions or by the FDA. We may not be able to file for marketing approvals and may not receive necessary approvals to commercialize our products in any market.

Even if we, or any collaborators we may have in the future, obtain marketing approvals for EBI-005 or our other product candidates, the terms of those approvals, ongoing regulations and post-marketing restrictions may limit how we, or they, manufacture and market our products, which could materially impair our ability to generate revenue.

Once marketing approval has been granted, an approved product and its manufacturer and marketer are subject to ongoing review and extensive regulation. We, and any collaborators we may have in the future, must therefore comply with requirements concerning advertising and promotion for any of our products for which we or they obtain marketing approval. Promotional communications with respect to prescription products are subject to a variety of legal and regulatory restrictions and must be consistent with the information in the product's approved labeling. Thus, if EBI-005 or any other product candidate that we may develop receives marketing approval, the accompanying label may limit the approved use of our product, which could limit sales of the product.

In addition, manufacturers of approved products and those manufacturers' facilities are required to comply with extensive FDA requirements, including ensuring that quality control and manufacturing procedures conform to cGMPs, which include requirements relating to quality control and quality assurance as well as the corresponding maintenance of records and documentation and reporting requirements. We, our contract manufacturers, our future collaborators and their contract manufacturers will also be subject to other regulatory requirements, including submissions of safety and other post-marketing information and reports, registration and listing requirements, requirements regarding the distribution of samples to physicians, recordkeeping, and costly post-marketing studies or clinical trials and surveillance to monitor the safety or efficacy of the product such as the requirement to implement a risk evaluation and mitigation strategy.

We may be subject to substantial penalties if we fail to comply with regulatory requirements or if we experience unanticipated problems with our products.

Violations of the Federal Food, Drug, and Cosmetic Act relating to the promotion or manufacturing of prescription products may lead to investigations by the FDA, Department of Justice and state Attorneys General alleging violations of federal and state healthcare fraud and abuse laws, as well as state consumer protection laws. In addition, later discovery of previously unknown adverse events or other problems with our products, manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may yield various results, including:

- restrictions on such products, manufacturers or manufacturing processes;
- restrictions on the labeling or marketing of a product;

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- restrictions on product distribution or use;
- requirements to conduct post-marketing studies or clinical trials;
- warning letters;
- withdrawal of the products from the market;
- refusal to approve pending applications or supplements to approved applications that we submit;
- recall of products;
- fines, restitution or disgorgement of profits or revenues;
- suspension or withdrawal of marketing approvals;
- refusal to permit the import or export of our products;
- product seizure; or
- injunctions or the imposition of civil or criminal penalties.

Non-compliance with European Union requirements regarding safety monitoring or pharmacovigilance, and with requirements related to the development of products for the pediatric population, can also result in significant financial penalties.

Our relationships with customers and third-party payors may be subject, directly or indirectly, to applicable anti-kickback, fraud and abuse, false claims, transparency, health information privacy and security, and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm, administrative burdens and diminished profits and future earnings.

Healthcare providers, physicians and third-party payors in the United States and elsewhere will play a primary role in the recommendation and prescription of any product candidates, including EBI-005, for which we obtain marketing approval. Our future arrangements with third-party payors and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell and distribute any products for which we obtain marketing approval. In addition, we may be subject to transparency laws and patient privacy regulation by U.S. federal and state governments and by governments in foreign jurisdictions in which we conduct our business. The applicable federal, state and foreign healthcare laws and regulations that may affect our ability to operate include:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under a federal healthcare program such as Medicare and Medicaid;
- federal civil and criminal false claims laws and civil monetary penalty laws, including the federal False Claims Act, which impose criminal and civil penalties, including civil whistleblower or *qui tam* actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, including the Medicare and Medicaid programs, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, and their respective implementing regulations, which imposes obligations, including mandatory

contractual terms, on covered healthcare providers, health plans and healthcare clearinghouses, as well as their business associates, with respect to safeguarding the privacy, security and transmission of individually identifiable health information; and

- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, which may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers; state and foreign laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government or otherwise restrict payments that may be made to healthcare providers; state and foreign laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures; and state and foreign laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations may involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, including, without limitation, damages, fines, imprisonment, exclusion from participation in government funded healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations. If any of the physicians or other healthcare providers or entities with whom we expect to do business is found to be not in compliance with applicable laws, it may be subject to criminal, civil or administrative sanctions, including exclusions from participation in government funded healthcare programs.

Recently enacted and future legislation may affect our ability to commercialize and the prices we obtain for any products that are approved in the United States or foreign jurisdictions.

In the United States and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could affect our ability to profitably sell or commercialize any product candidate, including EBI-005, for which we obtain marketing approval or that we may in-license. The pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by legislative initiatives. Current laws, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and in additional downward pressure on the price that we receive for any approved product.

In the United States, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, or the MMA, changed the way Medicare covers and pays for pharmaceutical products. Cost reduction initiatives and other provisions of this legislation could limit coverage of and reduce the price that we receive for any approved products. While the MMA applies only to product benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own reimbursement rates. Therefore, any reduction in reimbursement that results from the MMA or other healthcare reform measures may result in a similar reduction in payments from private payors.

In March 2010, President Obama signed into law the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, or collectively PPACA. Among the provisions of PPACA of importance to our business, including, without limitation, our ability to commercialize and the prices we may obtain for any of our product candidates and that are approved for sale, are the following:

- an annual, nondeductible fee on any entity that manufactures or imports specified branded prescription drugs and biologic agents;

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- an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program;
- a new Medicare Part D coverage gap discount program, in which participating manufacturers must agree to offer 50% point-of-sale discounts off negotiated drug prices during the coverage gap period as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D;
- expansion of healthcare fraud and abuse laws, including the federal False Claims Act and the federal Anti-Kickback Statute, and the addition of new government investigative powers, and enhanced penalties for noncompliance;
- extension of manufacturers' Medicaid rebate liability;
- expansion of eligibility criteria for Medicaid programs; and
- expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program.

In addition, other legislative changes have been proposed and adopted since PPACA was enacted. These changes include aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, which went into effect in April 2013. In January 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, reduced Medicare payments to several types of providers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These new laws may result in additional reductions in Medicare and other healthcare funding.

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

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

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

Compliance with the FCPA is expensive and difficult, particularly in countries in which corruption is a recognized problem. In addition, the FCPA presents particular challenges in the pharmaceutical industry, because, in many countries, hospitals are operated by the government, and doctors and other hospital employees are considered foreign officials. Certain payments to hospitals in connection with clinical trials and other work have been deemed to be improper payments to government officials and have led to FCPA enforcement actions.

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

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

If we or our third-party manufacturers fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur significant costs.

We and our third-party manufacturers are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. From time to time and in the future, our operations may involve the use of hazardous and flammable materials, including chemicals and biological materials, and produce hazardous waste products. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from our use 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.

Further, with respect to the operations of our third-party contract manufacturers, it is possible that if they fail to operate in compliance with applicable environmental, health and safety laws and regulations or properly dispose of wastes associated with our products, we could be held liable for any resulting damages, suffer reputational harm or experience a disruption in the manufacture and supply of our product candidates or products.

Risks Related to Employee Matters and Managing Growth

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 and business development expertise of Abbie Celniker, Ph.D., our President and Chief Executive Officer, Eric Furfine, Ph.D., our Chief Scientific Officer, and Karen L. Tubridy, our Chief Development Officer, as well as the other principal members of our management, scientific and clinical team. Although we have entered into employment agreements 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 critical to 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

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regulatory approval of and commercialize products. 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 for similar personnel. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may be employed by 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.

We expect to expand our development and regulatory capabilities and potentially implement sales, marketing and distribution capabilities, and as a result, we may encounter difficulties in managing our growth, which could disrupt our operations.

We expect to experience significant growth in the number of our employees and the scope of our operations, particularly in the areas of drug development, regulatory affairs and, if any of our product candidates receives 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 effectively manage the expansion of our operations or recruit and train additional qualified personnel. 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 plans or disrupt our operations.

Risks Related to Our Common Stock and This Offering

After this offering, our executive officers, directors and principal stockholders, if they choose to act together, will continue to have the ability to control all matters submitted to stockholders for approval.

Upon the closing of this offering, our executive officers and directors, combined with our stockholders who owned more than 5% of our outstanding common stock, before this offering will, in the aggregate, beneficially own shares representing approximately % of our capital stock. As a result, if these stockholders were to choose to act together, they would be able to control all matters submitted to our stockholders for approval, as well as our management and affairs. For example, these persons, if they choose to act together, would control the election of directors and approval of any merger, consolidation or sale of all or substantially all of our assets.

This concentration of voting power may:

- delay, defer or prevent a change in control;
- entrench our management and the board of directors; or
- delay or prevent a merger, consolidation, takeover or other business combination involving us on terms that other stockholders may desire.

Provisions in our corporate charter documents and under Delaware law could make an acquisition of our company, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our certificate of incorporation and our bylaws that will become effective upon the closing of this offering may discourage, delay or prevent a merger, acquisition or other change in control of our company that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. In addition, because our board of directors is responsible for appointing the members of our management team, these

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provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors. Among other things, these provisions:

- establish a classified board of directors such that only one of three classes of directors is elected each year;
- allow the authorized number of our directors to be changed only by resolution of our board of directors;
- limit the manner in which stockholders can remove directors from our board of directors;
- establish advance notice requirements for stockholder proposals that can be acted on at stockholder meetings and nominations to our board of directors;
- require that stockholder actions must be effected at a duly called stockholder meeting and prohibit actions by our stockholders by written consent;
- limit who may call stockholder meetings;
- authorize our board of directors to issue preferred stock without stockholder approval, which could be used to institute a “poison pill” that would work to dilute the stock ownership of a potential hostile acquirer, effectively preventing acquisitions that have not been approved by our board of directors; and
- require the approval of the holders of at least 75% of the votes that all our stockholders would be entitled to cast to amend or repeal specified provisions of our certificate of incorporation or bylaws that will become effective upon the closing of this offering.

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

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 will be substantially higher than the pro forma 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 pro forma net tangible book value per share after this offering. To the extent outstanding options or warrants are exercised, you will incur further dilution. Based on an assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, you will experience immediate dilution of \$ per share, representing the difference between our pro forma net tangible book value per share, after giving effect to this offering, and the assumed initial public offering price. In addition, purchasers of common stock in this offering will have contributed approximately % of the aggregate price paid for all purchases of our stock but the shares purchased in this offering will represent an aggregate of only approximately % of our total common stock outstanding after this offering.

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. The initial public offering price for our common stock will be determined through negotiations with the underwriters. Although we have applied to have our common stock approved for listing on The NASDAQ Global Market, an active trading market for our shares may never develop or be sustained following this offering. If an active market for our common stock does not develop, it may be difficult for you to sell shares you purchase in this offering without depressing the market price for the shares or at all.

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The price of our common stock may be volatile and fluctuate substantially, which could result in substantial losses for purchasers of our common stock in this offering.

Our stock price is likely to be volatile. The stock market in general and the market for smaller 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:

- the success of competitive products or technologies;
- results of clinical trials of EBI-005 or any other product candidate that we may develop;
- results of clinical trials of product candidates of our competitors;
- regulatory or legal developments in the United States and other countries;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key scientific or management personnel;
- the level of expenses related to any of our product candidates or clinical development programs;
- the results of our efforts to discover, develop, acquire or in-license additional products, product candidates or technologies for the treatment of ophthalmic diseases, the costs of commercializing any such products and the costs of development of any such product candidates or technologies;
- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;
- variations in our financial results or those of companies that are perceived to be similar to us;
- changes in the structure of healthcare payment systems;
- market conditions in the pharmaceutical and biotechnology sectors;
- general economic, industry and market conditions; and
- the other factors described in this “Risk Factors” section.

In the past, following periods of volatility in the market price of a company’s securities, securities class-action litigation has often been instituted against that company. We also may face securities class-action litigation if we cannot obtain regulatory approvals for or if we otherwise fail to commercialize EBI-005. Such litigation, if instituted against us, could cause us to incur substantial costs to defend such claims and divert management’s attention and resources.

We have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

Our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our common stock. The failure by our management to apply these funds effectively could result in financial losses that could cause the price of our common stock to decline and delay the development of our product candidates. Pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value.

Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.

As of December 31, 2012, we had federal net operating loss carryforwards of \$37.9 million, state net operating loss carryforwards of \$37.4 million and aggregate federal and state research and development tax credit carryforwards of \$0.9 million available to reduce future taxable income. These federal and state net operating

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loss carryforwards and federal and state tax credit carryforwards will begin to expire at various dates beginning in 2014, if not utilized. Utilization of these net operating loss and tax credit carryforwards may be subject to a substantial limitation under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, or the Code, and comparable provisions of state, local and foreign tax laws due to changes in ownership of our company that have occurred previously or that could occur in the future. Under Section 382 of the Code and comparable provisions of state, local and foreign tax laws, if a corporation undergoes an “ownership change,” generally defined as a greater than 50% change by value in its equity ownership over a three year period, the corporation’s ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes, such as research and development tax credits, to reduce its post-change income may be limited. We have not completed a study to determine whether our initial public offering, our most recent private placement of our series B preferred stock and warrants to purchase shares of our common stock and other transactions that have occurred over the past three years may have triggered an ownership change limitation. We may also experience ownership changes in the future as a result of subsequent shifts in our stock ownership. As a result, if we generate taxable income, our ability to use our pre-change net operating loss and tax credits carryforwards to reduce U.S. federal and state taxable income may be subject to limitations, which could result in increased future tax liability to us.

A significant portion of our total outstanding shares are eligible to be sold into the market in the near future, which could cause the market price of our common stock to drop significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market, or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock. After this offering, we will have _____ shares of common stock outstanding based on the number of shares outstanding as of December 6, 2013. This includes the shares that we are selling in this offering, which may be resold in the public market immediately without restriction, unless purchased by our affiliates or existing stockholders. The remaining _____ shares are currently restricted as a result of securities laws or lock-up agreements but will become eligible to be sold at various times after the offering. Moreover, after this offering, holders of an aggregate of 54,970,271 shares of our common stock will have rights, subject to specified conditions, to require us to file registration statements covering their shares or, along with holders of an additional 195,000 shares of our common stock issuable upon exercise of warrants issued to our venture debt lender, to include their shares in registration statements that we may file for ourselves or other stockholders. We also intend to register all shares of common stock that we may issue under our equity compensation plans. Once we register these shares, they can be freely sold in the public market upon issuance, subject to volume limitations applicable to affiliates and the lock-up agreements described in the “Underwriting” section of this prospectus.

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

We are an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, and may remain an emerging growth company for up to five years. For so long as we remain an emerging growth company, we are permitted and intend to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include:

- being permitted to provide 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;
- not being required to comply with the auditor attestation requirements in the assessment of our internal control over financial reporting;
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor’s report providing additional information about the audit and the financial statements;

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- reduced disclosure obligations regarding executive compensation; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved.

We have taken advantage of reduced reporting burdens in this prospectus. In particular, in this prospectus, we have provided only two years of audited financial statements and have not included all of the executive compensation related information that would be required if we were not an emerging growth company. We cannot predict whether investors will find our common stock less attractive if we rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

In addition, the JOBS Act also provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to delay such adoption of new or revised accounting standards, 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 public companies that are not emerging growth companies.

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

As a public company, and particularly after we are no longer an emerging growth company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. The Sarbanes-Oxley Act of 2002, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of The NASDAQ Global Market and other applicable securities rules and regulations impose various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. For example, we expect that these rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance, which in turn could make it more difficult for us to attract and retain qualified members of our board of directors.

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

For as long as we remain an emerging growth company, we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies as described in the preceding risk factor. We may remain an emerging growth company until the end of the fiscal year in which the fifth anniversary of this offering occurs, although if the market value of our common stock that is held by non-affiliates exceeds \$700 million as of any June 30 before that time or if we have annual gross revenues of \$1 billion or more in any fiscal year, we would cease to be an emerging growth company as of December 31 of the applicable year. We also would cease to be an emerging growth company if we issue more than \$1 billion of non-convertible debt over a three-year period.

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, or Section 404, we will be required to furnish a report by our management on our internal control over financial reporting. However, while we remain an emerging growth company, we will not be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. To achieve compliance with Section 404 within the prescribed period, we will be engaged in a process to document and evaluate our internal control over financial reporting, which is

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both costly and challenging. In this regard, we will need to continue to dedicate internal resources, potentially engage outside consultants and adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented and implement a continuous reporting and improvement process for internal control over financial reporting. Despite our efforts, there is a risk that we will not be able to conclude, within the prescribed timeframe or at all, that our internal control over financial reporting is effective as required by Section 404. If we identify one or more material weaknesses in our internal control over financial reporting, it could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements.

Because we do not anticipate paying any cash dividends on our capital stock in the foreseeable future, capital appreciation, if any, will be your sole source of gain.

We have never declared or paid cash dividends on our capital stock. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. In addition, the terms of our loan and security agreement with SVB and any future debt agreements that we may enter into, may preclude us from paying dividends without the lenders' consent or at all. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS AND INDUSTRY DATA

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

The forward-looking statements in this prospectus include, among other things, statements about:

- our plans to develop and commercialize EBI-005 and other protein therapeutics to treat diseases of the eye;
- our ongoing and planned clinical trials, including the timing of the initiation and availability of anticipated top-line results of our two Phase 3 clinical trials evaluating EBI-005 for the treatment of moderate to severe dry eye disease;
- our ability to achieve anticipated milestones under our collaboration and license agreement with ThromboGenics;
- the timing of and our ability to submit applications for, obtain and maintain regulatory approvals for EBI-005 and our other product candidates;
- the potential advantages of EBI-005 and our other product candidates;
- the rate and degree of market acceptance and clinical utility of our products;
- our estimates regarding the potential market opportunity for EBI-005;
- our commercialization, marketing and manufacturing capabilities and strategy;
- our intellectual property position;
- our ability to identify additional products, product candidates or technologies with significant commercial potential that are consistent with our commercial objectives;
- our expectations related to the use of proceeds from this offering;
- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing;
- the impact of government laws and regulations; and
- our competitive position.

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

You should read this prospectus and the documents that we reference in this prospectus and have filed as exhibits to the registration statement of which this prospectus is a part completely and with the understanding that our actual future results may be materially different from what we expect. The forward-looking statements contained in this prospectus are made as of the date of this prospectus, and we do not assume any obligation to update any forward-looking statements.

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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. While we believe these industry publications and third-party research, surveys and studies are reliable, we have not independently verified such data.

USE OF PROCEEDS

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

A \$1.00 increase or decrease in the assumed initial public offering price of \$ _____ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease the net proceeds from this offering by approximately \$ _____ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions.

As of September 30, 2013, we had cash and cash equivalents of \$3.9 million. In December 2013, we received \$8.0 million in cash proceeds from our series B preferred stock financing. We currently estimate that we will use the net proceeds from this offering, together with our existing cash and cash equivalents, as follows:

- approximately \$ _____ to fund our pivotal Phase 3 clinical program for EBI-005 in patients with moderate to severe dry eye disease;
- approximately \$ _____ to fund our Phase 2 clinical trial of EBI-005 in patients with allergic conjunctivitis; and
- the remainder for working capital and other general corporate purposes, which will include development of our preclinical product candidates and pursuit of our other research and discovery efforts and could also include the acquisition or in-license of other products, product candidates or technologies.

This expected use of net proceeds from this offering and our existing cash and cash equivalents represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our development, the status of and results from clinical trials, as well as any collaborations that we may enter into with third parties for our product candidates, and any unforeseen cash needs. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering. We have no current agreements, commitments or understandings for any material acquisitions or licenses of any products, businesses or technologies.

Based on our planned use of the net proceeds from this offering and our existing cash and cash equivalents described above, we estimate that such funds will be sufficient to enable us to _____. We do not anticipate that the net proceeds from this offering and our existing cash and cash equivalents will be sufficient to allow us to _____.

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

DIVIDEND POLICY

We have never declared or paid cash dividends on our common stock. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. We do not intend to pay cash dividends in respect of our common stock in the foreseeable future. In addition, the terms of our existing loan and security agreement with SVB preclude us from paying dividends without SVB's consent.

CAPITALIZATION

The following table sets forth our cash and cash equivalents and capitalization as of September 30, 2013:

- on an actual basis;
- on a pro forma basis to give effect to:
 - the completion of our series B preferred stock financing in December 2013 in which we issued and sold an aggregate of 6,632,416 shares of our series B preferred stock and warrants to purchase 1,142,855 shares of our common stock for an aggregate purchase price of \$11.6 million, consisting of \$8.0 million in cash and \$3.6 million for the conversion of outstanding convertible promissory notes, including accrued interest;
 - the automatic conversion of all outstanding shares of our preferred stock, including the shares of our series B preferred stock that we issued in December 2013, into an aggregate of 51,882,416 shares of our common stock upon the closing of this offering;
 - the reclassification of our warrant liability to stockholders' equity as a result of warrants to purchase preferred stock becoming warrants to purchase common stock upon the closing of this offering; and
 - the issuance of 2,892,855 shares of our common stock upon the exercise of outstanding warrants held by some of our preferred stockholders, at an exercise price of \$0.01, including shares of our common stock issuable upon the exercise of the warrants that we issued in December 2013, which otherwise expire upon the closing of this offering; and
- on a pro forma as adjusted basis to give further effect to our issuance and sale of _____ shares of our common stock in this offering at an assumed initial public offering price of \$ _____ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

Our capitalization following the closing of this offering will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing. You should read this table together with "Selected Financial Data," our financial statements and the related notes appearing at the end of this prospectus and the "Management's Discussion and Analysis of Financial Condition and Results of Operations" section of this prospectus.

	As of September 30, 2013		
	Actual	Pro forma (in thousands)	Pro forma as adjusted
Cash and cash equivalents	\$ 3,881	\$ 11,910	\$ _____
Convertible notes payable	3,401	—	_____
Notes payable, net of discount (current and non-current)	4,929	4,929	_____
Warrant liability	246	—	_____
Series A preferred stock, par value \$0.001 per share; 45,445,000 shares authorized, 45,250,000 shares issued and outstanding, actual; 45,445,000 shares authorized and no shares issued and outstanding, pro forma; and no shares authorized, issued and outstanding, pro forma as adjusted	45,035	—	_____
Series B preferred stock, par value \$0.001 per share; no shares authorized, issued and outstanding, actual; 6,635,868 shares authorized and no shares issued and outstanding, pro forma; and no shares authorized, issued and outstanding, pro forma as adjusted	—	—	_____
Common stock, par value \$0.001 per share; 67,545,000 shares authorized, 10,448,143 shares issued and outstanding ⁽¹⁾ , actual; 76,973,723 shares authorized; 65,223,414 shares issued and outstanding ⁽¹⁾ , pro forma; and _____ shares authorized and _____ shares issued and outstanding ⁽¹⁾ pro forma as adjusted	9	64	_____
Additional paid-in capital	1,335	58,197	_____
Accumulated deficit	(52,528)	(52,734)	_____
Total stockholders' (deficit) equity	(51,184)	5,527	_____
Total capitalization	\$ 2,427	\$ 10,456	\$ _____

(1) Shares issued and outstanding include 1,336,669 shares of unvested restricted common stock, which are subject to repurchase by us as of September 30, 2013.

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A \$1.00 increase or decrease in the assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease each of cash and cash equivalents, additional paid-in capital, total stockholders' equity and total capitalization on a pro forma as adjusted basis by approximately \$ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The table above does not include:

- 6,408,922 shares of our common stock issuable upon the exercise of stock options outstanding as of September 30, 2013 at a weighted average exercise price of \$0.15 per share;
- 195,000 shares of our common stock issuable following the closing of this offering upon the exercise of warrants outstanding as of September 30, 2013 held by our venture debt lender, Silicon Valley Bank, at an exercise price of \$1.00 per share;
- 562,319 shares of our common stock available for future issuance under our 2009 Stock Incentive Plan, as of September 30, 2013; and
- additional shares of our common stock that will become 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 public offering price per share of our common stock and the pro forma net tangible book value per share of our common stock after this offering.

Our historical net tangible book value (deficit) as of September 30, 2013 was \$(51.2) million, or \$(4.90) per share of our common stock. Historical net tangible book value per share represents the amount of our total tangible assets less total liabilities and our series A preferred stock, divided by the number of shares of our common stock outstanding as of September 30, 2013, which includes 1,336,669 shares of unvested restricted stock.

Our pro forma net tangible book value (deficit) as of September 30, 2013 was \$5.5 million, or \$0.08 per share of our common stock. Pro forma net tangible book value per share represents the amount of our total tangible assets less our total liabilities, divided by the pro forma number of shares of our common stock outstanding as of September 30, 2013, which includes 1,336,669 shares of unvested restricted stock, after giving effect to the completion of our series B preferred stock financing in December 2013 in which we issued and sold an aggregate of 6,632,416 shares of our series B preferred stock and warrants to purchase 1,142,855 shares of our common stock for an aggregate purchase price of \$11.6 million, consisting of \$8.0 million in cash and \$3.6 million for the conversion of outstanding convertible promissory notes, including accrued interest, the conversion of all outstanding shares of our preferred stock, including the shares of our series B preferred stock that we issued in December 2013, into an aggregate of 51,882,416 shares of our common stock upon the closing of this offering, the related reclassification of our warrant liability to stockholders' equity as a result of warrants to purchase preferred stock becoming warrants to purchase common stock upon the closing of this offering, and the issuance of 2,892,855 shares of our common stock upon the exercise of outstanding warrants held by some of our preferred stockholders, at an exercise price of \$0.01 per share, including shares of our common stock issuable upon the exercise of the warrants that we issued in December 2013, which otherwise expire upon the closing of this offering.

After giving effect to our issuance and sale of _____ shares of our common stock in this offering at an assumed initial public offering price of \$ _____ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma net tangible book value as of September 30, 2013 would have been \$ _____ million, or \$ _____ per share. This represents an immediate increase in pro forma net tangible book value per share of \$ _____ to existing stockholders and immediate dilution of \$ _____ in pro forma net tangible book value per share to new investors purchasing common stock in this offering. Dilution per share to new investors is determined by subtracting pro forma net tangible book value per share after this offering from the initial public offering price per share paid by new investors. The following table illustrates this dilution on a per share basis:

Assumed initial public offering price per share	\$
Historical net tangible book value (deficit) per share as of September 30, 2013	\$(4.90)
Increase per share attributable to the issuance and sale of preferred stock and warrants to purchase common stock, the conversion of outstanding preferred stock, the reclassification of warrant liability to stockholders' equity and the exercise of common stock warrants	4.98
Pro forma net tangible book value (deficit) per share as of September 30, 2013	0.08
Increase in net tangible book value per share attributable to new investors	_____
Pro forma net tangible book value per share after this offering	_____
Dilution per share to new investors	\$ _____

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

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If the underwriters exercise their over-allotment option or if any additional shares are issued in connection with the exercise of options, you will experience further dilution.

The following table summarizes, on a pro forma basis as of September 30, 2013, the total number of shares purchased from us, the total consideration paid, or to be paid, and the average price per share paid, or to be paid, by existing stockholders and by new investors in this offering at an assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, before deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. As the table shows, new investors purchasing shares in this offering will pay an average price per share substantially higher than our existing stockholders paid.

	<u>Shares purchased</u>		<u>Total consideration</u>		<u>Average price per share</u>
	<u>Number</u>	<u>Percentage</u>	<u>Amount</u>	<u>Percentage</u>	
Existing stockholders	65,223,414	%	\$57,027,147	%	\$ 0.87
New investors					
Total		100%	\$	100%	

A \$1.00 increase or decrease in the assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease the total consideration paid by new investors by \$ million and increase or decrease the percentage of total consideration paid by new investors by approximately percentage points, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same.

The table above is based on shares outstanding as of September 30, 2013, including 1,336,669 shares of unvested restricted stock, and after giving effect to our issuance and sale in December 2013 of 6,632,416 shares of our series B preferred stock and warrants to purchase 1,142,855 shares of our common stock, the automatic conversion of all outstanding shares of our preferred stock, including the shares of our series B preferred stock that we issued in December 2013, into an aggregate of 51,882,416 shares of our common stock upon the closing of this offering and the issuance of 2,892,855 shares of our common stock issuable upon the exercise of outstanding warrants held by some of our preferred stockholders, at an exercise price of \$0.01 per share, including shares of our common stock issuable upon the exercise of the warrants that we issued in December 2013, which otherwise expire upon the closing of this offering.

The table above does not include:

- 6,408,922 shares of our common stock issuable upon the exercise of stock options outstanding as of September 30, 2013 at a weighted average exercise price of \$0.15 per share;
- 195,000 shares of our common stock issuable following the closing of this offering upon the exercise of warrants outstanding as of September 30, 2013 held by our venture debt lender, Silicon Valley Bank, at an exercise price of \$1.00 per share;
- 562,319 shares of our common stock available for future issuance under our 2009 Plan as of September 30, 2013; and
- additional shares of our common stock that will become available for future issuance under our equity compensation plans upon the closing of this offering.

If the underwriters exercise their over-allotment option in full, the following will occur:

- the percentage of shares of our common stock held by existing stockholders will decrease to approximately % of the total number of shares of our common stock outstanding after this offering; and
- the percentage of shares of our common stock held by new investors will increase to approximately % of the total number of shares of our common stock outstanding after this offering.

SELECTED FINANCIAL DATA

You should read the following selected financial data together with our financial statements and the related notes appearing at the end of this prospectus and the “Management’s Discussion and Analysis of Financial Condition and Results of Operations” section of this prospectus. We have derived the statement of operations data for the years ended December 31, 2011 and 2012 and the balance sheet data as of December 31, 2011 and 2012 from our audited financial statements included in this prospectus, which have been audited by Ernst & Young LLP, an independent registered public accounting firm. We have derived the statement of operations data for the nine months ended September 30, 2012 and 2013 and the balance sheet data as of September 30, 2013 from our unaudited financial statements included in this prospectus. The unaudited financial data include, in the opinion of our management, all adjustments, consisting of normal recurring adjustments, that are necessary for a fair statement of our financial position and results of operations for these periods. Our historical results for any prior period are not necessarily indicative of results to be expected in any future period, and our results for any interim period are not necessarily indicative of results to be expected for a full fiscal year.

	Year ended December 31,		Nine months ended September 30,	
	2011	2012	2012	2013
	(in thousands, except per share data)			
Statement of Operations Data:				
Collaboration revenue	\$ —	\$ —	\$ —	\$ 824
Operating expenses:				
Research and development	9,411	15,263	11,367	10,576
General and administrative	3,267	4,213	3,081	2,606
Total operating expenses	<u>12,678</u>	<u>19,476</u>	<u>14,448</u>	<u>13,182</u>
Loss from operations	(12,678)	(19,476)	(14,448)	(12,358)
Other income (expense):				
Other income (expense), net	3	(13)	7	(96)
Interest expense	(151)	(168)	(122)	(505)
Total other expense, net	<u>(148)</u>	<u>(181)</u>	<u>(115)</u>	<u>(601)</u>
Net loss and comprehensive loss	<u>\$ (12,826)</u>	<u>\$ (19,657)</u>	<u>\$ (14,563)</u>	<u>\$ (12,959)</u>
Cumulative preferred stock dividends	<u>(1,452)</u>	<u>(3,111)</u>	<u>(2,201)</u>	<u>(2,715)</u>
Net loss applicable to common stockholders	<u>\$ (14,278)</u>	<u>\$ (22,768)</u>	<u>\$ (16,764)</u>	<u>\$ (15,674)</u>
Net loss per share—basic and diluted	<u>\$ (2.80)</u>	<u>\$ (3.61)</u>	<u>\$ (2.81)</u>	<u>\$ (1.87)</u>
Weighted-average number of common shares used in net loss per share—basic and diluted	<u>5,092</u>	<u>6,308</u>	<u>5,971</u>	<u>8,384</u>
Pro forma net loss per share—basic and diluted (unaudited)		<u>\$ (0.43)</u>		<u>\$ (0.24)</u>
Weighted average number of common shares used in pro forma net loss per share—basic and diluted (unaudited)		<u>45,199</u>		<u>54,224</u>

See Note 2 within the notes to our financial statements appearing at the end of this prospectus for a description of the method used to calculate basic and diluted net loss applicable to common stockholders and pro forma basic and diluted net loss per share.

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	As of December 31,		As of
	2011	2012	September 30, 2013
	(in thousands)		
Balance Sheet Data:			
Cash and cash equivalents	\$ 700	\$ 7,882	\$ 3,881
Working capital	(1,229)	6,446	(2,948)
Total assets	2,665	9,503	5,051
Notes payable, net of current portion	325	1,769	3,287
Warrant liability	26	147	246
Convertible preferred stock	19,644	45,035	45,035
Accumulated deficit	(19,912)	(39,569)	(52,528)
Total stockholders' deficit	(19,791)	(39,296)	(51,184)

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

You should read the following discussion and analysis of our financial condition and results of operations together with our financial statements and related notes appearing 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.

Overview

We are a clinical-stage biopharmaceutical company with a proprietary protein engineering platform, called AMP-Rx, that we apply to the discovery and development of protein therapeutics to treat diseases of the eye. Our therapeutic approach is based on the role of cytokines in diseases of the eye, our understanding of the structural biology of cytokines and our ability to rationally design and engineer proteins to modulate the effects of cytokines. Cytokines are cell signaling molecules found in the body that can have important inflammatory effects. Our most advanced product candidate is EBI-005, which we designed, engineered and generated using our AMP-Rx platform and are developing as a topical treatment for dry eye disease and allergic conjunctivitis. In 2013, we completed a Phase 1b/2a clinical trial of EBI-005 in patients with moderate to severe dry eye disease. We plan to initiate a pivotal Phase 3 clinical program evaluating EBI-005 for the treatment of moderate to severe dry eye disease in early 2014. We also plan to initiate a Phase 2 clinical trial to evaluate the use of EBI-005 in patients with allergic conjunctivitis in 2014. We hold worldwide commercialization rights to EBI-005.

We were incorporated and commenced active operations in early 2008, and our operations to date have been limited to organizing and staffing our company, acquiring rights to intellectual property, business planning, raising capital, developing our technology, identifying potential product candidates, undertaking preclinical studies and, beginning in 2012, conducting clinical trials. To date, we have financed our operations primarily through private placements of our preferred stock and convertible bridge notes, venture debt borrowings and, to a lesser extent, from a collaboration. All of our revenue to date has been collaboration revenue, which we first began to generate in 2013. We recognized collaboration revenue of \$0.8 million for the nine months ended September 30, 2013. Since inception, we have incurred significant operating losses. As of September 30, 2013, we had an accumulated deficit of \$52.5 million. Our net loss was \$12.8 million for the year ended December 31, 2011, \$19.7 million for the year ended December 31, 2012 and \$13.0 million for the nine months ended September 30, 2013.

We expect our expenses to increase substantially in connection with our ongoing activities, particularly as we initiate and complete our planned pivotal Phase 3 clinical program for EBI-005, consisting of two Phase 3 clinical trials evaluating EBI-005 for the treatment of moderate to severe dry eye disease and a separate clinical trial evaluating the safety of treatment with EBI-005 for one year, and seek marketing approval for EBI-005 for this indication in the United States and, whether alone or in collaboration with third parties, in the European Union and other jurisdictions. We also expect our expenses to increase as we initiate and conduct additional clinical trials of EBI-005 for the treatment of allergic conjunctivitis or additional indications or for use in other patient populations and as we continue research and development and initiate additional clinical trials of, and seek marketing approval for, our other product candidates. In addition, if we obtain marketing approval for EBI-005 or any other product candidates, we expect to incur significant commercialization expenses related to product manufacturing, marketing, sales and distribution. Furthermore, upon the closing of this offering, we expect to incur additional costs associated with operating as a public company. Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. If we are unable to raise capital when needed or on attractive terms, we could be forced to delay, reduce or eliminate our research and development programs or any future commercialization efforts.

Financial Operations Overview

Revenue

To date, we have not generated any revenues from the sale of products. All of our revenue to date has been derived from a collaboration. We do not expect to generate significant product revenue unless and until we obtain marketing approval for, and commercialize, EBI-005, which we do not expect will occur before 2017, if ever.

We have generated collaboration revenue exclusively from our collaboration and license agreement with ThromboGenics N.V., or Thrombogenics, which we entered into in May 2013. Under the agreement, we and ThromboGenics are collaborating to identify protein or peptide therapeutics that directly modulate any of a specified set of targets in a novel pathway in retinal disease. We call the therapeutics that are identified, and whose modulation of one of the targets is confirmed, in the course of the research collaboration, collaboration products. The initial research term extends for 30 months from the date we entered into the agreement, but may be extended on mutual agreement. The agreement expires when all of ThromboGenics' payment obligations expire. We are responsible for specified non-clinical activities during the research term. ThromboGenics is responsible for all development, manufacturing and commercialization activities with respect to the collaboration products. We granted ThromboGenics an exclusive, sublicensable, worldwide royalty-bearing license under our rights in any intellectual property made in the course of this collaboration, as well as under any other intellectual property we control during the research term that is necessary for ThromboGenics to perform its obligations to research, develop, manufacture and commercialize collaboration products. During the term of the agreement, neither we nor ThromboGenics, nor our respective affiliates other than any entities which become affiliates as a result of an acquisition of us or ThromboGenics, are permitted to research, develop, manufacture or commercialize any protein or peptide therapeutic that directly modulates one of the specified targets, except as otherwise provided in the agreement.

In connection with the agreement, we received an upfront, non-refundable payment of \$1.75 million, and are entitled to receive payment for our performance of activities under the agreement at a set rate per full time annual equivalent personnel for research services pursuant to the agreement. We identified three deliverables in the arrangement: the research license, the research services and our participation on the joint research committee, or JRC deliverable, and concluded that there are two units of accounting: a combined research license and research services deliverable and the JRC deliverable. The estimated selling price for the JRC deliverable was *de minimis*, and thus we allocated the fixed arrangement consideration to the combined unit of accounting. We are recognizing revenue using the proportional performance method by which the amounts are recognized in proportion to the costs incurred based on full time equivalent efforts. In addition, we are eligible to receive up to an aggregate of \$10.0 million if ThromboGenics achieves specified preclinical and clinical development milestones and up to an aggregate of \$15.0 million if ThromboGenics achieves specified regulatory milestones. There are no commercialization or sales based milestones under the agreement. ThromboGenics is obligated to pay us a low single digit royalty on the sale of collaboration products. We recognized collaboration revenue of \$0.8 million in connection with this collaboration for the nine months ended September 30, 2013. We expect that any revenue we generate from our collaboration with ThromboGenics will fluctuate from quarter to quarter as a result of the uncertain timing and amount of payments for research services, milestone payments and royalties.

Research and Development Expenses

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

- employee-related expenses, including salaries, benefits, travel and stock-based compensation expense;
- expenses incurred under agreements with contract research organizations, or CROs, and investigative sites that conduct our clinical trials;
- expenses associated with developing manufacturing capabilities and manufacturing clinical study materials;

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- facilities, depreciation, and other expenses, which include direct and allocated expenses for rent and maintenance of facilities, insurance, and other supplies; and
- expenses associated with preclinical and regulatory activities.

We expense research and development costs as incurred. We recognize external development costs based on an evaluation of the progress to completion of specific tasks using information and data provided to us by our vendors and our clinical sites.

In April 2013, we implemented a strategic restructuring designed to conserve resources and improve our financial position. As part of this strategic restructuring, we reduced spending on early stage research programs and implemented a reduction in force of 15 positions, or 50% of our workforce, primarily in the research area. We expect our research and development expenses to increase substantially as compared to prior periods in connection with conducting our planned pivotal Phase 3 clinical program for EBI-005, seeking marketing approval for EBI-005 in the United States and, whether alone or in collaboration with third parties, in the European Union and other jurisdictions, initiating and conducting additional clinical trials of EBI-005 for the treatment of allergic conjunctivitis or additional indications or for use in other patient populations and continuing the research and development and initiating clinical trials of our other product candidates.

We estimate that we will incur external research and development expenses of approximately \$ million to complete our planned pivotal Phase 3 clinical program for EBI-005 and to submit a Biologics License Application, or BLA, to the United States Food and Drug Administration, or FDA, seeking approval of EBI-005 for the treatment of dry eye disease in the United States before the end of 2016. We estimate that we will incur additional external research and development expenses of approximately \$ million to complete our planned Phase 2 clinical trial to evaluate the use of EBI-005 in patients with allergic conjunctivitis. We expect that additional funds of approximately \$ million will be required to fund our internal research and development expenses for EBI-005, internal and external research and development expenses for our preclinical and research and discovery programs and for working capital and other general corporate purposes during the period from the completion of this offering until we file our BLA for EBI-005 for the treatment of dry eye disease. At this time, we cannot reasonably estimate the remaining costs necessary to commercialize EBI-005 for the treatment of dry eye disease, including commercial manufacturing of EBI-005, or the nature, timing or costs of the efforts necessary to complete the development of any other product candidate.

The successful development and commercialization of our product candidates is highly uncertain. This is due to the numerous risks and uncertainties associated with product development and commercialization, including the uncertainty of:

- the scope, progress, outcome and costs of our clinical trials and other research and development activities;
- the efficacy and potential advantages of our product candidates compared to alternative treatments, including any standard of care;
- the market acceptance of our product candidates;
- obtaining, maintaining, defending and enforcing patent claims and other intellectual property rights;
- significant and changing government regulation; and
- the timing, receipt and terms of any marketing approvals.

A change in the outcome of any of these variables with respect to the development of EBI-005 or any other product candidate that we may develop could mean a significant change in the costs and timing associated with the development of that product candidate. For example, if the FDA or another regulatory authority were to require us to conduct clinical trials or other testing beyond those that we currently contemplate will be required

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for the completion of clinical development of EBI-005 or any other product candidate that we may develop or if we experience significant delays in enrollment in any of our clinical trials, we could be required to expend significant additional financial resources and time on the completion of clinical development of that product candidate.

We allocate direct research and development expenses, consisting principally of external costs, such as fees paid to investigators, consultants, central laboratories and CROs in connection with our clinical trials, and costs related to manufacturing or purchasing clinical trial materials, to specific product programs. We do not allocate employee and contractor-related costs, costs associated with our platform and facility expenses, including depreciation or other indirect costs, to specific product programs because these costs are deployed across multiple product programs under research and development and, as such, are separately classified. The table below provides research and development expenses incurred for our EBI-005 product program and other expenses by category. We did not allocate research and development expenses to any other specific product program during the periods presented:

	Year ended December 31,		Nine months ended September 30,	
	2011	2012	2012	2013
EBI-005	\$ 2,627	\$8,680	\$ 6,350	\$ 5,690
Personnel and other expenses:				
Employee and contractor-related expenses	4,009	3,867	2,900	3,292
Platform-related lab expenses	1,746	1,710	1,339	800
Facility expenses	772	733	558	599
Other expenses	257	273	220	195
Total personnel and other expenses	6,784	6,583	5,017	4,886
Total research and development expenses	<u>\$ 9,411</u>	<u>\$ 15,263</u>	<u>\$ 11,367</u>	<u>\$ 10,576</u>

General and Administrative Expenses

General and administrative expenses consist primarily of salaries and related costs for personnel, including stock-based compensation, in executive, operational, finance and human resource functions. Other general and administrative expenses include facility-related costs and professional fees for legal, patent, consulting and accounting services.

We anticipate that our general and administrative expenses will increase in the future as we increase our headcount to support our continued research and development and potential commercialization of our product candidates. We also anticipate increased accounting, audit, legal, regulatory, compliance, insurance and investor and public relations expenses associated with being a public company.

Other Income (Expense), Net

Other income and expense consists primarily of interest income earned on cash and cash equivalents, interest expense on outstanding debt and the gain or loss associated with the change in the fair value of our preferred stock warrant liability and the convertible notes that are carried at fair value.

Critical Accounting Policies and Significant Judgments and Estimates

This management's discussion and analysis of our financial condition and results of operations is based on our financial statements, which we have prepared in accordance with U.S. generally accepted accounting principles. The preparation of these financial statements requires us to make estimates and judgments that affect

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the reported amounts of assets, liabilities, and expenses and the disclosure of contingent assets and liabilities in our financial statements. On an ongoing basis, we evaluate our estimates and judgments, including those related to revenue recognition, accrued research and development expenses and stock-based compensation. We base our estimates on historical experience, known trends and events and various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

While our significant accounting policies are described in more detail in the notes to our financial statements appearing at the end of this prospectus, we believe the following accounting policies to be most critical to the judgments and estimates used in the preparation of our financial statements.

Revenue Recognition

We recognize revenue in accordance with Accounting Standards Codification, or ASC, 605, *Revenue Recognition*. Accordingly, 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 reasonable assured.

We record as deferred revenue any amounts received prior to satisfying the revenue recognition criteria. We classify as deferred revenue, current any amounts expected to be recognized as revenue within the 12 months following the balance sheet date. We classify as deferred revenue, net of current portion any amounts not expected to be recognized as revenue within the 12 months following the balance sheet date.

We evaluate multiple-element arrangements based on the guidance in ASC Topic 605-25, *Revenue Recognition-Multiple-Element Arrangements*, or ASC 605-25. Pursuant to the guidance in ASC 605-25, we evaluate multiple-element arrangements to determine (1) the deliverables included in the arrangement and (2) whether the individual deliverables represent separate units of accounting or whether they must be accounted for as a combined unit of accounting. This evaluation involves subjective determinations and 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 the delivered item has value to the customer on a standalone basis, and 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 the arrangement that is fixed or determinable is then allocated among the separate units of accounting using the relative selling price method. We determine the selling price of a unit of accounting following the hierarchy of evidence prescribed by ASC 605-25. Accordingly, we determine the estimated selling price for units of accounting within each arrangement using vendor-specific objective evidence, or VSOE, of selling price, if available, third-party evidence, or TPE, of selling price if VSOE is not available, or best estimate of selling price, or BESP, if neither VSOE nor TPE is available.

We recognize arrangement consideration allocated to each unit of accounting when all of the revenue recognition criteria in ASC 605 are satisfied for that particular unit of accounting. In the event that a deliverable

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does not represent a separate unit of accounting, we recognize revenue from the combined unit of accounting over our 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 straight-line basis over the period we are expected to complete our performance obligations. Conversely, if the pattern of performance in 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.

At the inception of an arrangement that includes milestone payments, 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: (1) 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; (2) the consideration relates solely to past performance; and (3) 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 have concluded that certain of the preclinical and clinical development milestone payments pursuant to our collaboration and license arrangement with ThromboGenics are substantive. Accordingly, in accordance with ASC Topic 605-28, *Revenue Recognition-Milestone Method*, we will recognize revenue in its entirety upon successful accomplishment of these 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, assuming all other revenue recognition criteria are met.

Accrued Research and Development Expenses

As part of the process of preparing our financial statements, we are required to estimate our accrued expenses. This process involves reviewing quotes and contracts, identifying services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of the actual cost. The majority of our service providers invoice us monthly in arrears for services performed or when contractual milestones are met. We make estimates of our accrued expenses as of each balance sheet date in our financial statements based on facts and circumstances known to us at that time. We periodically confirm the accuracy of our estimates with the service providers and make adjustments if necessary. The significant estimates in our accrued research and development expenses are related to fees paid to CROs and other vendors in connection with research and development activities for which we have not yet been invoiced.

We base our expenses related to CROs on our estimates of the services received and efforts expended pursuant to quotes and contracts with CROs that conduct research and development on our behalf. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. There may be instances in which payments made to our vendors will exceed the level of services provided and result in a prepayment of the research and development expense. In accruing service fees, we estimate the time period over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from our estimate, we adjust the accrual or prepayment expense accordingly. Although we do not expect our estimates to be materially different from amounts actually incurred, our understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and could result in our reporting amounts that are too high or too low in any particular period. There have been no material changes in estimates for the periods presented.

Stock-based Compensation

We account for all stock-based compensation payments to employees, directors and non-employees using an option pricing model for estimating fair value. Accordingly, stock-based compensation expense is measured based on the estimated fair value of the awards on the date of grant, net of estimated forfeitures. We recognize compensation expense for the portion of the award that is ultimately expected to vest over the period during which the recipient renders the required services to us using the straight-line method. In accordance with authoritative guidance, we remeasure the fair value of non-employee stock-based awards as the awards vest, and recognize the resulting value, if any, as expense during the period the related services are rendered.

Significant Factors, Assumptions and Methodologies Used in Determining Fair Value

We apply the fair value recognition provisions of ASC Topic 718, *Compensation-Stock Compensation*, or ASC 718. Determining the amount of stock-based compensation to be recorded requires us to develop estimates of the fair value of stock options as of their grant date. We recognize stock-based compensation expense ratably over the requisite service period, which in most cases is the vesting period of the award. Calculating the fair value of stock-based awards requires that we make highly subjective assumptions.

We use the Black-Scholes option pricing model to value our stock option awards. Use of this valuation methodology requires that we make assumptions as to the volatility of our common stock, the expected term of our stock options, the risk free interest rate for a period that approximates the expected term of our stock options and our expected dividend yield. Because we are a privately held company with a limited operating history, we utilize data from a representative group of public companies to estimate expected stock price volatility. We selected companies from the biopharmaceutical industry with similar characteristics to us, including those at a similar stage of development and with a similar therapeutic focus.

We use the “simplified method” to estimate the expected term of stock option grants to employees. Under this approach, the weighted-average expected life is presumed to be the average of the contractual term (ten years) and the vesting term (generally four years) of our stock options, taking into consideration multiple vesting tranches. We utilize this method due to lack of historical exercise data and the plain-vanilla nature of our share-based awards. We have never paid, and do not anticipate paying, any cash dividends in the foreseeable future, and therefore use an expected dividend yield of zero in the option-pricing model. The risk-free rate is based on the yield curve of U.S. Treasury securities with periods commensurate with the expected term of the options being valued. The fair value of each stock option granted to employees is estimated on the date of grant using the Black-Scholes option-pricing model based on the assumptions noted in the following table:

	Year ended December 31,		Nine months ended September 30,	
	2011	2012	2012	2013
Risk-free interest rate	1.16-2.69%	0.57-0.95%	0.57-0.95%	1.09-1.85%
Expected dividend yield	—	—	—	—
Expected term (in years)	6	6	6	6
Expected volatility	70.61%	70.48-70.80%	70.48-70.80%	76.58-77.80%

We are also required to estimate forfeitures at the time of grant and revise those estimates in subsequent periods if actual forfeitures differ from our estimates. We use historical data to estimate pre-vesting option forfeitures and record stock-based compensation expense only for those awards that are expected to vest. To the extent that actual forfeitures differ from our estimates, the difference is recorded as a cumulative adjustment in the period the estimates are revised. Stock-based compensation expense recognized in the financial statements is based on awards that are ultimately expected to vest. Through September 30, 2013, actual forfeitures have not been material.

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Stock-based compensation expense associated with stock options granted to employees and non-employees was \$38,000 for the year ended December 31, 2011, \$0.1 million for the year ended December 31, 2012, \$0.1 million for the nine months ended September 30, 2012 and \$0.8 million for the nine months ended September 30, 2013. As of September 30, 2013, we had \$1.2 million of total unrecognized stock-based compensation expense related to service-based vesting awards, which we expect to recognize over a weighted-average remaining vesting period of approximately 2.32 years. In addition, as of September 30, 2013, we had unrecognized compensation expense related to performance-based awards of \$1.4 million, which will be recorded when the vesting conditions become probable of achievement. Our stock-based compensation expense is expected to increase as a result of recognizing our existing unrecognized stock-based compensation for awards that will vest and as we issue additional stock-based awards to attract and retain our employees.

For the years ended December 31, 2011 and 2012 and for the nine months ended September 30, 2012 and 2013, we allocated stock-based compensation expense as follows:

	Year ended December 31,		Nine months ended September 30,	
	2011	2012	2012	2013
	(in thousands)			
Research and development expense	\$ 37	\$ 117	\$ 92	\$ 715
General and administrative expense	1	13	8	40
Total stock-based compensation expense	<u>\$ 38</u>	<u>\$ 130</u>	<u>\$ 100</u>	<u>\$ 755</u>

Fair Value of Common Stock

We are required to estimate the fair value of our common stock underlying our stock-based awards when performing the fair value calculations using the Black-Scholes option pricing model. The fair value of our common stock underlying our stock-based awards was determined on each grant date by our board of directors, with input from management. All options to purchase shares of our common stock are intended to be granted with an exercise price per share no less than the fair value per share of our common stock underlying those options on the date of grant, based on the information known to us on the date of grant. In the absence of a public trading market for our common stock, on each grant date, we develop an estimate of the fair value of our common stock in order to determine an exercise price for the option grants. We determined the fair value of stock options using methodologies, approaches and assumptions consistent with the American Institute of Certified Public Accountants, or AICPA, *Audit and Accounting Practice Aid Series: Valuation of Privately Held Company Equity Securities Issued as Compensation*, or the AICPA Practice Guide. In addition, we considered various objective and subjective factors, along with input from management and contemporaneous valuations, to determine the fair value of our common stock, including:

- external market conditions affecting the biotechnology industry;
- trends within the biotechnology industry;
- the prices at which we sold shares of preferred stock;
- the superior rights and preferences of the preferred stock relative to our common stock at the time of each grant;
- our results of operations and financial position;
- the status of our research and development efforts;
- our stage of development and business strategy;
- the lack of an active public market for our capital stock; and
- the likelihood of achieving a liquidity event, such as an initial public offering, or IPO, or sale of our company in light of prevailing market conditions.

The per share estimated fair value of common stock in the table below represents the determination by our board of directors of the fair value of our common stock as of the date of grant, taking into consideration the

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various objective and subjective factors described above, including the conclusions, if applicable, of contemporaneous valuations of our common stock as discussed below. The following table sets forth information about our stock option grants since January 1, 2012:

<u>Date of Grant</u>	<u>Number of shares underlying option grants</u>	<u>Exercise price per share</u>	<u>Per share estimated fair value of common stock</u>
February 16, 2012	150,000	\$ 0.12	\$ 0.12
May 17, 2012	659,200	0.12	0.12
August 9, 2012	116,000	0.12	0.12
February 14, 2013	537,500	0.13	0.13
February 22, 2013	1,100,000	0.13	0.13
March 15, 2013	575,000	0.13	0.13
May 16, 2013	160,000	0.13	0.13
August 15, 2013	590,000	0.98	0.98
October 31, 2013	1,018,000	1.16	1.16
November 5, 2013	100,000	1.16	1.16

In determining the exercise prices of the options set forth in the table above granted since January 1, 2012, our board of directors considered the most recent valuations of our common stock, which were prepared as of November 1, 2011, November 1, 2012, June 30, 2013, August 15, 2013 and September 30, 2013 and based its determination in part on the analyses summarized below.

The intrinsic value of all outstanding vested and unvested options as of September 30, 2013 was \$ _____ million based on a per share price of \$ _____, the midpoint of the price range set forth on the cover page of this prospectus, 6,408,922 shares of common stock issuable upon the exercise of options outstanding as of September 30, 2013 and a weighted average exercise price of \$0.15 per share.

Valuations

Common stock valuation methodologies. These valuations of our common stock were prepared in accordance with the guidelines in the AICPA Practice Guide, which prescribes several valuation approaches for determining the value of an enterprise, such as the cost, market and income approaches, and various methodologies for allocating the value of an enterprise to its capital structure and specifically the common stock.

We generally used the market approach, in particular the guideline company and precedent transaction methodologies, based on inputs from comparable public companies' equity valuations and comparable acquisition transactions, to estimate the equity value of our company. Additionally, if applicable, we considered company valuations implied by arm's length transactions involving sale of our securities to independent investors, taking into consideration the various rights and preferences of the equity securities transacted.

Methods used to allocate our enterprise value to classes of securities. In accordance with the AICPA Practice Guide, we considered the following methods for allocating the enterprise value across our classes and series of capital stock to determine the fair value of our common stock at each valuation date.

- *Option pricing method, or OPM.* The OPM treats common stock and preferred stock as call options on the enterprise's value, with exercise prices based on the liquidation preference and conversion terms of the preferred stock. Under this method, the common stock has value only if the funds available for distribution to shareholders exceed the value of the liquidation preference at the time of a liquidity event (for example, merger or sale).
- *Probability-weighted expected return method, or PWERM.* Under a PWERM, the value of the various equity securities are estimated based upon an analysis of future values for the enterprise

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assuming various future outcomes. Share value is based upon the probability-weighted present value of expected future investment returns, considering each of the possible future outcomes available to the enterprise, as well as the rights of each share class.

For each of the valuations described below, we used either the OPM or the PWERM to determine the estimated fair value of our common stock. The method selected was based on availability and the quality of information to develop the assumptions for the methodology.

Valuation of common stock as of November 1, 2011

We conducted a contemporaneous valuation of our common stock as of November 1, 2011. In conducting this valuation we estimated the value of our common stock based on the estimated value of our series A preferred stock. Our series A preferred stock financing, or series A financing, was structured to close in three tranches, each priced at \$1.00 per share. As noted in the AICPA Practice Guide, in a tranching financing, the per-share price paid in the early tranches is assumed to consist of the value of the preferred security and the value of a contingent forward contract to invest in subsequent tranches. After adjusting for the contingent forward contract, a value of \$0.83 per share was assumed for series A preferred stock as of the closing of the second tranche of the series A financing in February 2011. We concluded that the terms of the series A financing were representative of fair value. We utilized the back-solve method (a form of the market approach defined in the AICPA Practice Guide) to estimate the equity value at November 1, 2011 that was implied by the arm's length series A financing.

In applying the back-solve method, we utilized the OPM. For the OPM analysis, we estimated a weighted-average time to liquidity of 2.6 years as of November 1, 2011, which was our best estimate for potential exit scenarios for the investors. Annual volatility of 56% was assumed based on an analysis of guideline public companies' historical equity volatility for a period of 2.6 years, which was the term assumption. The risk-free rate assumption was based on the yield on three-year U.S. Treasury bonds as of November 1, 2011. The exercise prices assumed for the OPM were determined by the features of the series A preferred stock, including a per-share liquidation preference, a price at which preferred participation is capped and a price at which the preferred shares convert to common. Based on these OPM assumptions, an implied equity value of \$18.6 million was determined. At this equity value, the value per share for the series A preferred stock was equal to its per-share issuance price adjusted for the tranching structure of the series A financing.

Based on these assumptions, the implied value per share of the common stock on a minority, marketable basis was \$0.15. Because our common stock as of November 1, 2011 was not publicly traded or marketable, we applied a discount for lack of marketability of 21% to the calculated value. The discount for lack of marketability was based on a quantitative put option calculation. We concluded that our common stock had a fair value of \$0.12 per share as of November 1, 2011.

Stock options granted from January 2012 to August 2012

Our board of directors granted stock options on February 16, 2012, May 17, 2012, and August 9, 2012, in each case with an exercise price of \$0.12 per share, which our board of directors determined to be the fair value of our common stock on each grant date. In addition to the objective and subjective factors discussed above, our board of directors also considered input from management and the valuation as of November 1, 2011 in estimating the fair value of our common stock. Given the lack of clarity around a future liquidity event, the lack of significant progress in our research and development programs and a lack of business development activities in the first eight months of 2012, our board of directors determined that no significant events or other circumstances had occurred between November 1, 2011 and August 9, 2012 that would indicate there was a change in the fair value of our common stock during that period.

Valuation of common stock as of November 1, 2012

We conducted a contemporaneous valuation of our common stock as of November 1, 2012. In assessing the fair value of our common stock, we considered the lack of significant progress in our development programs, including the fact that we had not commenced our Phase 1 clinical trial of EBI-005. In conducting this valuation we estimated the value of our common stock based on the price at which we sold shares of our series A preferred stock. The third tranche of our series A financing had its final closing on April 23, 2012. A new, independent investor participated in the third tranche and increased the size of this financing. As such, we concluded that the price paid for the series A preferred stock was representative of fair value. We utilized the back-solve method to estimate the equity value at November 1, 2012 that was implied by this arm's length purchase of series A preferred stock.

In applying the back-solve method, we utilized the OPM. For the OPM analysis, we estimated a weighted-average time to liquidity of 3.0 years as of November 1, 2012, which was our best estimate for potential exit scenarios for the investors. Annual volatility of 38% was assumed based on an analysis of guideline public companies' historical equity volatility for a period of 3.0 years, which was the term assumption. The risk-free rate assumption was based on the yield on three-year U.S. Treasury bonds as of November 1, 2012. The exercise prices assumed for the OPM were determined by the features of the series A preferred stock, including a per-share liquidation preference, a price at which preferred participation is capped and a price at which the preferred shares convert to common. Based on these OPM assumptions, an implied equity value of \$47.8 million was determined. At this equity value the value per-share for the series A preferred stock was equal to the per-share issuance price of \$1.00.

Based on these assumptions, the implied value per share of the common stock on a minority, marketable basis was \$0.15. Because our common stock as of November 1, 2012 was not publicly traded or marketable, we applied a discount for lack of marketability of 15% to the calculated value. The discount for lack of marketability was based on a quantitative put option calculation. Based on these factors, we concluded that our common stock had a fair value of \$0.13 per share as of November 1, 2012.

Stock options granted from February 2013 to May 2013

Our board of directors granted stock options on February 14, 2013, February 22, 2013, March 15, 2013 and May 16, 2013, in each case with an exercise price of \$0.13 per share, which our board of directors determined to be the fair value of our common stock on each grant date. In addition to the objective and subjective factors discussed above, our board of directors also considered input from management and the valuation as of November 1, 2012 in estimating the fair value of our common stock. Given the lack of clarity around a future liquidity event and the lack of significant clinical data in the first five months of 2013, our board of directors determined that no significant events or other circumstances had occurred between November 1, 2012 and May 16, 2013 that would indicate there was a change in the fair value of our common stock during that period.

Valuation of common stock as of June 30, 2013

While we did not grant any stock options during the period from May 17, 2013 to June 30, 2013, we did conduct a contemporaneous valuation at June 30, 2013 for financial reporting purposes that included the measurement of non-employee stock-based compensation expense. In assessing the fair value of our common stock, we considered the fact that EBI-005 had completed a Phase 1b/2a trial and demonstrated an acceptable safety profile to advance to pivotal trials, which led us to expect an increase in the fair value of our common stock.

Our contemporaneous valuation at June 30, 2013 used the PWERM. We assumed an IPO scenario, a high case sale/merger scenario and a low case sale/merger scenario. In order to estimate expected proceeds from each potential exit scenario, we considered data from the biopharmaceutical industry for initial public offerings and merger and acquisition transactions. In addition we also considered the valuation of our last private financing in

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April 2012. For the IPO scenario, we assumed that all of our preferred shares would convert to common shares. For the high case sale/merger scenario, we assumed that the IPO would not occur and that we would continue to make significant progress in clinical development. For the low case sale/merger scenario, we assumed that the IPO would not occur and that the future sale price would reflect a lack of progress in clinical trials, a lack of necessary funding or both.

We discounted the future value associated with each scenario to present value as of June 30, 2013 by applying a discount rate. Given our stage of development at June 30, 2013 and the differences in risk between our preferred and common shares, we applied a discount rate of 24% to our preferred shares and 28% to our common shares. The discount rates were based on the typical venture capital rates of return for companies in the bridge/IPO stage of development, as reported in the AICPA Practice Guide. We applied a discount for lack of marketability to the probability-weighted present value of our common stock. The discount for lack of marketability was based on a quantitative put option calculation.

The following table summarizes the significant assumptions for each of the valuation scenarios used in the PWERM analysis to determine the fair value of our common stock as of June 30, 2013:

<u>June 30, 2013 valuation assumptions</u>	<u>IPO</u>	<u>Sale-high case</u>	<u>Sale-low case</u>
Probability weighting	15%	45%	40%
Liquidity date	3/31/14	6/30/16	6/30/16
Discount rate, preferred	24%	24%	24%
Discount rate, common	28%	28%	28%
Discount for lack of marketability	18%	18%	18%

Based on the qualitative factors described above and the results of our contemporaneous valuation analysis, we determined that the fair value of our common stock at June 30, 2013 was \$0.81 per share.

Valuation of common stock as of August 15, 2013

In August 2013, our board of directors authorized the management team to assess the feasibility of an IPO in the second half of 2013. The board's decision was based on favorable conditions in the market for IPOs by biotechnology companies and the board's increasing confidence in the progress of EBI-005 in clinical development.

We conducted a contemporaneous valuation of our common stock as of August 15, 2013. In assessing the fair value of our common stock, we considered the following factors that contributed to an expected increase in the fair value of our common stock:

- the outcome of our meeting with the FDA's Division of Transplant and Ophthalmology Products in July 2013 to discuss our planned pivotal Phase 3 clinical program; and
- the potential for accelerated timing of an IPO due to our assessment of current market conditions.

Our contemporaneous valuation at August 15, 2013 used the PWERM. We assumed an IPO scenario, a high case sale/merger scenario and a low case sale/merger scenario. In order to estimate expected proceeds from each potential exit scenario, we considered data from the biopharmaceutical industry for initial public offerings and merger and acquisition transactions. For the IPO scenario, we assumed that all of our preferred shares would convert to common shares. For the high case sale/merger scenario, we assumed that the IPO would not occur and that we would continue to make significant progress in clinical development. For the low case sale/merger scenario, we assumed that the IPO would not occur and that the future sale price would reflect a lack of further progress in clinical development, a lack of necessary funding or both.

We discounted the future value associated with each scenario to present value as of August 15, 2013 by applying a discount rate. Given our stage of development at August 15, 2013 and the differences in risk between our preferred and common shares, we applied a discount rate of 24% to our preferred shares and 28% to our

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common shares. The discount rates were based on the typical venture capital rates of return for companies in the bridge/IPO stage of development, as reported in the AICPA Practice Guide. We applied a discount for lack of marketability of 17% to the probability-weighted present value of our common stock. The discount for lack of marketability was based on a quantitative put option calculation.

The following table summarizes the significant assumptions for each of the valuation scenarios used in the PWERM analysis to determine the fair value of our common stock as of August 15, 2013:

<u>August 15, 2013 valuation assumptions</u>	<u>IPO</u>	<u>Sale-high case</u>	<u>Sale-low case</u>
Probability weighting	25%	45%	30%
Liquidity date	3/31/14	6/30/16	6/30/16
Discount rate, preferred	24%	24%	24%
Discount rate, common	28%	28%	28%
Discount for lack of marketability	17%	17%	17%

The increase in the probability weighting to an IPO as compared to the June 30, 2013 valuation was attributable to the potential for accelerated timing of an IPO based upon market conditions and authorization from our board of directors to proceed with assessing the feasibility of an IPO.

Based on the qualitative factors described above and the results of our contemporaneous valuation analysis, we concluded that our common stock had a fair value of \$0.98 per share as of August 15, 2013.

Stock options granted on August 15, 2013

Our board of directors granted stock options on August 15, 2013, with an exercise price of \$0.98 per share, which our board of directors determined to be the fair value of our common stock on the date of grant. In addition to the objective and subjective factors discussed above, our board of directors also considered input from management and the contemporaneous valuation of our common stock as of August 15, 2013 in estimating the fair value of our common stock.

Valuation of common stock as of September 30, 2013

We conducted a contemporaneous valuation of our common stock as of September 30, 2013. In assessing the fair value of our common stock, we considered the following factors:

- we selected underwriters for an IPO and scheduled an organizational meeting to be held in the first week of October 2013; and
- we completed our first commercial-scale manufacture of the EBI-005 protein for our first planned Phase 3 trial.

Our contemporaneous valuation at September 30, 2013 used the PWERM. We assumed an IPO scenario, a high case sale/merger scenario and a low case sale/merger scenario. In order to estimate expected proceeds from each potential exit scenario, we considered data from the biopharmaceutical industry for initial public offerings and merger and acquisition transactions. For the IPO scenario, we assumed that all of our preferred shares would convert to common shares. For the high case sale/merger scenario, we assumed that the IPO would not occur and that we would continue to make significant progress in clinical development. For the low case sale/merger scenario, we assumed that the IPO would not occur and that the future sale price would reflect a lack of further progress in clinical development, a lack of necessary funding or both.

We converted the future value associated with each scenario to present value as of September 30, 2013 by applying a discount rate. Given our stage of development at September 30, 2013 and the differences in risk between our preferred and common shares, we applied a discount rate of 24% to our preferred shares and 28% to

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our common shares. The discount rates were based on the typical venture capital rates of return for companies in the bridge/IPO stage of development, as reported in the AICPA Practice Guide. We applied a discount for lack of marketability of 14% to the probability-weighted present value of the common stock. The discount for lack of marketability was based on a quantitative put option calculation.

The following table summarizes the significant assumptions for each of the valuation scenarios used in the PWERM analysis to determine the fair value of our common stock as of September 30, 2013:

<u>September 30, 2013 valuation assumptions</u>	<u>IPO</u>	<u>Sale-high case</u>	<u>Sale-low case</u>
Probability weighting	50%	30%	20%
Liquidity date	1/31/14	6/30/16	6/30/16
Discount rate, preferred	24%	24%	24%
Discount rate, common	28%	28%	28%
Discount for lack of marketability	14%	14%	14%

The increase in the probability weighting to an IPO as compared to the August 15, 2013 valuation was attributable to our selection of underwriters for a potential IPO and scheduling of an organizational meeting to be held in the first week of October 2013.

Based on the qualitative factors described above and the results of our contemporaneous valuation analysis, we determined that the fair value of our common stock at September 30, 2013 was \$1.16 per share.

Stock options granted on October 31, 2013 and November 5, 2013

Our board of directors granted stock options on October 31, 2013 and November 5, 2013, in each case with an exercise price of \$1.16 per share, which our board of directors determined to be the fair value of our common stock on the date of grant. In addition to the objective and subjective factors discussed above, our board of directors also considered input from management and the contemporaneous valuation of our common stock as of September 30, 2013 in estimating the fair value of our common stock. After considering this input and our contemporaneous valuation, our board of directors determined that no significant events or other circumstances had occurred between September 30, 2013 and November 5, 2013 that would indicate there was a change in the fair value of our common stock during that period.

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 until those standards would otherwise apply to private companies. We have irrevocably elected to “opt out” of this provision and, as a result, we will comply with new or revised accounting standards as required when they are adopted.

[Table of Contents](#)**Results of Operations****Comparison of the Nine Months Ended September 30, 2012 and 2013**

	Nine months ended September 30,		Change
	2012	2013 (in thousands)	
Collaboration revenue	\$ —	\$ 824	\$ 824
Operating expenses:			
Research and development	11,367	10,576	(791)
General and administrative	3,081	2,606	(475)
Total operating expenses	14,448	13,182	(1,266)
Loss from operations	(14,448)	(12,358)	2,090
Other income (expense), net	(115)	(601)	(486)
Net loss	<u>\$(14,563)</u>	<u>\$(12,959)</u>	<u>\$ 1,604</u>

Revenue. Revenue was \$0.8 million for the nine months ended September 30, 2013 compared to \$0 for the nine months ended September 30, 2012. The increase of \$0.8 million was due to revenue recognized pursuant to the ThromboGenics collaboration and license agreement entered into in May 2013.

Research and development expenses. Research and development expenses were \$11.4 million for the nine months ended September 30, 2013 compared to \$10.6 million for the nine months ended September 30, 2012. The decrease of \$0.8 million was primarily due to a decrease of \$0.7 million of EBI-005 related development expenses and a decrease in platform-related laboratory expenses of \$0.5 million. In April 2013, we implemented a strategic restructuring to focus more of our research and development expenses on the development of EBI-005. As a result, we reduced headcount from 30 to 15, including 13 positions in our research and development function. These decreases in research and development expenses were partially offset by an increase in contractor-related expenses of \$0.4 million to support the increased development activities of the Phase 1b/2a clinical trial of EBI-005.

General and administrative expenses. General and administrative expenses were \$3.1 million for the nine months ended September 30, 2013 compared to \$2.6 million for the nine months ended September 30, 2012. The decrease of \$0.5 million was primarily due to our strategic restructuring, which focused more of our resources on the development of EBI-005. As a result of the restructuring in April 2013, we reduced total headcount from 30 to 15, including two positions in our general and administrative function.

Other income (expense), net. Other income (expense), net was \$(0.1) million for the nine months ended September 30, 2013 compared to \$(0.6) million for the nine months ended September 30, 2012. The increase was primarily due to the change in the fair value of the warrant liability, which increased from \$0.1 million to \$0.2 million, the change in the fair value of convertible notes payable of \$0.2 million, and an increase in interest expense due to additional borrowings under our debt facility during the nine months ended September 30, 2013.

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Comparison of the Years Ended December 31, 2011 and 2012

	Year ended December 31,		Change
	2011	2012	
	(in thousands)		
Operating expenses:			
Research and development	\$ 9,411	\$ 15,263	\$ 5,852
General and administrative	3,267	4,213	946
Total operating expenses	<u>12,678</u>	<u>19,476</u>	<u>6,798</u>
Loss from operations	(12,678)	(19,476)	(6,798)
Other income (expense), net	(148)	(181)	(33)
Net loss	<u><u>\$ (12,826)</u></u>	<u><u>\$ (19,657)</u></u>	<u><u>\$ (6,831)</u></u>

Revenue. We did not recognize any revenue during the years ended December 31, 2011 and 2012.

Research and development expenses. Research and development expenses were \$15.3 million for the year ended December 31, 2012 compared to \$9.4 million for the year ended December 31, 2011. The increase of \$5.9 million was primarily due to an increase in costs associated with EBI-005, including clinical supply manufacturing and drug product process development activities in preparation for initiating our Phase 1b/2a trial of EBI-005.

General and administrative expenses. General and administrative expenses were \$4.2 million for the year ended December 31, 2012 compared to \$3.3 million for the year ended December 31, 2011. The increase of \$0.9 million was primarily due to an increase in employee and contractor related expenses in support of our development efforts.

Other income (expense), net. Other income (expense), net, was \$(0.2) million for the year ended December 31, 2012 compared to \$(0.1) million for the year ended December 31, 2011.

Liquidity and Capital Resources

Sources of Liquidity

Since inception, we have incurred significant operating losses. All of our revenue to date has been collaboration revenue. To date, we have financed our operations primarily through private placements of our preferred stock and bridge notes convertible into our preferred stock, venture debt borrowings and, to a lesser extent, from a collaboration.

In May 2013, we entered into the collaboration and license agreement with ThromboGenics. Under this collaboration, ThromboGenics made a \$1.75 million up-front, non-refundable cash payment to us and will fund the research services that we provide under the agreement.

In June 2013, we issued and sold 7% convertible promissory notes in the aggregate principal amount of \$3.5 million and accompanying warrants to purchase shares of our common stock to four of the holders of our series A preferred stock. The warrants are initially exercisable at a price of \$0.01 per share for up to an aggregate of 1,750,000 shares of our common stock and will expire, to the extent not exercised, upon the closing of this offering. We refer to these convertible promissory notes as the June 2013 convertible notes.

In December 2013, we issued and sold an aggregate of 6,632,416 shares of our series B preferred stock and accompanying warrants to purchase shares of our common stock to four of the holders of our series A preferred

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stock, at a price per share of \$1.75, for an aggregate purchase price of \$11.6 million, consisting of \$8.0 million in cash and \$3.6 million for the conversion of the June 2013 convertible notes, including accrued interest. The warrants are initially exercisable at a price of \$0.01 per share for up to an aggregate of 1,142,855 shares of our common stock and will expire, to the extent not exercised, upon the closing of this offering.

Cash Flows

As of September 30, 2013, we had cash and cash equivalents of \$3.9 million. Cash in excess of immediate requirements is invested in accordance with our investment policy, primarily with a view to liquidity and capital preservation.

The following table sets forth the primary sources and uses of cash for each of the periods set forth below:

	Year ended December 31,		Nine months ended September 30,	
	2011	2012	2012	2013
	(in thousands)			
Net cash provided by (used in):				
Operating activities	\$(10,869)	\$(19,092)	\$(14,235)	\$(10,437)
Investing activities	(805)	(110)	(110)	—
Financing activities	10,448	26,384	26,414	6,436
Net (decrease) increase in cash and cash equivalents	<u>\$ (1,226)</u>	<u>\$ 7,182</u>	<u>\$ 12,069</u>	<u>\$ (4,001)</u>

Operating activities. Net cash used in operating activities was \$10.9 million for the year ended December 31, 2011, and consisted primarily of a net loss of \$12.8 million adjusted for non-cash items, including depreciation expense of \$0.4 million and a net change in operating assets and liabilities of \$1.5 million. The significant items in the change in operating assets and liabilities include decreases in other receivables of \$0.8 million and increases in accounts payable and accrued expenses of \$0.9 million offset by an increase in prepaid expenses and other current assets of \$0.2 million.

Net cash used in operating activities was \$19.1 million for the year ended December 31, 2012, and consisted primarily of a net loss of \$19.7 million adjusted for non-cash items, including depreciation expense of \$0.4 million, stock-based compensation expense of \$0.1 million and a net change in operating assets and liabilities of \$(0.1) million.

Net cash used in operating activities was \$14.2 million for the nine months ended September 30, 2012, and consisted primarily of a net loss of \$14.6 million adjusted for non-cash items, including depreciation expense of \$0.3 million, stock-based compensation expense of \$0.1 million and a net change in operating assets and liabilities of \$(0.1) million. The significant items in the change in operating assets and liabilities include a net decrease in accounts payable and accrued expenses of \$0.3 million partially offset by a decrease in prepaid expenses and other current assets of \$0.2 million.

Net cash used in operating activities was \$10.4 million for the nine months ended September 30, 2013, and consisted primarily of a net loss of \$13.0 million adjusted for non-cash items, including stock-based compensation expense of \$0.8 million, depreciation expense of \$0.3 million, change in fair value of warrant liability of \$0.1 million, change in fair value of convertible notes payable of \$0.2 million and a net change in operating assets and liabilities of \$1.1 million. The significant items in the change in operating assets and liabilities include an increase in deferred revenue of \$1.7 million due to the up-front payment related to the ThromboGenics collaboration partially offset by a decrease in accounts payable and accrued expenses of \$0.6 million.

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Investing activities. Net cash used in investing activities consists of purchases of property and equipment. For the years ended December 31, 2011 and 2012, we purchased \$0.8 million and \$0.1 million, respectively, of property and equipment, primarily laboratory equipment.

For the nine months ended September 30, 2012, we purchased \$0.1 million of property and equipment. We made no such purchases in the nine months ended September 30, 2013.

Financing activities. Net cash provided by financing activities for the year ended December 31, 2011 was \$10.4 million and consisted primarily of proceeds of \$11.0 million from the issuance of series A preferred stock offset by \$0.6 million in payments on equipment financing and notes payable. Net cash provided by financing activities for the year ended December 31, 2012 was \$26.4 million and consisted primarily of proceeds of \$25.4 million from the issuance of series A preferred stock and additional borrowings under our debt facility of \$2.0 million offset by \$1.0 million in payments on equipment financing and notes payable.

Net cash provided by financing activities for the nine months ended September 30, 2012 was \$26.4 million and consisted primarily of proceeds of \$25.4 million from the issuance of series A preferred stock and additional borrowings under our debt facility of \$2.0 million, offset by payments of \$1.0 million on our debt facility. Net cash provided by financing activities for the nine months ended September 30, 2013 was \$6.4 million and consisted primarily of proceeds from the issuance of convertible notes of \$3.5 million to certain of our stockholders and additional borrowings under our debt facility of \$3.0 million.

Funding Requirements

We expect our expenses to increase substantially in connection with our ongoing activities, particularly as we initiate and complete our planned pivotal Phase 3 clinical program evaluating EBI-005 for the treatment of moderate to severe dry eye disease, and seek marketing approval for EBI-005 for this indication in the United States and, whether alone or in collaboration with third parties, in the European Union and other jurisdictions. Furthermore, upon the closing of this offering, we expect to incur additional costs associated with operating as a public company.

Our expenses will also increase if and as we:

- pursue the development of EBI-005 for the treatment of allergic conjunctivitis or additional indications or for use in other patient populations or, if it is approved, seek to broaden the label for EBI-005;
- continue the research and development of our other product candidates;
- seek to discover and develop additional product candidates;
- in-license or acquire the rights to other products, product candidates or technologies for the treatment of ophthalmic diseases;
- seek marketing approvals for any product candidates that successfully complete clinical trials;
- establish sales, marketing and distribution capabilities and scale up and validate external manufacturing capabilities to commercialize any products for which we may obtain marketing approval;
- maintain, expand and protect our intellectual property portfolio;
- hire additional clinical, quality control, scientific and management personnel;
- expand our operational, financial and management systems and personnel, including personnel to support our clinical development, manufacturing and planned future commercialization efforts and our operations as a public company; and
- increase our insurance coverage as we expand our clinical trials and commence commercialization of EBI-005.

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As of September 30, 2013, we had cash and cash equivalents of \$3.9 million. We believe that the net proceeds from this offering, together with our cash and cash equivalents as of September 30, 2013 and the \$8.0 million in cash proceeds from our series B preferred stock financing that we completed in December 2013, will enable us to fund our operating expenses, debt service obligations and capital expenditure requirements through _____, without giving effect to any potential milestone payments we may receive under our collaboration and license agreement with ThromboGenics. We have based this estimate on assumptions that may prove to be wrong, and we could use our capital resources sooner than we currently expect.

Our future capital requirements will depend on many factors, including:

- the progress, costs and outcome of our planned pivotal Phase 3 clinical program for EBI-005 and of any clinical activities for regulatory review of EBI-005 outside of the United States;
- the costs and timing of process development and manufacturing scale up and validation activities associated with EBI-005;
- the costs, timing and outcome of regulatory review of EBI-005 in the United States, the European Union and in other jurisdictions;
- the costs and timing of commercialization activities for EBI-005 if we receive, or expect to receive, marketing approval, including the costs and timing of establishing product sales, marketing, distribution and outsourced manufacturing capabilities;
- subject to receipt of marketing approval, revenue received from commercial sales of EBI-005;
- the progress, costs and outcome of developing EBI-005 for the treatment of additional indications or for use in other patient populations, including our planned Phase 2 clinical trial to assess the potential therapeutic benefit of EBI-005 for the treatment of allergic conjunctivitis in patients who do not respond adequately to antihistamines;
- our ability to establish collaborations on favorable terms, if at all, particularly manufacturing, marketing and distribution arrangements for our product candidates;
- the scope, progress, results and costs of preclinical development, laboratory testing and, if we determine to proceed into clinical development, clinical trials for our other product candidates;
- the success of our collaboration with ThromboGenics;
- the costs and timing of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending any intellectual property-related claims; and
- the extent to which we in-license or acquire rights to other products, product candidates or technologies for the treatment of ophthalmic diseases.

Until such time, if ever, as we can generate substantial product revenues, we expect to finance our cash needs through a combination of equity offerings, debt financings, government or other third-party funding, collaborations, strategic alliances, licensing arrangements and marketing and distribution arrangements. We do not have any committed external source of funds other than research funding under our collaboration and license agreement with ThromboGenics. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will 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. Our pledge of specified assets as collateral to secure our obligations under our loan and security agreement with our venture debt lender, Silicon Valley Bank, or SVB, may limit our ability to obtain debt financing. If we raise additional funds through government or other third-party funding, collaborations, strategic alliances, licensing arrangements or marketing and distribution arrangements, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs 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

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or future commercialization efforts or grant rights to develop and market products or product candidates that we would otherwise prefer to develop and market ourselves.

Contractual Obligations and Commitments

The following table summarizes our contractual obligations at December 31, 2012:

	Total	Less than 1 year	1 to 3 years (in thousands)	3 to 5 years	More than 5 years
Operating lease obligations(1)	\$ 797	\$ 797	\$ —	\$ —	\$ —
Debt obligations(2)	2,347	282	1,473	592	—
Total fixed contractual obligations	\$3,144	\$ 1,079	\$1,473	\$ 592	\$ —

(1) We lease office space at 215 First Street in Cambridge, Massachusetts under a non-cancelable operating lease that was scheduled to expire on November 30, 2013. Effective November 30, 2013, we amended the lease to extend the term through January 31, 2016, with an option to further extend the lease term through April 30, 2018. Rental payments due under this lease from December 1, 2013 through January 31, 2016 will be \$0.9 million in total.

(2) Amounts include payments for interest on our debt obligations.

In May 2010, we entered into a \$1.5 million secured debt facility with SVB. We borrowed an aggregate of \$1.5 million under the debt facility in June and July 2010 and issued SVB promissory notes. In September 2012, we modified the terms of our secured debt facility with SVB to increase the amount we could borrow thereunder to \$5.0 million. We borrowed \$2.0 million under the debt facility in September 2012 and an additional \$3.0 million under the debt facility in February 2013. The debt facility is secured by substantially all of our assets except for our intellectual property. The debt facility carries a fixed interest rate of 5.75%. In addition, on the date that the debt facility is paid in full we are required to make a payment in an amount equal to 4% of total borrowings during the term of the debt facility. As of December 31, 2012, the outstanding principal balance on the notes was \$2.0 million. The debt facility provides for the repayment of the outstanding principal balance in equal monthly amounts beginning in October 2013 through September 2016. The debt facility contains negative covenants restricting our activities, including limitations on dispositions, mergers or acquisitions, incurring indebtedness or liens, paying dividends or making investments and certain other business transactions. There are no financial covenants associated with the debt facility. The obligations under the debt facility are subject to acceleration upon the occurrence of specified events of default, including a material adverse change in our business, operations or financial or other condition.

We also have obligations to pay royalties and to make future payments to third parties that become due and payable on the achievement of specified development, regulatory and commercial milestones. We have not included these commitments on our balance sheet or in the table above because the achievement and timing of these contingent payments are not fixed and determinable. These commitments include potential milestone and royalty payments we may be required to make under our license agreement with The Schepens Eye Research Institute, Inc., or Schepens, under which we obtained an exclusive worldwide license under specified patents and technology owned or controlled by Schepens to research, develop, make, have made, use, sell, offer for sale and import products for the treatment of inflammation of the eye and adjoining tissues, or anti-IL-1 products, including EBI-005. See “Business—License and Collaboration Agreements” for additional information regarding our agreement with Schepens.

We enter into contracts in the normal course of business with CROs to assist in the performance of our research and development activities and other services and products for operating purposes. These contracts generally provide for termination on notice, and therefore are cancelable contracts and not included in the table of contractual obligations and commitments.

Net Operating Loss Carryforwards

As of December 31, 2012, we had \$37.9 million of federal net operating loss carryforwards, state net operating loss carryforwards of \$37.4 million and aggregate federal and state research and development tax credit

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carryforwards of \$0.9 million available to reduce future taxable income. Due to our history of losses and lack of other positive evidence, we have determined that it is more likely than not that our deferred tax assets will not be realized, and therefore, the deferred tax assets were fully reduce by a valuation allowance. These federal and state net operating loss carryforwards and federal and state tax credit carryforwards will begin to expire at various dates beginning in 2014, if not utilized. Utilization of the net operating losses and general business tax credits carryforwards may be subject to a substantial limitation under Sections 382 and 383 of the Internal Revenue Code of 1986 as amended, which we refer to as the Code, due to changes in ownership of our company that have occurred previously or that could occur in the future. These ownership changes may limit the amount of net operating losses and general business tax credits carryforwards that can be utilized annually to reduce future taxable income and tax, respectively. In general, an ownership change, as defined by Section 382 of the Code, results from transactions increasing the ownership of "5-percent Shareholders" (as defined in the Code) in the stock of a corporation by more than 50 percentage points over a three-year period. We have not completed a study to determine the impact of this ownership change on our net operating loss, or NOL, carryforwards under Section 382 of the Code. If we experience a Section 382 ownership change in connection with this offering or as a result of future changes in our stock ownership, some of which changes are outside our control, the tax benefits related to the NOL carryforwards may be further limited or lost.

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 in the rules and regulations of the Securities and Exchange Commission.

Quantitative and Qualitative Disclosures About Market Risks

We are exposed to market risk related to changes in interest rates. As of September 30, 2013, we had cash and cash equivalents of \$3.9 million, primarily money market mutual funds consisting of U.S. government-backed securities. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates, particularly because our investments are in short-term securities. Our available for sale securities are subject to interest rate risk and will fall in value if market interest rates increase. Due to the short-term duration of our investment portfolio 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 portfolio.

BUSINESS

Overview

We are a clinical-stage biopharmaceutical company with a proprietary protein engineering platform, called AMP-Rx, that we apply to the discovery and development of protein therapeutics to treat diseases of the eye. Our therapeutic approach is based on the role of cytokines in diseases of the eye, our understanding of the structural biology of cytokines and our ability to rationally design and engineer proteins to modulate the effects of cytokines. Cytokines are cell signaling molecules found in the body that can have important inflammatory effects. Our most advanced product candidate is EBI-005, which we designed, engineered and generated using our AMP-Rx platform and are developing as a topical treatment for dry eye disease and allergic conjunctivitis. In 2013, we completed a Phase 1b/2a clinical trial of EBI-005 in patients with moderate to severe dry eye disease. We plan to initiate a pivotal Phase 3 clinical program evaluating EBI-005 for the treatment of moderate to severe dry eye disease in early 2014. We also plan to initiate a Phase 2 clinical trial to evaluate the use of EBI-005 in patients with allergic conjunctivitis in 2014. We hold worldwide commercialization rights to EBI-005.

We believe cytokines play a major role in the pathology underlying many eye diseases and that protein therapeutics are an effective means of modulating the effects of cytokines in diseases of the eye. We have used our AMP-Rx platform to rationally design, engineer and generate a pipeline of innovative protein therapeutic candidates that target cytokines we believe are central to diseases of the eye. We are conducting research and development programs directed at both diseases of the front of the eye, such as dry eye disease and allergic conjunctivitis, and diseases of the back of the eye, such as diabetic macular edema, or DME, and uveitis. Our EBI-005 program is based on the role that elevated levels of the inflammatory cytokine interleukin-1, or IL-1, play in the initiation and maintenance of the inflammation and pain associated with dry eye disease and the redness and itching associated with allergic conjunctivitis. We also are conducting additional discovery efforts for the treatment of diseases of the back of the eye based on the role that other cytokines play in these diseases.

Dry eye disease affects the ocular surface and is characterized by symptoms of dryness, pain, discomfort and irritation. If dry eye disease is left untreated or becomes severe, patients may suffer chronic ocular pain and distortion of vision that can significantly reduce their quality of life. Dry eye disease is one of the leading causes of patient visits to eye care professionals in the United States. According to Market Scope, LLC, or Market Scope, a publisher of research and analysis on the ophthalmic market, approximately 68 million people in the United States, European Union, Japan and other developed markets have dry eye disease, including approximately 26 million people who suffer from the moderate to severe form of dry eye disease. According to Market Scope, approximately 19 million people in the United States have dry eye disease, including approximately seven million people who suffer from the moderate to severe form of dry eye disease.

The current standard of care for moderate to severe dry eye disease includes artificial tears and topical anti-inflammatory and immune-modulating drugs. The anti-inflammatory and immune-modulating drug market for the treatment of moderate to severe dry eye disease consists primarily of Restasis, which is approved for use in the United States, and off-label use of corticosteroids. Restasis is a topically applied, ophthalmic formulation of the immune-modulating drug cyclosporine. Restasis is not approved for the treatment of the symptoms of dry eye disease, but only for increasing tear production in patients whose tear production is presumed to be suppressed due to ocular inflammation associated with dry eye disease. In clinical trials, approximately 17% of patients reported ocular burning following the use of Restasis. We believe that there remains a significant unmet medical need for new treatments for patients suffering from moderate to severe dry eye disease.

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We designed our Phase 1b/2a clinical trial of EBI-005 principally to assess safety in dry eye disease patients and secondarily, to measure efficacy in order to inform the design of our planned Phase 3 clinical trials. In our Phase 1b/2a trial, EBI-005 was generally well tolerated. While we did not power our Phase 1b/2a trial to measure efficacy with statistical significance, and the differences from baseline that we observed in the EBI-005 treatment groups were not statistically significant when compared to differences from baseline in patients who received vehicle control, we observed the following in this trial:

- on the primary efficacy endpoint of change in patient symptoms as assessed by a patient questionnaire called the ocular surface disease index, or OSDI, an improvement in patients treated with EBI-005 from baseline at six weeks;
- on the secondary efficacy endpoint of change in total corneal fluorescein staining, or CFS, a measure of ocular surface injury, an improvement in patients treated with EBI-005 from baseline at six weeks;
- on the painful or sore eyes question of the OSDI, a greater improvement from baseline at six weeks in patients treated with EBI-005 compared to improvement from baseline at six weeks in patients in the vehicle control group; and
- fewer artificial tears used by patients treated with EBI-005 compared with patients in the vehicle control group, and this difference was statistically significant.

Our planned pivotal Phase 3 clinical program will consist of two Phase 3 clinical trials evaluating the safety and efficacy of EBI-005 for the treatment of moderate to severe dry eye disease and a separate clinical trial evaluating the safety of treatment with EBI-005 for one year. We expect to initiate our first Phase 3 trial in early 2014. Based on our estimates regarding patient enrollment, we expect to have top-line data from our first Phase 3 trial available in early 2015. We also expect to initiate our separate safety trial in 2014. We currently intend to initiate our second Phase 3 trial after reviewing top-line data from our first Phase 3 trial, although we may later decide to initiate our second Phase 3 trial while our first Phase 3 trial is ongoing. If the results of both of our Phase 3 trials and our separate safety trial are favorable, we plan to submit a Biologics License Application, or BLA, to the U.S. Food and Drug Administration, or FDA, seeking approval of EBI-005 for the treatment of dry eye disease in the United States before the end of 2016.

In addition to our clinical development of EBI-005 in dry eye disease, in 2014 we plan to initiate a Phase 2 clinical trial of EBI-005 in patients with allergic conjunctivitis who have not responded adequately to antihistamines and mast cell stabilizers, drugs that inhibit the release of histamine by cells of the immune system. Allergic conjunctivitis is an inflammatory disease of the conjunctiva, the membrane covering the inside of the eyelids and white part of the eye, primarily from a reaction to allergy-causing substances such as pollen or pet dander. Our preclinical product candidates include EBI-029 for the treatment of DME, a serious disease of the central portion of the retina known as the macula, and EBI-028 for the treatment of uveitis, which is an inflammatory disease of the middle layer of the eye known as the uvea.

Background

Until recently, ocular therapies generally have been developed based on a limited understanding of the biology underlying the initiation and maintenance of the disease state. As a result, many of the therapies for diseases of the eye were not the result of rational drug design, but instead were ophthalmic formulations of pharmaceuticals, that were originally developed and approved for non-ocular diseases, such as steroids and antihistamines. We believe this limited understanding of the biology of eye diseases impeded the discovery and development of innovative ophthalmic therapeutics.

Over the past 15 years, researchers have been developing a greater understanding of the key proteins and pathways involved in ocular disease. For instance, the understanding of the protein pathways involved in the retinal disease wet age-related macular degeneration, or wet AMD, has greatly expanded. Wet AMD is characterized by abnormal new blood vessel growth in the back of the eye. By studying the biological processes associated with this abnormal growth, researchers identified the key role that a protein called vascular endothelial

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growth factor, or VEGF, plays in the initiation and maintenance of wet AMD. This understanding then led to the successful development of VEGF-blockers, such as Lucentis and Eylea, as new treatments for wet AMD that have dramatically improved outcomes for many patients. The developers of these VEGF-blockers have created a multi-billion dollar ophthalmic drug market where none existed 10 years ago. We believe that we can apply similar advances in the understanding of other protein pathways involved in eye diseases to the discovery and development of new treatments for these diseases.

Our Approach

We apply a rational, biology-based approach to the discovery and development of novel protein therapeutics for patients suffering from eye diseases. Our therapeutic approach is based on the role of cytokines in diseases of the eye, our understanding of the structural biology of cytokines and our ability to rationally design and engineer proteins to modulate the effects of cytokines.

AMP-Rx is our proprietary platform that we use to design, engineer and generate novel protein therapies that modulate key molecular targets we believe are responsible for the initiation or maintenance of an ocular disease. We begin by analyzing the target and identifying the protein-based approaches we may use to modulate the target. We then generate protein candidates and model protein/target interactions to inform an iterative protein optimization technique. We use this process to modify protein drugs to meet design specifications for improved biological and drug-like properties. We believe that key advantages of the AMP-Rx platform are:

- *Broad applicability.* We can apply the AMP-Rx platform to select among most forms of protein therapeutics, including antibodies, enzymes, soluble receptors and signaling proteins, for the optimal approach to treatment.
- *Efficiency.* We use the AMP-Rx platform to optimize multiple properties of drug candidates simultaneously. We generally avoid the time-consuming approach of traditional protein drug discovery that involves sequential screening and selection of product characteristics.
- *Customized drug design.* We use the AMP-Rx platform to design and engineer therapeutics that incorporate a range of key pharmaceutical properties, such as rapid onset of effect, increased half-life and improved ocular surface retention.
- *Manufacturability of drug candidates.* We use the AMP-Rx platform to generate drug candidates that have favorable manufacturing characteristics, such as high production yield, improved solubility and thermal stability. We believe these characteristics will allow us to minimize costly or difficult production and purification processes.

Our Strategy

Our goal is to become a leading biopharmaceutical company focused on developing and commercializing novel protein therapeutics to treat diseases of the eye. The key elements of our strategy in support of this goal are to:

- *Complete clinical development of and seek marketing approval for EBI-005 for the treatment of dry eye disease.* Currently, we are devoting most of our efforts to completing the clinical development of EBI-005. In early 2014, we plan to initiate a pivotal Phase 3 clinical program consisting of two Phase 3 clinical trials evaluating the safety and efficacy of EBI-005 for the treatment of moderate to severe dry eye disease and a separate clinical trial evaluating the safety of treatment with EBI-005 for one year. We expect to initiate our first Phase 3 trial in early 2014. Based on our estimates regarding patient enrollment, we expect to have top-line data from our first Phase 3 trial available in early 2015. We also expect to initiate our separate safety trial in 2014. We currently intend to initiate our second Phase 3 trial after reviewing top-line data from our first Phase 3 trial, although we may later decide to initiate our second Phase 3 trial while our first Phase 3 trial is ongoing. If the results of both of our Phase 3 trials and our separate safety trial are favorable, we plan to submit a BLA to the FDA, seeking approval of EBI-005 for the treatment of dry eye disease in the United States before the end of 2016.

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- *Expand use of EBI-005 for additional ocular indications.* We are evaluating other ocular surface diseases in which we believe elevated levels of IL-1 signaling play a role in the underlying biology of the disease and for which we believe EBI-005 treatment may be beneficial. In 2014, we plan to initiate a Phase 2 clinical trial to assess the potential therapeutic benefit of EBI-005 for the treatment of allergic conjunctivitis in patients who have not responded adequately to antihistamines and mast cell stabilizers. We expect that top-line data from this Phase 2 trial could be available before the end of 2014.
- *Maximize commercial potential of EBI-005.* We hold worldwide commercialization rights to EBI-005. We believe that the specialists in the United States who treat most of the moderate to severe dry eye disease patients are sufficiently concentrated that if EBI-005 receives marketing approval in the United States, we could effectively promote EBI-005 to these specialists with a specialty sales and marketing group. Therefore, we may decide to build our own focused, specialty sales force in order to commercialize EBI-005 in the United States. We intend to enter into strategic collaborations for the development and commercialization of EBI-005 outside of the United States.
- *Apply AMP-Rx platform to build a pipeline of product candidates for the treatment of eye diseases.* We use our AMP-Rx platform to rationally design, engineer and generate a pipeline of innovative protein therapeutic candidates that target cytokines that we believe are central to diseases of the eye. We have designed, engineered and generated EBI-005 and our other product candidates using our AMP-Rx platform. Our two most advanced preclinical product candidates are EBI-029 for the treatment of DME and EBI-028 for the treatment of uveitis. Both of these product candidates are in early preclinical research. We plan to continue to apply our platform to expand our product pipeline.
- *Pursue collaborative and other strategic opportunities.* We have established a collaboration with ThromboGenics N.V., a European based, publicly held biopharmaceutical company focused on developing and commercializing innovative ophthalmic medicines. In this collaboration, we apply our proprietary AMP-Rx platform to design, engineer and generate protein therapeutics that can modulate a specific novel pathway in retinal disease and that have key pharmaceutical attributes. This collaboration provides us with funding for the specific program that is the subject of the collaboration and allows us to apply our AMP-Rx platform to a product discovery effort we might not otherwise have pursued. We plan to evaluate opportunities to enter into other collaborations that may contribute to our ability to advance our product candidates and to progress concurrently a range of discovery and development programs. We also plan to evaluate opportunities to in-license or acquire the rights to other products, product candidates or technologies for the treatment of eye diseases.

Our Product Development Programs

We apply our proprietary AMP-Rx platform to the discovery and development of protein therapeutics to treat diseases of the eye. Our therapeutic approach is based on the role of cytokines in diseases of the eye, our understanding of the structural biology of cytokines and our ability to rationally design and engineer proteins to modulate the effects of cytokines. We have generated a product pipeline of innovative protein therapeutic candidates that address ocular diseases that are not well served by current therapies.

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The following table summarizes key information about our product development programs.

Our Product Candidates

PROGRAM	TARGET	INDICATION	OUR COMMERCIAL RIGHTS	DEVELOPMENT STAGE				
				DISCOVERY	PRE-CLINICAL	PHASE 1	PHASE 2	PHASE 3
EBI-005 (Topical)	IL-1 Receptor	Dry Eye Disease	Worldwide					Planned initiation in early 2014
		Allergic Conjunctivitis	Worldwide					Planned initiation in 2014
EBI-029 (Intravitreal Injection)	IL-6	Diabetic Macular Edema	Worldwide					
EBI-028 (Intravitreal Injection)	IL-17	Uveitis	Worldwide					

Ocular Surface Diseases

Ocular surface diseases are disorders of the surface of the cornea, the transparent layer that forms the front of the eye, and the conjunctiva, the membrane covering the inside of the eyelids and white part of the eye. These diseases include dry eye disease and allergic conjunctivitis. Patients with ocular surface diseases may suffer from difficulty with routine visual activities, loss of vision, discomfort, infections, erosion of the cornea, ulcerations and scarring of the cornea. We believe that the optimal approach to treatment of diseases of the ocular surface is a potent active ingredient formulated with a comfortable solution, or vehicle, for topical delivery.

Dry Eye Disease

Dry eye disease is a potentially debilitating disease of the eye that may, in its most severe forms, have sight-threatening corneal complications. Dry eye disease often is classified as mild, moderate or severe based on clinical symptom severity. Dry eye disease is one of the leading causes of patient visits to eye care professionals in the United States. According to Market Scope, approximately 68 million people in the United States, European Union, Japan and other developed markets have dry eye disease, including approximately 26 million people who suffer from the moderate to severe form of dry eye disease. According to Market Scope, approximately 19 million people in the United States have dry eye disease, including approximately seven million people who suffer from the moderate to severe form of dry eye disease.

Current Treatments. The current standard of care for moderate to severe dry eye disease includes artificial tears and topical anti-inflammatory and immune-modulating drugs. Artificial tears act as a wetting agent. They are available as over-the-counter treatments and are usually considered the first line of therapy for patients with mild disease. Artificial tears are effective supplements to other therapies in the treatment of moderate to severe dry eye disease, but they generally are not sufficient as a monotherapy. The anti-inflammatory and immune-modulating drug market for the treatment of moderate to severe dry eye disease consists primarily of Restasis, which is approved for use in the United States, and off-label use of corticosteroids. There are no drugs approved in the European Union for the treatment of dry eye disease.

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Corticosteroids applied topically, or directly to the surface of the eye, have been shown to be effective in the treatment of moderate to severe dry eye disease. However, topically applied corticosteroids have been associated with a higher risk of developing glaucoma and cataracts and an increased risk of ocular infection. These are serious side effects that significantly limit the use of corticosteroids.

Restasis is a topically applied, ophthalmic formulation of the immune-modulating drug cyclosporine. Restasis is not approved for the treatment of the symptoms of dry eye disease, but only for increasing tear production in patients whose tear production is presumed to be suppressed due to ocular inflammation associated with dry eye disease. Restasis had annual worldwide sales of approximately \$792 million in 2012. In clinical trials, Restasis increased tear production, a sign of dry eye disease, after six months of treatment in approximately 15% of treated patients as compared to approximately 5% of patients in the control groups. In these same clinical trials, approximately 17% of patients reported ocular burning following the use of Restasis. We believe that there remains a significant unmet medical need for new treatments for patients suffering from moderate to severe dry eye disease.

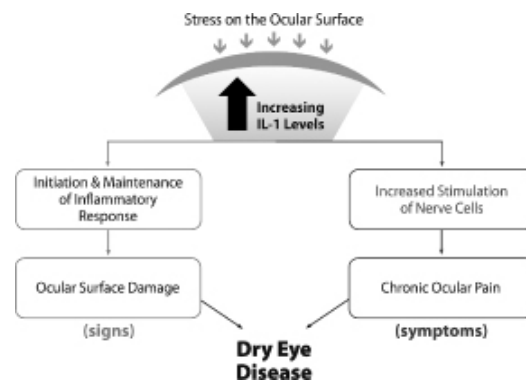
Biology. At the onset of dry eye disease, the tear film that is necessary for maintaining the health of the surface of the eye and for providing clear vision breaks down. The precise causes of the breakdown are not well understood but may include hormonal changes, infection or inflammation of the eye, the use of drugs with drying effects such as anti-depressants, contact lens use, smoke and very dry air. Without adequate wetting, the surface of the eye becomes stressed. The symptoms of dry eye disease include discomfort, pain, burning, itching and visual disturbance.

We believe that stress on the ocular surface as a result of the loss of an adequate tear film leads to the signs and symptoms of dry eye disease. As a result of this stress on the ocular surface, various cells and tissues of the eye produce inflammatory mediators, such as the cytokines interleukin-1alpha, or IL-1a, and interleukin-1beta, or IL-1b. These cytokines, which we refer to together as IL-1, bind to the IL-1 receptor found on many different cell types in the cornea and conjunctiva. This binding and the resulting receptor signaling initiate and maintain an inflammatory response in the tissues of the eye. The resulting inflammation then leads to the further local production of inflammatory cytokines. This cascade of inflammation results in a state of chronic inflammation and ocular surface damage. This damage is indicative of dry eye disease and can be measured by the staining of the ocular surface with the dye fluorescein, a measure known as corneal fluorescein staining, or CFS.

IL-1a and IL-1b also can bind to the IL-1 receptor on nerve cells. This binding and the resulting receptor signaling stimulates nerve cells, triggers nociception, or feelings of pain, and can result over time in chronic hyperalgesia, or increased sensitivity to pain. Nociception and hyperalgesia lead to patient reported symptoms of discomfort, ocular pain, which patients may report as soreness, stinging or burning, and difficulty with routine visual activities, such as using a computer, driving a car or watching television. These subjective symptoms of dry eye disease can be evaluated through a variety of patient-reported and physician-reported assessments. These usually take the form of questionnaires which provide data that can be scored to provide a quantitative measure of symptom severity.

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As depicted in the graphic below, stress on the ocular surface leads to the excess production of IL-1. IL-1 initiates and maintains both inflammatory and neural responses in the tissues of the eye. The inflammatory response results in ocular surface damage, a sign of dry eye disease. The inflammatory response also results in continued production of IL-1 and chronic inflammation, which manifests as various symptoms of dry eye disease. The neural response results in feelings of and hypersensitivity to pain, which are persistent symptoms of dry eye disease.



The biological activities of IL-1 suggest that blocking IL-1 receptor signaling should have a dual function and reduce both a sign of dry eye disease, specifically ocular surface inflammation and injury, and a symptom of dry eye disease, specifically ocular pain and discomfort. In the case of dry eye disease, IL-1a and IL-1b, acting independently or in concert, both drive IL-1 receptor signaling. As a result, a therapy that blocks only IL-1a or IL-1b may not have the desired effect of completely blocking IL-1 receptor signaling and alleviating the signs and symptoms of dry eye disease. We believe that a better approach is to block the IL-1 receptor itself so neither IL-1a nor IL-1b can bind to the receptor and trigger receptor signaling.

EBI-005 – a Novel IL-1 Receptor Antagonist

Our most advanced product candidate is EBI-005, a recombinant protein which binds with the IL-1 receptor and blocks, or antagonizes, IL-1 receptor signaling. We have designed, engineered and generated EBI-005 using our AMP-Rx platform and are developing EBI-005 as a topical, eye-drop treatment for dry eye disease and allergic conjunctivitis. EBI-005 prevents the binding of both IL-1a and IL-1b to the IL-1 receptor. When the IL-1 receptor is blocked by EBI-005, the IL-1 receptor is unable to transmit the biological signals that we believe are responsible for pain, discomfort, itching and inflammation in ocular surface diseases.

Design and Attributes of EBI-005

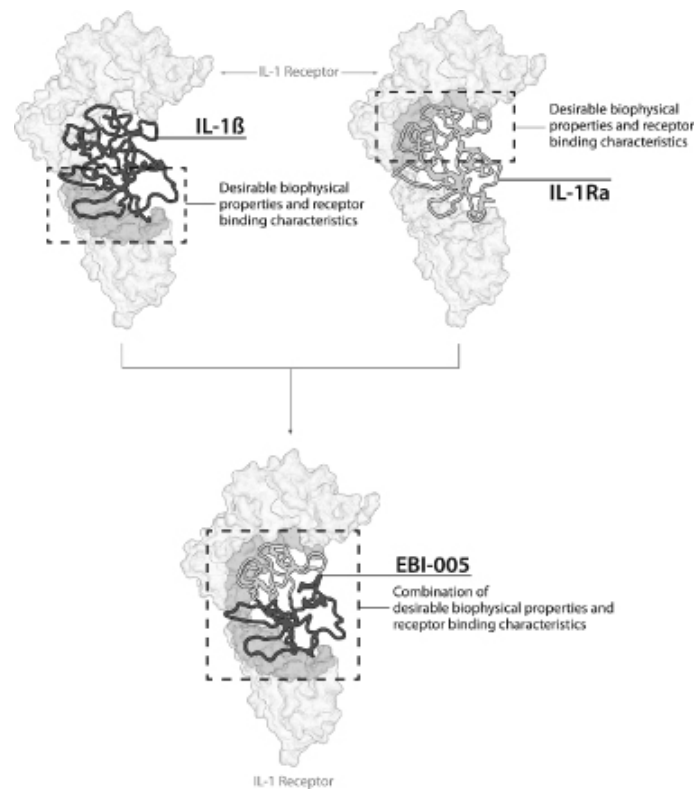
We designed EBI-005 based on our understanding of the molecular structure of the IL-1 receptor and two of the molecules, or ligands, that are known to bind effectively to this receptor, IL-1b and IL-1 receptor antagonist, or IL-1Ra. We engineered EBI-005 to combine the portions of IL-1b and IL-1Ra having desirable biophysical properties and IL-1 receptor binding characteristics. We engineered EBI-005 as a pure antagonist to the IL-1 receptor, which means that EBI-005 binds to the IL-1 receptor without triggering receptor signaling. We also designed EBI-005 to have the following product attributes that we believe improve its potential utility as a topical therapeutic:

- *Rapid onset of action.* We have designed EBI-005 to be a potent blocker of IL-1. In a biochemical study of receptor binding, EBI-005 bound more rapidly and up to 500 times more strongly to the IL-1 receptor than the natural ligands IL-1b and IL-1Ra. In a mouse model of dry eye disease, treatment with EBI-005 resulted in a greater reduction in CFS from baseline at seven days and at 11 days when compared to the reduction in CFS from baseline with IL-1Ra treatment. We believe the potency of EBI-005 may result in a rapid onset of symptomatic relief.

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- *Comfortable for patients.* We have optimized EBI-005 for topical, ophthalmic delivery and have formulated it with a preservative-free comfortable solution, or vehicle, for delivery as an eye drop. We believe patient comfort is an important factor in patient compliance and physician recommendation of a topical drug for diseases of the ocular surface.
- *Convenient dosing.* We have designed EBI-005 to bind tightly to the IL-1 receptor and block it for an extended period of time. We have measured the duration of this receptor binding in biochemical tests outside the body, or *in vitro*. Based on these tests and our understanding of the natural cycling of the IL-1 receptor from the cell surface to the cell interior, we believe EBI-005 remains bound to an IL-1 receptor during the entire period the receptor is present on the surface of a cell. We believe a long duration of receptor binding may allow for a convenient dosing schedule.
- *Stable dosage form.* We designed EBI-005 to be a thermally stable protein product. In analytical tests, EBI-005 was stable for up to six months at room temperature. We believe room temperature stability without the need for refrigeration is an important convenience for patients.

The design of EBI-005 as a combination of those portions of IL-1b and IL-1Ra having desirable biophysical properties and IL-1 receptor binding characteristics is depicted in the graphic below.



EBI-005 Binds Tightly to and Blocks the IL-1 Receptor

We believe IL-1 plays a central role in dry eye disease and that EBI-005 has the potential to treat both the signs and symptoms of dry eye disease by binding tightly to and blocking the transmission of biological signals by the IL-1 receptor. EBI-005 blocks the inflammatory and neuropathic activities of IL-1 by binding to the IL-1 receptor during both the initiation and maintenance of the cycle of pain and inflammation in dry eye disease.

Proof of Concept Clinical Trial with Anakinra, an IL-1 Blocker

In 2013, the peer-reviewed journal *JAMA Ophthalmology* published the results of an exploratory Phase 1/2 clinical trial in 75 patients conducted by our co-founder Dr. Reza Dana at the Massachusetts Eye and Ear Infirmary using another IL-1 blocker, anakinra, to treat moderate to severe dry eye disease. Anakinra is approved for subcutaneous administration for the treatment of rheumatoid arthritis and is marketed under the brand name Kineret. For this proof-of-concept study, the investigators compounded, or reformulated, anakinra in eye drops at two different concentrations for topical administration. In this double masked, placebo controlled study, patients with dry eye disease received either anakinra or a placebo control consisting of the vehicle, which was a commercially available eye drop the investigators used to formulate anakinra for topical, ophthalmic application. The investigators in this trial required patients who were using anti-inflammatory therapies, including Restasis, to discontinue their use for 30 days prior to enrollment and throughout this trial. Patients were allowed to continue their use of artificial tears and therapies other than anti-inflammatory therapies. Thirty patients received anakinra at the lower dose of 25 mg/ml and 15 patients received anakinra at the higher dose of 50 mg/ml. Thirty patients received vehicle control. Patients were treated for 12 weeks with a follow up at 16 weeks.

In this trial, there was an improvement in CFS, a sign of dry eye disease, in patients treated with anakinra from baseline at 12 weeks. We believe that the magnitude of the CFS response was clinically relevant for the lower dose anakinra treatment group. However, this difference was not statistically significant when compared to the difference from baseline observed in patients who received vehicle control. We determine statistical significance based on a widely used, conventional statistical method that establishes the p-value of clinical results. Typically, a p-value of 0.05 or less represents statistical significance. There also was an improvement in patient symptoms as measured by the OSDI score in patients treated with anakinra from baseline at 12 weeks. We believe that the magnitude of improvement in patient symptoms as measured by the OSDI score was clinically relevant for both the lower dose and higher dose anakinra treatment groups, and the differences from baseline were statistically significant for both the lower dose and higher dose anakinra treatment groups when compared to the differences from baseline observed in patients who received vehicle control.

We subsequently conducted an additional, retrospective analysis of the results of this trial. In this analysis, we observed in patients treated with anakinra that the improvement from baseline at 12 weeks in pain and discomfort, as measured by the painful or sore eyes question on the OSDI, was the largest contributor to the improvement in patient symptoms as measured by the OSDI score. We then analyzed the data on pain and discomfort and observed a statistically significant improvement from baseline in pain and discomfort, as measured by the painful or sore eyes question on the OSDI, in the lower dose (p=0.04) and higher dose (p=0.04) anakinra treatment groups compared to the improvement from baseline in the vehicle control group. We believe that the clinical experiences with anakinra are relevant to our development of EBI-005 because the therapeutic targets and mechanisms of action of anakinra and EBI-005 are similar. However, based on our studies of the biophysical characteristics of anakinra, we do not believe that it can be formulated for topical ophthalmic delivery in a convenient format on a commercial basis because at the concentration shown to be effective in the anakinra trial, anakinra is not stable under the conditions encountered during vialing in a standard blow-fill-seal vial configuration. We believe that the blow-fill-seal vial configuration is the most cost-effective process for delivering a preservative-free eye drop. We believe that a drug for dry eye disease should be preservative-free because chronic exposure to preservatives may irritate the ocular surface. In addition, based on our own biochemical studies, we do not believe that the particular formulation of anakinra used in the anakinra trial can be used for topical ophthalmic delivery in a convenient format on a commercial basis because at the concentration shown to be effective in the anakinra trial:

- anakinra is not stable in solution when agitated, which means that routine handling of a topical, ophthalmic formulation of anakinra by a patient could result in a change in the concentration of anakinra received by the patient upon dosing; and
- anakinra is not stable at room temperature. We believe room temperature stability without the need for refrigeration is an important convenience for patients.

Clinical Development of EBI-005

We have completed two clinical trials with EBI-005. In 2012, after submitting an investigational new drug application, or IND, to the FDA for the purpose of conducting clinical trials for the treatment of dry eye disease, we completed a Phase 1 clinical trial evaluating the safety and tolerability of EBI-005 in healthy volunteers. In 2013, we completed a Phase 1b/2a clinical trial evaluating the safety, tolerability and biological activity of EBI-005 in patients with moderate to severe dry eye disease. In early 2014, we plan to initiate a pivotal Phase 3 clinical program consisting of two Phase 3 clinical trials evaluating the safety and efficacy of EBI-005 for the treatment of moderate to severe dry eye disease and a separate clinical trial evaluating the safety of treatment with EBI-005 for one year. We expect to initiate our first Phase 3 trial in early 2014. Based on our estimates regarding patient enrollment, we expect to have top-line data from our first Phase 3 trial available in early 2015. We expect to initiate our separate safety trial in 2014.

We currently intend to initiate our second Phase 3 trial after reviewing top-line data from our first Phase 3 trial, although we may later decide to initiate our second Phase 3 trial while our first Phase 3 trial is ongoing. We will base our decision on when to initiate our second Phase 3 trial upon our assessment of the benefits of potentially accelerating the completion of our pivotal Phase 3 clinical program and the risk that we will not have potentially valuable information from the completion of the first Phase 3 trial that would suggest that changes to the second Phase 3 trial would have improved its design or likelihood of success. If the results of both of our Phase 3 trials and our separate safety trial are favorable, we plan to submit a BLA with the FDA seeking approval of EBI-005 for the treatment of dry eye disease in the United States before the end of 2016.

We designed our Phase 1b/2a trial to evaluate the safety and tolerability of EBI-005 and to provide us with insights regarding dose, patient selection and efficacy endpoints for the design of our planned Phase 3 trials. When we evaluated the results of the anakinra trial, we concluded that we would need to conduct a clinical trial in approximately 650 patients in order to determine with statistical significance a difference in improvements in one sign and one symptom of dry eye disease between patients treated with EBI-005 at concentrations of 5 mg/ml and 20 mg/ml and a vehicle control.

We believed that a trial with approximately 650 patients as our first clinical trial of EBI-005 in patients with dry eye disease was impractical. Accordingly, we designed our Phase 1b/2a trial as a smaller trial to determine if treatment with EBI-005 would result in the magnitude of change from baseline on CFS scores, OSDI scores and OSDI scores specifically on the painful or sore eyes question that had been observed by Dr. Dana with anakinra treatment. CFS is a quantitative measure of the severity of dry eye disease and is a widely used and validated sign of dry eye disease. CFS is measured on a scale from zero, which means no staining and no sign of damage, to a maximum of between three and 15, depending on the particular scale used, which means extensive staining and damage. The OSDI is a commonly used 12-item questionnaire that is designed to determine how a patient experiences the feeling of dry eye disease, the impact that dry eye disease has on routine visual function and what environmental triggers exacerbate symptoms. The OSDI score is a composite of the scores on the individual questions and ranges from zero, which means the patient is experiencing no symptoms, to 100, which means the patient is experiencing severe symptoms. Individual questions in the OSDI, which have scores that range from zero to four, also can be evaluated as measures of specific symptoms.

We formulate the active pharmaceutical ingredient of EBI-005 with a preservative-free solution, or vehicle, for topical, ophthalmic delivery as an eye drop. In descriptions of our clinical trials in this prospectus, we refer to this formulation also as EBI-005. The vehicle is a proprietary mixture of excipients that are commonly used in eye drops. In each of our clinical trials the placebo control group receives vehicle, which is the same as the EBI-005 formulation used in the trial except that it contains none of the EBI-005 active pharmaceutical ingredient.

We tested EBI-005 at concentrations of 5 mg/ml and 20 mg/ml in our Phase 1b/2a trial. We analyzed efficacy data by first combining both EBI-005 dose groups, as specified in the statistical analysis plan, into a single combined EBI-005 treatment group and then by individual EBI-005 dose groups. We designed our Phase 1b/2a trial to evaluate differences in patient responses to EBI-005 on multiple efficacy endpoints without an expectation of achieving statistical significance compared to vehicle control. We believed that the results of our

Phase 1b/2a trial would provide a foundation for making informed choices regarding dose of EBI-005, patient eligibility criteria and measures of clinical efficacy for our planned Phase 3 trials. As described below, we have incorporated our evaluations of the results of our Phase 1b/2a trial into the design of our planned pivotal Phase 3 clinical program. The pivotal Phase 3 clinical program described in this prospectus is based on our current protocols and is subject to change.

Planned Pivotal Phase 3 Clinical Program of EBI-005 for the Treatment of Dry Eye Disease

In 2014, we plan to initiate a pivotal Phase 3 clinical program that will consist of two Phase 3 clinical trials to evaluate the safety and efficacy of EBI-005 from baseline at 12 weeks at a concentration of 5 mg/ml for the treatment of moderate to severe dry eye disease and a separate clinical trial evaluating the safety of treatment with EBI-005 at the same concentration for one year. We plan to conduct each of our Phase 3 trials in approximately 650 patients. We expect to initiate our first Phase 3 trial in early 2014. We plan to conduct our first Phase 3 trial at up to 40 centers in the United States. If the results of our first Phase 3 trial are favorable, we currently intend to initiate our second Phase 3 trial after reviewing top-line data from our first Phase 3 trial. However, we may later decide to initiate our second Phase 3 trial while our first Phase 3 trial is ongoing. We plan to conduct our second Phase 3 trial at up to 40 centers in the United States and Europe. We will conduct each of our Phase 3 trials in an outpatient setting in a natural environment. We will not use a controlled adverse environment chamber.

We have designed our pivotal Phase 3 clinical program based on the results we observed in our Phase 1b/2a clinical trial of EBI-005 for the treatment of dry eye disease. We met with the FDA's Division of Transplant and Ophthalmology Products in July 2013 to discuss our planned pivotal Phase 3 clinical program. Based in part on the discussions at that meeting, we believe that if the results of both of our Phase 3 trials are favorable, they will be sufficient, together with our separate safety trial, to support a BLA submission to the FDA seeking approval of EBI-005 for the treatment of dry eye disease in the United States. We are currently seeking scientific advice from the European Medicines Agency, or EMA, to confirm the requirements for pivotal trials in the European Union.

Planned Phase 3 Clinical Trial Endpoints

Based on our communications with the FDA, we believe that in order to support a BLA submission to the FDA seeking approval of EBI-005 in the United States, we must demonstrate in two Phase 3 clinical trials a statistically significant improvement in at least one sign and one symptom of dry eye disease in patients treated with EBI-005 compared to improvement on the same sign and symptom in patients receiving vehicle. We plan to specify a sign and a symptom as co-primary endpoints in our Phase 3 trials. We expect that one co-primary endpoint will be defined as a change in CFS score, a sign of dry eye disease, from baseline at week 12 with EBI-005 treatment compared to change from baseline at week 12 with vehicle control. We expect the other co-primary endpoint will be defined as improvement in pain and discomfort as measured by the painful or sore eyes question on the OSDI, a symptom of dry eye disease, from baseline at week 12 with EBI-005 treatment compared to change from baseline at week 12 with vehicle control.

We expect to include change in the OSDI score from baseline at week 12 with EBI-005 treatment compared to change from baseline at week 12 with vehicle control as another measure of change in symptoms and as a secondary endpoint in our first Phase 3 trial. We expect also to include as secondary endpoints in our first Phase 3 trial changes in CFS in specified regions of the cornea from baseline at week 12 with EBI-005 treatment compared to changes from baseline at week 12 with vehicle control. Other secondary endpoints in our first Phase 3 trial will include the evaluation of the change in all primary and secondary endpoints from baseline at week nine. In addition to efficacy endpoints, other secondary endpoints in these Phase 3 trials will include the evaluation of the safety, tolerability and immunogenicity, or the tendency to elicit an antibody response, of EBI-005 after 12 weeks of dosing.

If we demonstrate a statistically significant improvement from baseline in the EBI-005 treatment group relative to the improvement from baseline in the vehicle control group on a pre-specified secondary endpoint in the first of our Phase 3 trials, we may decide to substitute that secondary endpoint as a co-primary endpoint in

our second Phase 3 trial prior to initiation of this second Phase 3 trial. If we demonstrate a statistically significant improvement from baseline in the EBI-005 treatment group relative to the improvement from baseline in the vehicle control group on the substituted co-primary endpoint in the second Phase 3 trial, we may combine the results of the evaluation of the pre-specified secondary endpoint in the first Phase 3 trial with the results of the substituted pre-specified co-primary endpoint in the second Phase 3 trial, in support of our application for marketing approval of EBI-005. Based on our meeting with the FDA in July 2013, we believe that, although it would be a review issue at the time of our application for marketing approval, the FDA may consider this an acceptable means of meeting the requirement that we duplicate in two Phase 3 trials a statistically significant improvement on a clinically relevant sign or symptom.

Planned Phase 3 Clinical Trial Design

Each of our planned Phase 3 trials will be a double masked, randomized, placebo controlled study. Patients will be screened on the basis of eligibility criteria at a first visit. We expect that patients who qualify for enrollment will receive topical administration in each eye three times per day for one week of vehicle. At the conclusion of this one-week run-in period, we will reassess patients against additional eligibility criteria. Those patients who qualify under these additional criteria will be randomly assigned, or randomized, to either an EBI-005 treatment group or a vehicle control group. We refer to the time at which we randomize a patient as baseline.

Eligible patients will be at least 18 years of age, with moderate to severe dry eye disease. We expect that additional eligibility criteria will include the following:

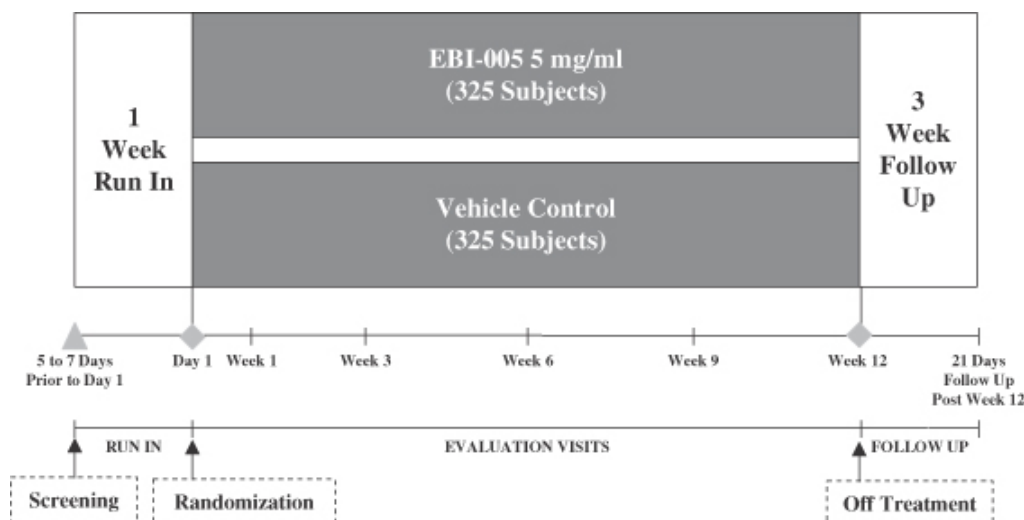
- OSDI score greater than or equal to 23 and less than or equal to 75 at screening. A score greater than or equal to 23 and less than or equal to 32 is considered moderate dry eye disease. A score greater than or equal to 33 is considered severe dry eye disease.
- OSDI score greater than or equal to 19 and less than 50 at randomization.
- CFS score of greater than or equal to six and less than 15 on the National Eye Institute, or NEI, scale at screening. A score greater than or equal to six and less than 15 is consistent with moderate to severe dry eye disease.
- CFS score of greater than or equal to five and less than 15 on the NEI scale at randomization.

During our Phase 1b/2a trial of EBI-005, we observed greater variability in clinical response in patients who had an OSDI score greater than or equal to 50 at randomization. We believe this increased variability in clinical response made it more difficult to detect differences between the combined EBI-005 treatment groups and the vehicle control group on the primary and secondary efficacy endpoints. In our Phase 3 trials, we will exclude patients with an OSDI score greater than or equal to 50 at randomization because we believe this criteria will reduce variability in clinical response and improve our ability to detect differences between the EBI-005 treatment group and the vehicle control group on the co-primary and secondary efficacy endpoints.

We expect that patients who are randomized will receive topical administration in each eye three times per day for 12 weeks of EBI-005 at 5 mg/ml or vehicle control beginning at randomization. The patients will undergo study evaluations at weeks one, three, six, nine and 12 following randomization. The last dose of EBI-005 will be completed 12 weeks after randomization. We will require patients to attend a final visit three weeks after their week 12 visit.

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The timeline for our first Phase 3 trial of EBI-005 and number of patients, or subjects, to be randomized into the EBI-005 treatment and vehicle control groups are depicted in the graphic below.



The following aspects of the design of our Phase 3 trials are based on the results we observed in our Phase 1b/2a trial of EBI-005 for the treatment of dry eye disease:

Eligibility Criteria—OSDI Score. Our Phase 3 trials of EBI-005 will include patients with OSDI scores at screening greater than or equal to 23 and less than or equal to 75 and with OSDI scores at randomization greater than or equal to 19 and less than 50. In a retrospective analysis of the results of our Phase 1b/2a trial, in which we included patients with OSDI scores at screening greater than or equal to 23 and less than 90 and with OSDI scores at randomization greater than or equal to 19, we observed in patients with OSDI scores less than 50 at randomization less variability in clinical response than we observed in patients with OSDI scores greater than or equal to 50 at randomization. Therefore, we have designed our Phase 3 trials to exclude at randomization patients with an OSDI score greater than or equal to 50. We believe this will make it more likely that our Phase 3 trials will confirm the trend of greater improvement in clinical response from baseline in the combined EBI-005 treatment groups relative to the improvement from baseline in vehicle control group that we observed in our Phase 1b/2a trial. We also have designed our Phase 3 trials to exclude at screening patients with an OSDI score greater than 75, as compared to greater than or equal to 90 in our Phase 1b/2a trial. We believe we can increase the likelihood of recruiting patients who will have an OSDI score less than 50 at randomization by excluding patients with OSDI scores greater than 75 at screening.

Eligibility Criteria—CFS Score. We expect to include patients with CFS scores greater than or equal to six and less than 15 on the NEI scale at screening or greater than or equal to five and less than 15 on the NEI scale at randomization. These are the same criteria we used in our Phase 1b/2a trial, except that we did not exclude patients with a CFS score of 15 at randomization in our Phase 1b/2a trial. The determination of CFS score is made by microscopic examination of the cornea by the physician who has to assess the extent of staining in each of five regions of the ocular surface. We have developed an eye-piece for the microscope that projects a grid pattern onto the cornea that divides it into the five regions to be assessed. We believe this helps the physician and reduces some of the subjectivity inherent in the assessment. By reducing the subjectivity, we believe we generate a more reliable data set for statistical analysis.

Use of Rescue Artificial Tears. We plan to prohibit the use of rescue artificial tears by patients in our Phase 3 trials. In our Phase 1b/2a trial, we measured artificial tear usage by patients as a pre-specified exploratory

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endpoint. Mean and median artificial tear usage were significantly higher in patients in the vehicle control group than those in the EBI-005 treatment groups. We believe that the use of artificial tears by patients in the vehicle control group could have had an impact on the sign and symptom assessments in our Phase 1b/2a trial. If such assessments improved because of the use of artificial tears, we believe these improvements would have occurred disproportionately in the vehicle control group because we observed that patients in the vehicle control group used more artificial tears and a higher percentage of patients in the vehicle control group used large amounts of artificial tears compared to the combined EBI-005 treatment groups. As a result, we believe that the differences in our Phase 1b/2a trial in the sign and symptom assessment scores between the vehicle control group and the combined EBI-005 treatment groups might have been larger if artificial tears were not used.

Dose of EBI-005. Overall in our Phase 1b/2a trial, we did not observe any significant differences between administration of EBI-005 three times per day at a concentration of 5 mg/ml and at a concentration of 20 mg/ml. Based on our understanding of the mechanism of action and potency of EBI-005, we did not expect to observe any such differences. In our Phase 3 trials, we will be evaluating topical administration of EBI-005 three times per day at a concentration of 5 mg/ml.

Efficacy Endpoint—CFS Score. In a retrospective analysis of the results of our Phase 1b/2a trial, we observed a trend of greater improvement of CFS scores from baseline at week six in the combined EBI-005 treatment groups relative to the improvement from baseline in the vehicle control group when we excluded the seven patients who had major protocol deviations and included only patients who had baseline OSDI scores less than 50. We believe this trend is consistent with the results of the anakinra trial. In our first Phase 3 trial, we will pre-specify the change in CFS scores from baseline at week 12 as a co-primary efficacy endpoint.

Efficacy Endpoint—OSDI Pain. In a retrospective analysis of the results of our Phase 1b/2a trial, we observed a trend of greater improvement of the scores on the OSDI question regarding painful or sore eyes from baseline at week six in the combined EBI-005 treatment groups relative to the improvement from baseline in the vehicle control group when we excluded the seven patients who had major protocol deviations and included only patients who had baseline OSDI scores less than 50. We believe this trend is consistent with our understanding of the mechanism of action of EBI-005 and the trends we observed in our retrospective analysis of the results of the anakinra trial. In our first Phase 3 trial, we will pre-specify the change in scores from baseline on the OSDI question regarding painful or sore eyes from baseline at week 12 as a co-primary efficacy endpoint.

Number of Patients. Based on the results of our Phase 1b/2a trial, we believe that each of our Phase 3 trials will be adequately powered with approximately 650 patients to detect a difference between the EBI-005 treatment group and vehicle control on our proposed co-primary efficacy endpoints. We plan to perform a sample size reassessment on a masked basis of all randomized patients after the first one-third of the randomized patients complete 12 weeks of treatment with EBI-005 in our first Phase 3 trial to determine whether we need to increase the number of patients we randomize in this trial. We plan to conduct this sample size reassessment to determine whether the observed variability of the clinical response is greater than the variability we expected based on the results of our Phase 1b/2a trial. If we need to increase the number of patients, we plan to randomize an equal number of additional patients in each treatment arm of our first Phase 3 trial. We expect to engage a contract research organization, or CRO, to conduct this sample size reassessment, and we expect not to receive any information other than whether we need to randomize additional patients. We do not believe this masked sample size reassessment will compromise our final statistical analysis. We do not expect that any increase in the number of randomized patients will have a significant impact on the costs or duration of our first Phase 3 trial.

Duration of Trial. In the anakinra trial, the investigators observed greater improvements on mean change from baseline on both CFS score and OSDI score at 12 weeks in patients treated with lower dose anakinra compared to vehicle control than was observed at six weeks. We believe that the longer treatment period in our Phase 3 trials may improve our ability to detect differences between the EBI-005 treatment group and the vehicle control group on our co-primary efficacy endpoints.

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Vehicle. We have modified the vehicle in our formulation of EBI-005 for our Phase 3 trials relative to the vehicle in our formulation of EBI-005 for our Phase 1b/2a trial primarily by removing carboxymethyl cellulose, or CMC, a common ingredient in artificial tears. CMC is not included in Restasis. We made this refinement to make our formulation of EBI-005 suitable for vialing in an industry standard single-use format, to increase stability of EBI-005 and to improve ease of manufacturing. We believe our new formulation remains comfortable to patients and that the removal of CMC will not meaningfully affect patient responses.

Natural Environment. We intend to conduct our Phase 3 trials in a natural environment and not to use a controlled adverse environment chamber. We also conducted our Phase 1b/2a trial in a natural environment. A controlled adverse environment chamber historically has been used in trials of product candidates for the treatment of dry eye disease. A controlled adverse environment chamber allows the clinical investigator to exacerbate the signs and symptoms of dry eye in a controlled manner by regulating humidity, temperature, airflow, lighting conditions and visual tasking. However, we believe that the controlled adverse environment chamber introduces differences in the presentation and manifestation of dry eye disease and in patients' perceptions of their disease. We believe that the controlled adverse environment chamber does not reflect the environment in which patients experience their dry eye disease on a daily basis and in which patients and physicians ultimately will judge the benefits of any dry eye disease drug. As a result, we believe that a natural environment is a better setting for the evaluation of EBI-005.

In addition to the two Phase 3 trials required to support marketing approval of EBI-005 for the treatment of dry eye disease in the United States, we will be required to demonstrate the long-term safety of EBI-005 treatment in a safety trial. To meet this requirement, we plan to conduct a safety trial with no fewer than 100 patients who will be treated with EBI-005 for one year. We expect that patients in this safety trial will be treated three times a day with EBI-005 at a concentration of 5 mg/ml. During this study, the safety and tolerability of longer term exposure to EBI-005 will be evaluated, along with immunogenicity and potentially other endpoints that may support the application for marketing approval of EBI-005.

We plan to initiate our first Phase 3 trial in our pivotal Phase 3 clinical program in early 2014. Based on our estimates regarding patient enrollment, we expect to have top-line data from our first Phase 3 trial available in early 2015. If the results of our first Phase 3 trial are favorable, we plan to conduct a second Phase 3 trial that will be designed to evaluate co-primary endpoints that met the criteria of acceptability in our first Phase 3 trial as co-primary endpoints or as one co-primary endpoint and one secondary endpoint. We expect that our second Phase 3 trial will be designed similarly to the first trial. We currently intend to initiate our second Phase 3 trial after reviewing top-line data from our first Phase 3 trial, although we may later decide to initiate our second Phase 3 trial while our first Phase 3 trial is ongoing, in which case we would not be able to change the co-primary endpoints in our second Phase 3 trial based on the results of our first Phase 3 trial. If the results of both Phase 3 trials in our pivotal Phase 3 clinical program and our separate safety trial are favorable, we plan to submit a BLA seeking approval in the United States of EBI-005 for the treatment of dry eye disease before the end of 2016.

Completed Phase 1b/2a Clinical Trial in Dry Eye Disease

In the second quarter of 2013, we completed a multicenter, double masked, randomized, placebo controlled Phase 1b/2a clinical trial evaluating the safety and biological activity of EBI-005 in patients with moderate to severe dry eye disease. We conducted this trial in 74 patients at eight centers in the United States. We conducted this trial in a natural environment. We did not use a controlled adverse environment chamber.

We screened patients against eligibility criteria at a first visit. Patients who qualified for enrollment received topical administration in each eye three times per day for one week of vehicle. At the conclusion of the one-week run-in period, we reassessed patients again against eligibility criteria. Those patients who qualified under these additional criteria were randomized to one of three treatment groups. We refer to the CFS score, OSDI score and other measures taken at randomization as baseline.

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Eligible subjects were at least 18 years of age, with moderate to severe dry eye disease. Additional eligibility criteria included the following:

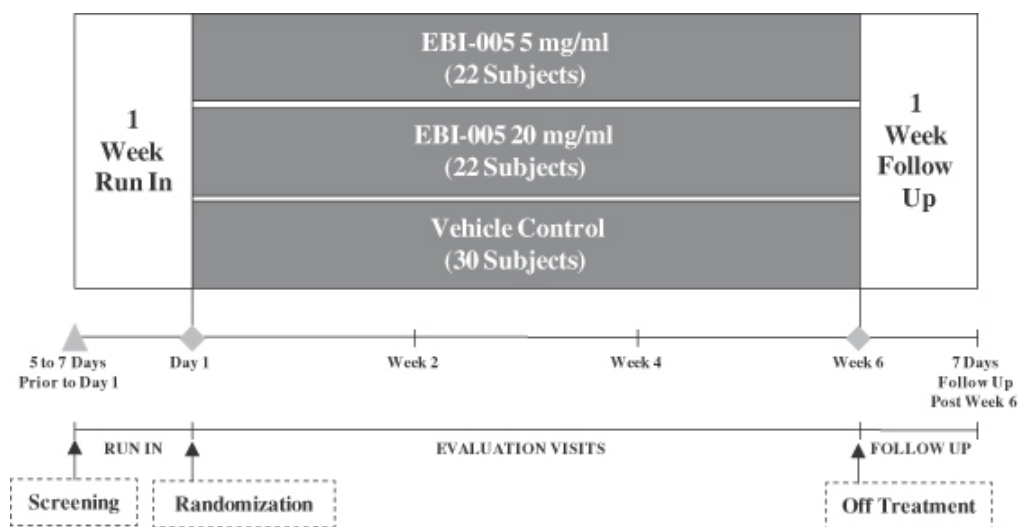
- OSDI score greater than or equal to 23 and less than 90 at the time of screening;
- OSDI score greater than or equal to 19 at randomization;
- CFS score greater than or equal to six and less than 15 on the NEI scale at the time of screening; and
- CFS score greater than or equal to five at randomization.

Patients who were randomized to a treatment group were treated in both eyes three times per day for six weeks beginning at randomization. Treatments for the three groups in this trial were as follows:

- In the first group, 22 patients received topical administration in each eye three times per day of EBI-005 at a concentration of 20 mg/ml.
- In the second group, 22 patients received topical administration in each eye three times per day of EBI-005 at a concentration of 5 mg/ml.
- In the third group, 30 patients received topical administration in each eye three times per day of vehicle.

We assessed patients at screening, at randomization, at evaluation visits on weeks two, four and six following randomization, and at a follow up visit one week after the completion of treatment.

The timeline for our Phase 1b/2a trial of EBI-005 and number of patients randomized into the EBI-005 treatment and vehicle control groups are depicted in the graphic below.



The principal objective of our Phase 1b/2a trial was to evaluate the safety and tolerability of six weeks of dosing three times a day with EBI-005 as compared to vehicle control in patients with moderate to severe dry eye disease. The protocol also included other objectives and pre-specified primary and secondary efficacy endpoints to assist us in the evaluation of the biological and clinical response of patients to EBI-005.

The primary safety endpoints included adverse event reporting, complete ophthalmic examination, testing for corneal health and assessment of clinical laboratory markers. The primary efficacy endpoint of our Phase 1b/2a trial was the absolute change of OSDI score, a symptom of dry eye disease, at week six from baseline. The secondary efficacy endpoints of this trial were changes at week six from baseline in the following sign and symptom scores:

- CFS score, a sign of dry eye disease.
- Symptom assessment in dry eye, or modified SANDE, questionnaire score. The modified SANDE questionnaire is a short questionnaire completed by the patient that quantifies the frequency and severity of symptoms of dry eye disease using a visual analog scale.
- Subject-rated and investigator-rated global symptom assessment, or GSA. The GSA is a short questionnaire that assesses degrees of relief or worsening of specified signs and symptoms of dry eye disease.
- Subject-rated individual ocular symptom assessments of the severity of eyelid itching, the sensation of having a foreign body in the eye and ocular burning or pain.

Statistical Analysis and Significance

In accordance with the protocol and the statistical analysis plan, the primary analysis population was the intent-to-treat, or ITT, population, which is all patients enrolled in the trial. There were major protocol deviations with respect to seven of the 74 enrolled patients in the intent-to-treat population. Five of these deviations occurred in the EBI-005 treatment groups, and two occurred in the vehicle control group. These deviations included two patients, one in each of the EBI-005 treatment groups, who were inadvertently enrolled despite having met an exclusion criteria of no history of corneal surgery and five patients in the vehicle control group who missed at least one entire day's dosing. In accordance with the protocol and the statistical analysis plan, we also conducted analyses on the 67 enrolled patients in the efficacy evaluable, or EE, population, which excludes those patients with major protocol deviations.

We analyzed efficacy data by first combining both the 5 mg/ml and 20 mg/ml EBI-005 dose groups, as specified in the statistical analysis plan, and by individual dose groups. Overall, we did not see a meaningful difference in response between the two EBI-005 dose groups on any efficacy measure when we analyzed the data for each separate drug treatment group in either the intent-to-treat or efficacy evaluable population.

In our Phase 1b/2a trial, the median baseline OSDI score was 50 for all patients at randomization, meaning that 50% of the intent-to-treat population had baseline OSDI scores of less than 50. During our Phase 1b/2a trial of EBI-005, we observed greater variability in clinical response in patients who had an OSDI score greater than or equal to 50. We believe that increased variability in clinical response made it more difficult to detect differences between the combined EBI-005 treatment groups and the vehicle control group on the primary and secondary efficacy endpoints. Therefore, we performed additional retrospective analyses that were not pre-specified primary or secondary endpoints in our Phase 1b/2a trial. In these analyses, we assessed whether patients with OSDI scores of less than 50 at baseline responded differently to EBI-005 treatment than patients with OSDI scores greater than or equal to 50 at baseline. The results of these analyses are described below. Although a retrospective analysis performed after trial results are unmasked can result in the introduction of bias, we believe that the various retrospective analyses that we performed will assist us in the assessment of the population of patients with the most robust separation between the treatment and vehicle control groups for both signs and symptoms to inform the design of our planned Phase 3 trials.

We designed this Phase 1b/2a trial to measure trends of efficacy, and we did not power the trial to measure with statistical significance the differences in any efficacy endpoints. Therefore, the improvements we observed with respect to pre-specified primary, secondary and exploratory endpoints and retrospective analyses in the intent-to-treat and efficacy evaluable populations that are described below were not statistically significant when compared to vehicle, except as specifically noted.

Primary and Secondary Efficacy Endpoints—Intent-to-Treat Population

We observed in the combined EBI-005 treatment groups in the intent-to-treat population an improvement from baseline in both CFS, a sign of dry eye disease, and OSDI, a symptom of dry eye disease, after six weeks of treatment with EBI-005. We believe that the magnitudes of these responses were clinically relevant.

The table below sets forth for the combined EBI-005 treatment groups and the vehicle control group, in each case assessing the intent-to-treat population, the mean score at baseline, mean change from baseline at week six, and the percentage change from baseline at week six on the following primary and secondary efficacy endpoints:

- the primary efficacy endpoint of change from baseline in OSDI score; and
- the secondary efficacy endpoint of change from baseline in CFS.

	Combined EBI-005 treatment groups (ITT population) (n = 44)		Vehicle control group (ITT population) (n = 30)	
	OSDI	CFS	OSDI	CFS
Mean Score at Baseline	49.8 Points	9.1 Points	52.6 Points	8.8 Points
Mean Change from Baseline at Week Six	18.9 Points	3.0 Points	19.0 Points	2.7 Points
Percentage Change from Baseline at Week Six	38%	33%	36%	31%

We observed improvements in the combined EBI-005 treatment groups in the intent-to-treat population from baseline through week six on each of the secondary efficacy endpoints of modified SANDE questionnaire score, subject-rated and investigator-rated GSA and subject-rated individual ocular symptom assessments of the severity of eyelid itching, the sensation of having a foreign body in the eye and ocular burning or pain. However, the differences between the improvements we observed in the combined EBI-005 treatment groups from baseline at week six and the improvements we observed in the vehicle control group from baseline at week six were not statistically significant for any of these measures. We do not plan to use any of these measures as primary or secondary endpoints in our planned Phase 3 trials.

Analyses of Efficacy Endpoints—Efficacy Evaluable Population

As noted above, there were major protocol deviations with respect to seven of the 74 enrolled patients in the intent-to-treat population. As a result, we believe the efficacy evaluable population, which excludes those patients with major protocol deviations, is a more appropriate population on which to conduct further analyses. The results of our additional retrospective analyses are presented below only with respect to the efficacy evaluable population. The results of pre-specified analyses of the corresponding primary and secondary efficacy endpoints with respect to the efficacy evaluable population also are presented below.

We observed in patients with OSDI scores less than 50 at randomization less variability in clinical response than we observed in patients with OSDI scores greater than or equal to 50 at randomization. We believe that increased variability in clinical response in the total efficacy evaluable population made it more difficult to detect differences between the EBI-005 treatment groups and vehicle control. We refer to the efficacy evaluable population with OSDI scores of less than 50 at randomization as the EE50 population.

Retrospective Analysis—OSDI Score. In the total efficacy evaluable population and in patients in the EE50 population, we observed an improvement of OSDI scores from baseline at week six in the combined EBI-005 treatment groups. We believe the magnitude of the response was clinically relevant. We also observed that the trend in the improvement in OSDI scores from baseline at week six favoring the combined EBI-005 treatment groups compared to the improvement in OSDI scores from baseline at week six in vehicle control was greater in the EE50 population than in the total efficacy evaluable population.

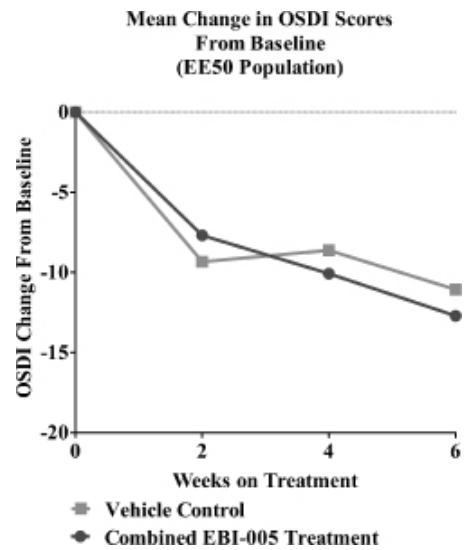
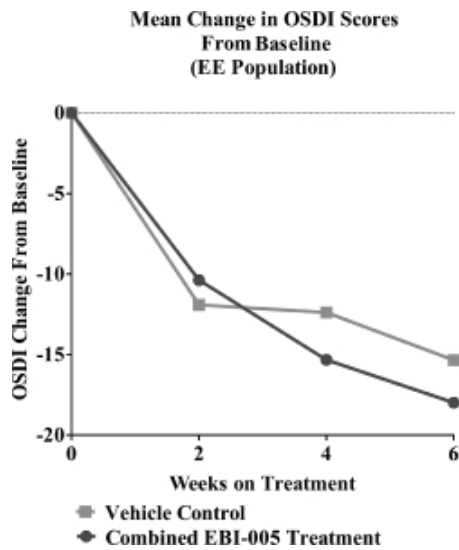
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The table below sets forth with respect to each of the combined EBI-005 treatment groups and the vehicle control group in the total efficacy evaluable population and in the EE50 population:

- the mean OSDI score at baseline;
- the mean change in OSDI score from baseline to week six; and
- the percentage change in OSDI score from baseline to week six.

	OSDI score			
	Combined EBI-005 treatment groups		Vehicle control group	
	EE population (n = 41)	EE50 population (n = 20)	EE population (n = 26)	EE50 population (n = 15)
Mean OSDI Score at Baseline	50.0 Points	31.1 Points	49.8 Points	35.0 Points
Mean Change in OSDI from Baseline to Week Six	18.0 Points	12.7 Points	15.3 Points	11.1 Points
Percentage Change in OSDI Score from Baseline to Week Six	36%	41%	31%	32%

The graphs below set forth with respect to each of the combined EBI-005 treatment groups and the vehicle control group in the total efficacy evaluable population and in the EE50 population, the mean change in OSDI scores from baseline at each evaluation visit following randomization during the treatment period.



Retrospective Analysis—Painful or Sore Eyes Question on OSDI. In the total efficacy evaluable population and in patients in the EE50 population, we observed an improvement on the OSDI question regarding painful or sore eyes at week six from baseline in the combined EBI-005 treatment groups. We also observed that the trend in the improvement in the score on the OSDI question regarding painful or sore eyes from baseline at week six favoring the combined EBI-005 treatment groups compared to the improvement in the score on the OSDI question regarding painful or sore eyes from baseline at week six in the vehicle control group was greater in the EE50 population than in the total efficacy evaluable population.

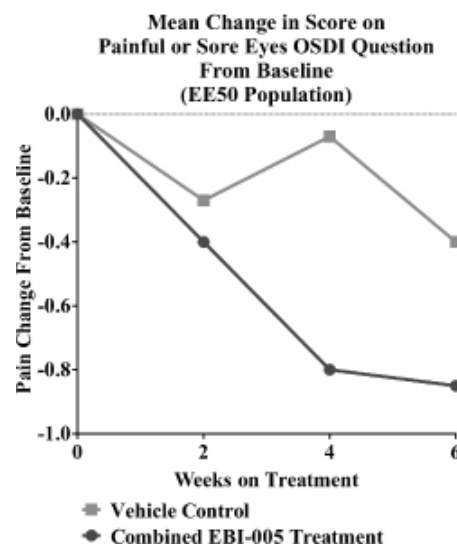
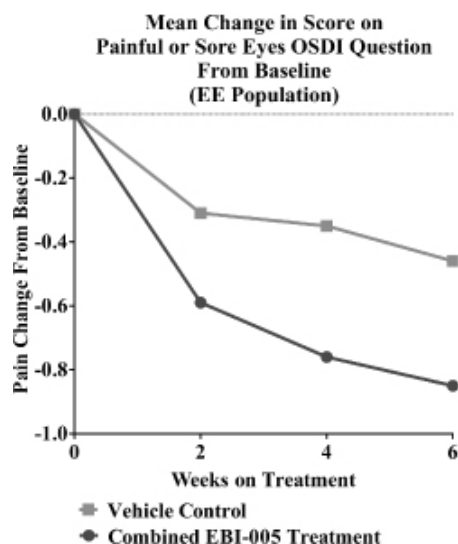
The table below sets forth with respect to each of the combined EBI-005 treatment groups and the vehicle control group in the total efficacy evaluable population and in the EE50 population:

- the mean score on the OSDI question regarding painful or sore eyes at baseline;

- the mean change in score on the OSDI question regarding painful or sore eyes from baseline at week six; and
- the percentage change in score on the OSDI question regarding painful or sore eyes from baseline at week six.

	Painful or sore eyes question			
	Combined EBI-005 treatment groups		Vehicle control group	
	EE population (n = 41)	EE50 population (n = 20)	EE population (n = 26)	EE50 population (n = 15)
Mean Score on OSDI Question at Baseline	1.8 Points	1.4 Points	1.7 Points	1.3 Points
Mean Change in Score on OSDI Question from Baseline to Week Six	0.9 Points	0.9 Points	0.5 Points	0.4 Points
Percentage Change in Score on OSDI Question from Baseline to Week Six	46%	61%	27%	31%

The graphs below set forth with respect to each of the combined EBI-005 treatment groups and the vehicle control group in the total efficacy evaluable population and in the EE50 population, the mean change in scores on the OSDI question regarding painful or sore eyes from baseline at each evaluation visit following randomization during the treatment period.



On most of the other individual OSDI questions, we observed trends in changes in scores at week six from baseline that favored patients treated with EBI-005 compared to patients treated with vehicle control in an analysis of the efficacy evaluable population. On eight of the other OSDI questions, we observed trends in changes in scores at week six from baseline that favored patients treated with EBI-005 compared to vehicle control in an analysis of the efficacy evaluable population. On the other three OSDI questions, we observed trends in changes in scores at week six from baseline that favored vehicle control compared to patients treated with EBI-005 in an analysis of the efficacy evaluable population. However, none of these trends were statistically significant.

Retrospective Analysis—CFS. In the total efficacy evaluable population and in patients in the EE50 population, we observed an improvement in CFS at week six from baseline in the combined EBI-005 treatment groups. We also observed in the EE50 population a strong trend in the improvement in the CFS score from

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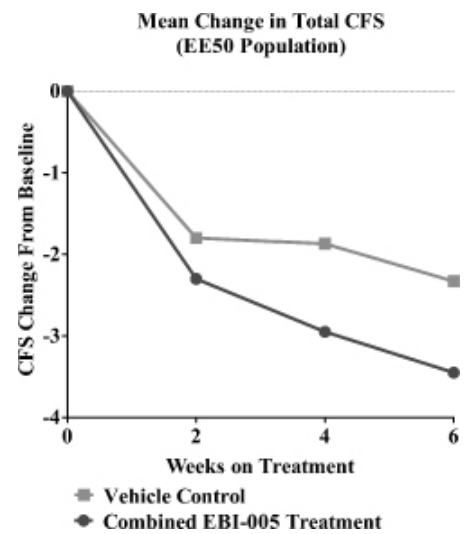
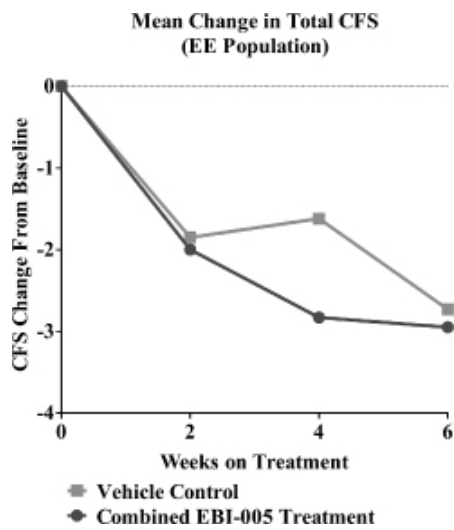
baseline at week six favoring the combined EBI-005 treatment groups compared to improvement in the CFS score from baseline at week six in the vehicle control group. We did not observe this trend in the total efficacy evaluable population.

The table below sets forth with respect to each of the combined EBI-005 treatment groups and the vehicle control group in the total efficacy evaluable population and in the EE50 population:

- the mean total CFS score at baseline;
- the mean change in total CFS score from baseline at week six; and
- the percentage change in total CFS score from baseline at week six.

	CFS score			
	Combined EBI-005 treatment groups		Vehicle control group	
	EE population (n = 41)	EE50 population (n = 20)	EE population (n = 26)	EE50 population (n = 15)
Mean Total CFS Score at Baseline	9.0 Points	8.9 Points	9.0 Points	8.4 Points
Mean Change in Total CFS Score from Baseline at Week Six	3.0 Points	3.5 Points	2.7 Points	2.3 Points
Percent Change in Total CFS Score from Baseline at Week Six	33%	39%	30%	28%

The graphs below set forth with respect to each of the combined EBI-005 treatment groups and the vehicle control group in the total efficacy evaluable population and in the EE50 population, the mean change in total CFS scores from baseline at each evaluation visit following randomization during the treatment period.



Pre-Specified Exploratory Endpoint—Artificial Tear Use

We distributed artificial tears to patients in this trial with one dose per vial. Patients were permitted to use up to four vials of these artificial tears daily. Patients were instructed not to use any other artificial tears during this trial. At the end of the trial, we counted the number of vials used by each patient. We excluded from our assessment of artificial tear use in the combined EBI-005 treatment groups one patient for whom there were no records of use of artificial tears. In addition, we performed a statistical outlier assessment of artificial tear use and excluded from our assessment of the combined EBI-005 treatment groups one patient whose use of artificial tears

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was many times greater than any other patient and whose inclusion could distort any statistical analysis. All of the results presented on the use of artificial tears excluded these two patients from the combined EBI-005 treatment groups.

The use of artificial tears was similar at baseline for patients in the combined EBI-005 treatment groups and vehicle control groups. However, over the course of the six-week treatment period of this trial, we observed the following differences, which were statistically significant only with respect to the efficacy evaluable population:

- the mean artificial tear usage was greater in the vehicle control group than in the combined EBI-005 treatment groups in the total efficacy evaluable population ($p=0.005$) and in the EE50 population ($p=0.190$);
- the median artificial tear usage was higher in the vehicle control group than in the combined EBI-005 treatment groups in the total efficacy evaluable population and in the EE50 population; and
- a greater percentage of patients in the vehicle control group used large amounts of artificial tears, which we defined as the use of more than 50 vials during this trial, than in the combined EBI-005 treatment groups in the total efficacy evaluable population ($p=0.005$) and in the EE50 population ($p=0.267$).

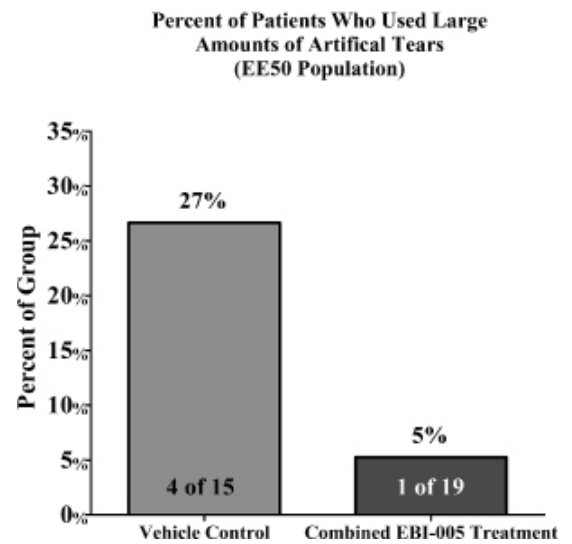
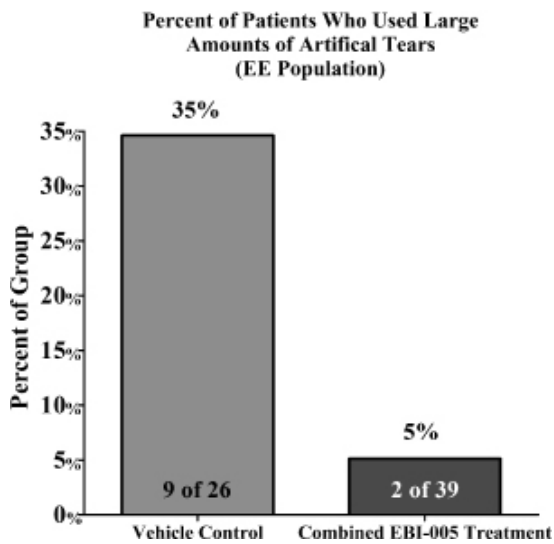
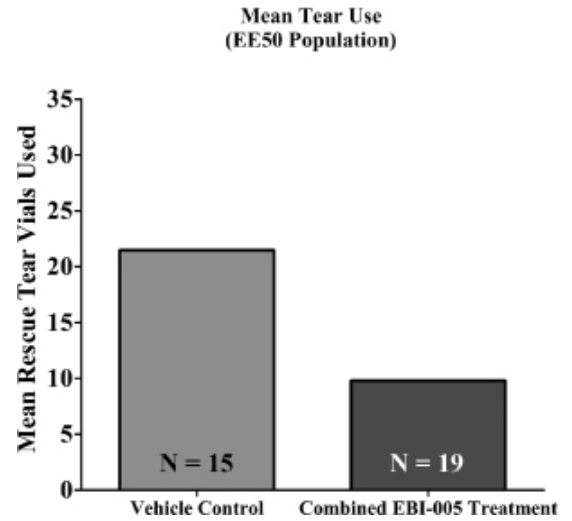
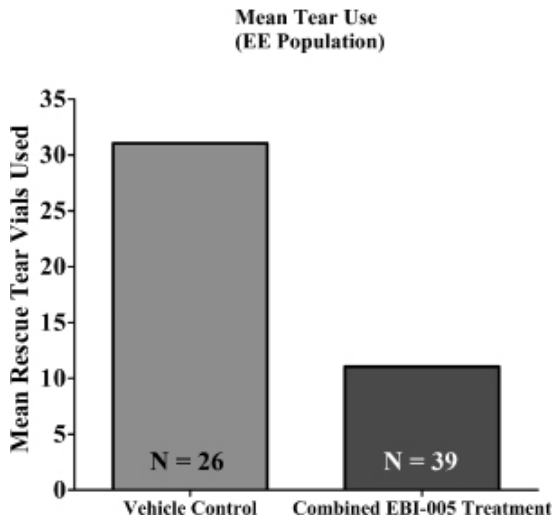
The table below sets forth with respect to each of the combined EBI-005 treatment groups and the vehicle control group in the total efficacy evaluable population and in the EE50 population:

- the mean number of vials of artificial tears used;
- the median number of vials of artificial tears used; and
- the percentage of patients who used large amounts of artificial tears.

	Artificial tear use			
	Combined EBI-005 treatment groups		Vehicle control group	
	EE population (n = 39)	EE50 population (n = 19)	EE population (n = 26)	EE50 population (n = 15)
Mean Number of Vials of Artificial Tears Used	11.1	9.8	31.0	21.5
Median Number of Vials of Artificial Tears Used	1.0	2.0	10.5	5.0
Percentage of Patients Who Used Large Amounts of Artificial Tears	5%	5%	35%	27%

The graphs below set forth with respect to each of the combined EBI-005 treatment groups and the vehicle control group in the total efficacy evaluable population and in the EE50 population:

- the mean number of vials of artificial tear usage; and
- the percentage of patients who used large amounts of artificial tears.



Safety, Pharmacokinetics and Immunogenicity

Both doses of EBI-005 were generally well tolerated in our Phase 1b/2a trial. No patients discontinued their participation in this trial due to adverse events. We did not observe any significant imbalances between the combined EBI-005 treatment groups and the vehicle control group in the incidence of ocular adverse events or systemic adverse events. There were no serious adverse events reported during this trial, and no patients

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discontinued the trial due to adverse events or for any other reason. The reporting of ocular and non-ocular adverse events was similar between the treatment and vehicle control groups. The number of ocular adverse events reported during this trial and the number of patients in our Phase 1b/2a trial with one or more ocular adverse events as coded using MedDRA Version 12.1, a standard method of reporting adverse events, are set forth in the table below.

	Vehicle (N=30)	EBI-005 (5 mg/ml) (N=22)	EBI-005 (20 mg/ml) (N=22)	EBI-005 (5+20 mg/ml) (N=44)
Number of patients with one or more ocular adverse events	0 (0%)	1 (5%)	2 (9%)	3 (7%)
Eye disorders				
Eye irritation	0 (0%)	0 (0%)	1 (5%)	1 (2%)
Eye pain	0 (0%)	1 (5%)	1 (5%)	2 (5%)
Foreign body sensation in eyes	0 (0%)	1 (5%)	0 (0%)	1 (2%)
Increased tearing	0 (0%)	1 (5%)	0 (0%)	1 (2%)
Ocular redness	0 (0%)	1 (5%)	0 (0%)	1 (2%)

In addition to the ocular adverse events noted above, two patients reported application site pain during the one-week run-in period of this trial when all patients received only vehicle and one patient in the vehicle control group reported application site pain during the treatment period of this trial. Application site pain is coded under general disorders and administrative site conditions, and not eye disorders, under MedDRA Version 12.1.

There was no measurable EBI-005 in the systemic circulation following topical administration. We observed low titer, anti-EBI-005 antibodies in three of 44 treated patients. The presence of these antibodies was not associated with any clinically relevant observations.

We have used an assay that generates a signal in the presence of IL-1b and EBI-005, but cannot distinguish between them, to assess the amount of EBI-005 remaining on the surface of the eye. Using this assay, we observed in tears of patients treated with EBI-005 a 20-fold increase in signal compared to signal prior to dosing with EBI-005. We believe this increase is due to the high concentration of EBI-005 on the surface of the eye. We have correlated the levels of this signal with the time since the last dose of EBI-005 and believe this correlation indicates EBI-005 is present on the eye for almost 10 hours after dosing.

Completed Phase 1 Clinical Trial in Healthy Volunteers

In 2012, we completed a double masked, placebo controlled, single dose Phase 1 clinical trial evaluating the safety and tolerability of EBI-005 in healthy volunteers. We conducted our Phase 1 trial in 16 healthy volunteers at a single center in the United States. We conducted this trial in a natural environment. We did not use a controlled adverse environment chamber.

The principal objective of our Phase 1 trial was to evaluate the safety and tolerability of topical ocular administration of EBI-005 in healthy volunteers. Other objectives of this trial were to evaluate the pharmacokinetics and immunogenicity of EBI-005.

Subjects were randomized to receive EBI-005 or vehicle on three occasions, every six hours, on day one. Subjects randomized to the EBI-005 treatment groups received EBI-005 in the right eye and vehicle in the left eye. Subjects randomized to the vehicle control groups received vehicle in each eye. Subjects were randomized in two groups as follows:

- Group 1 Six subjects: 5 mg/ml EBI-005, one dose at six-hour intervals
 Two subjects: vehicle, one dose at six-hour intervals
- Group 2 Six subjects: 20 mg/ml EBI-005, one dose at six-hour intervals
 Two subjects: vehicle, one dose at six-hour intervals

We assessed the subjects for safety and tolerability for four days following the one day of dosing and at a final follow up visit seven days following dosing.

EBI-005 was generally well tolerated in this Phase 1 trial. There were no serious adverse events reported during this trial, and no subjects discontinued their participation in this trial due to adverse events. The reporting of mild ocular and non-ocular adverse events was similar between the treatment and vehicle control groups. There were no detectable systemic levels of EBI-005 and no specific anti-EBI-005 antibody formation in any of the subjects exposed to EBI-005.

Expand the Use of EBI-005 for Additional Ocular Indications

We are evaluating other ocular surface diseases for which we believe EBI-005 treatment may be beneficial. In 2014, we plan to initiate a Phase 2 clinical trial to assess the potential therapeutic benefit of EBI-005 for the treatment of allergic conjunctivitis in patients who have not responded adequately to antihistamines and mast cell stabilizers, which are the current standard of care. Based on this plan and our estimates regarding patient enrollment, we expect that top-line data from the trial could be available before the end of 2014.

Allergic conjunctivitis

Allergic conjunctivitis is an inflammatory disease of the conjunctiva, the membrane covering the inside of the eyelids and white part of the eye, primarily from a reaction to allergy-causing substances such as pollen or pet dander. This inflammation results in the primary sign of redness and primary symptom of acute itch. According to a study on the management of seasonal allergic conjunctivitis published in 2012 in the peer reviewed journal *Acta Ophthalmologica*, allergic conjunctivitis affects 15% to 40% of the United States population. Allergic conjunctivitis ranges in clinical severity from relatively mild, common forms to more severe forms that can cause impaired vision and even, in the most severe cases, blindness. The mild to moderate manifestations of allergic conjunctivitis tend to fall into the seasonal, or SAC, and perennial, or PAC, allergic conjunctivitis classes. The more severe forms of allergic conjunctivitis include vernal keratoconjunctivitis, or VKC, and atopic keratoconjunctivitis, or AKC.

VKC involves severe inflammation of the conjunctiva and cornea. VKC appears most often in young males and can have significant effects on children, including photophobia, or abnormal sensitivity to light, and pain and foreign body sensation in patients with inflammation of the cornea. Although VKC often resolves spontaneously following puberty, visual impairment can be severe if the cornea is extensively involved. According to a study on vernal keratoconjunctivitis published in 2004 in the peer reviewed journal *Eye-Nature*, approximately 6% of VKC patients show reduced visual acuity. VKC is rare in the United States and is classified by the FDA as a distinct disease, which is a necessary precondition for a product to qualify for orphan drug designation.

AKC, while more common than VKC, is also rare in the United States. AKC involves severe, chronic external ocular inflammation associated with asthma and eczema that may first appear in teenagers and continue for decades. It is often associated with severe photophobia and extreme discomfort and pain. Patients with AKC often have difficulty opening their eyelids in the morning as a result of a combination of ocular discharges and discomfort. AKC also commonly impairs the vision of patients due to a combination of corneal surface disease and frequent scarring. In severe cases of AKC, ulceration of the cornea can result in blindness.

We believe that prolonged and more severe cases of allergic conjunctivitis, including VKC and AKC, are characterized by an inflammatory process that is mediated by IL-1. IL-1 stimulates the maturation and recruitment of antigen presenting cells, or dendritic cells, that perpetuate or exacerbate the allergic response. IL-1 also mediates the turning on and off of genes that code for key chemokines that activate and direct pathogenic white blood cells to the ocular surface.

Treatment of Allergic Conjunctivitis

For many patients with chronic or more severe forms of allergic conjunctivitis, antihistamines and mast cell stabilizers are not sufficient to treat their signs and symptoms. These refractive patients often are treated with topical corticosteroids, which have been associated with a higher risk of developing glaucoma and cataracts and an increased risk of ocular infection. We believe there remains a significant unmet medical need for new treatments for patients suffering from VKC and AKC and for patients with SAC and PAC that have severe enough disease that they are not satisfactorily treated by antihistamines and mast cell stabilizers.

Planned Phase 2 Clinical Trial of EBI-005 for the Treatment of Allergic Conjunctivitis

We plan to conduct a Phase 2 clinical trial of EBI-005 for the treatment of allergic conjunctivitis in controlled exposure models commonly used to assess anti-allergy medications. In these models, patients are tested following exposure to specific allergens. The conjunctival allergen challenge model, or CAC, is an allergen challenge model that achieves a very high transient dose exposure by placing allergen directly into the space between the eyelid and the surface of the eye of the study subject. The allergy environmental exposure chamber, or EEC, is another clinical model that exposes patients to allergen in the circulated air of a sealed room. We believe the CAC and the EEC models will mimic the exacerbation of disease typically observed in those patients with prolonged and more severe cases of allergic conjunctivitis.

We currently expect to conduct our Phase 2 trial in approximately 200 patients at a single center in Canada. We plan to enroll ragweed allergic volunteers whose allergy has been confirmed with a positive skin prick test to ragweed within one year prior to enrollment. Inclusion and exclusion criteria will require that patients have a history of chronic ocular allergy and resistance to treatment with antihistamines and mast cell stabilizers. We expect to enroll patients in EEC and CAC arms. Patients will be randomized to each arm and to receive either EBI-005 at 5 mg/ml or vehicle. Treatment will be applied in each of the subject's eyes three times a day.

We expect that the primary endpoints in both the EEC and CAC arms will be an assessment of symptoms of allergic conjunctivitis as measured by subject reported ocular itching. We expect that the secondary endpoints in the study will include redness, swelling and other measures of the signs of ocular allergy. We also plan to assess general ocular safety and tolerability. If the results of this Phase 2 trial are favorable, we will use these results to help determine whether to proceed with, and how to design, subsequent pivotal studies for allergic conjunctivitis in the United States, Canada, Europe and other countries. We expect that the FDA will require that any pivotal clinical trials evaluate EBI-005 against standard-of-care antihistamines. We also may study the response of VKC populations to treatment with EBI-005 separately to determine whether to proceed with further development and whether an orphan drug designation might be available for EBI-005 for such use.

Our Other Product Candidates

In addition to EBI-005, we have two proprietary product candidates in early preclinical development, EBI-029 and EBI-028. We plan to further evaluate these product candidates for potential use in humans as follows:

- EBI-029, a novel inhibitor of the cytokine IL-6, which we are developing as an intravitreal injection for the treatment of certain retinal diseases, such as DME; and
- EBI-028, a novel inhibitor of the cytokine IL-17, which we are developing as an intravitreal injection for the treatment of uveitis and other diseases of the back of the eye, such as dry AMD.

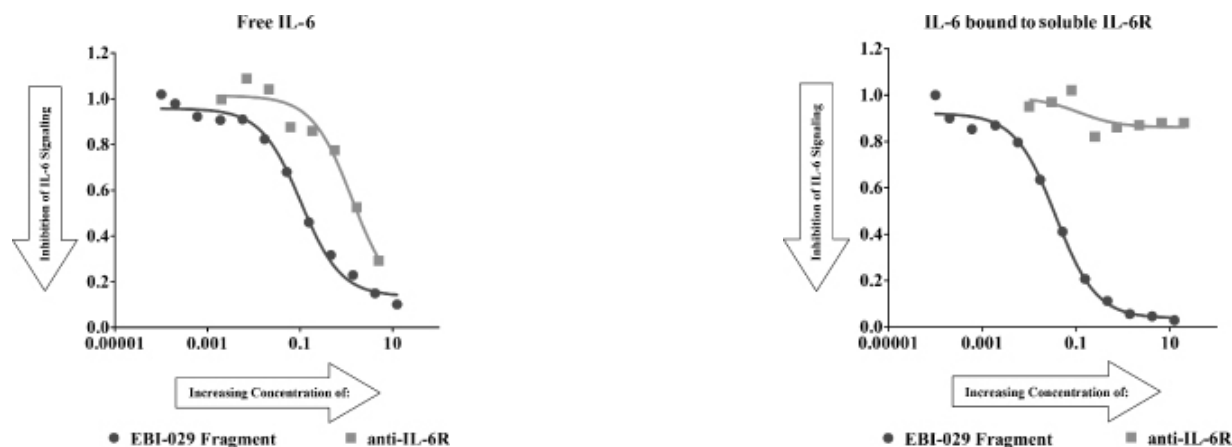
If results of our preclinical studies are favorable, we will consider further development of these product candidates either directly by us or in collaboration with one or more strategic collaborators. We are continuing to apply our AMP-Rx platform to further enhance our current product candidates and generate new product candidates.

EBI-029 – a Novel Inhibitor of the Cytokine IL-6

DME is characterized by abnormal new blood vessel formation and growth, referred to as neovascularization, in the layer of tissue beneath the retina called the choroid. According to The American Diabetes Association, DME is one of the most common causes of vision loss in the United States. In studies published in the peer reviewed journal *Ophthalmology*, IL-6 levels in the eye positively correlated with the severity of DME. According to a presentation at The Association for Research in Vision and Ophthalmology 2012 Annual Meeting, IL-6 levels in the eye positively correlated with resistance to anti-VEGF therapies, which are the current standard of care for the treatment of DME.

We designed and engineered EBI-029 using our AMP-Rx platform to block two forms of IL-6, free IL-6 and IL-6 bound to IL-6 receptor, or IL-6R. We believe the ability of EBI-029 to block these two forms of IL-6 will result in more effective inhibition of IL-6 activity compared to other antibodies that block only one of these two forms of IL-6. We are unable to test EBI-029 in animal models because EBI-029 only blocks human IL-6. In a live animal, or *in vivo*, study in a mouse model of choroidal neovascularization, we used a commercially available anti-IL-6 antibody that blocks mouse IL-6. In this study, we observed a significant reduction in abnormal neovascularization in animals treated with this anti-IL-6 antibody compared to animals that received placebo.

The graphs below illustrate the blocking of IL-6 signaling in an *in vitro* cell-based assay by increasing concentrations of the fragment of EBI-029 that blocked IL-6 and of a reference anti-IL-6-receptor antibody, or anti-IL-6R, that also blocked IL-6. EBI-029 blocked signaling of free IL-6 (left panel) and also IL-6 bound to soluble IL-6R (right panel). In contrast, the anti-IL-6R antibody blocked signaling of free IL-6 (left panel) but did not block signaling of IL-6 bound to soluble IL-6R (right panel). We believe the ability of EBI-029 to block signaling of free IL-6 and IL-6 bound to IL-6R could lead to improved biological effect.



EBI-028 – a Novel Inhibitor of the Cytokine IL-17

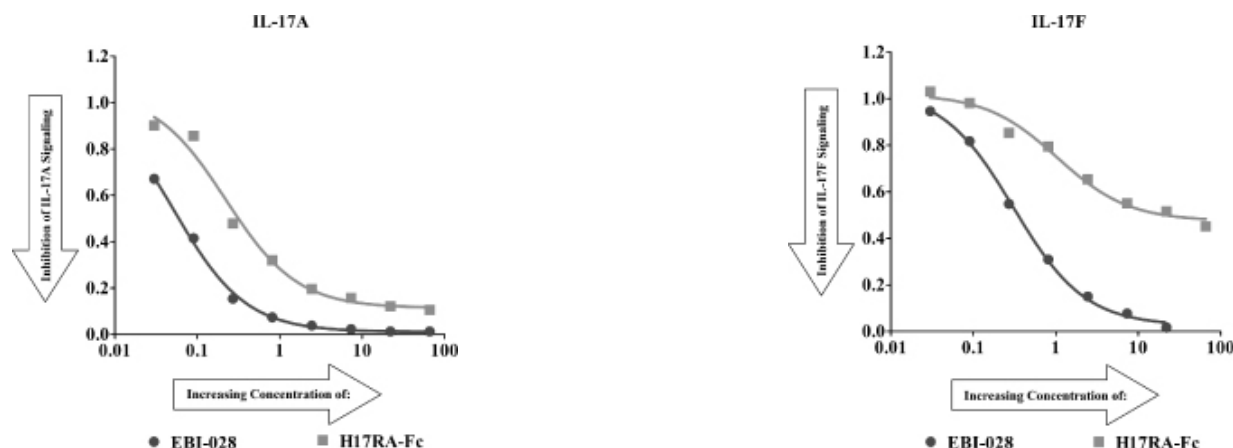
Uveitis is a heterogeneous group of ocular conditions that are characterized by inflammation of the middle layer of the eye known as the uvea. Based on prevalence data published in the peer reviewed journal *American Journal of Ophthalmology* and 2010 United States census data, we estimate that approximately 215,000 to 315,000 individuals in the United States suffer from some form of uveitis. According to the peer reviewed journal *British Journal of Ophthalmology*, uveitis also accounts for approximately 10% to 15% of cases of blindness in the United States. In a study published in the peer reviewed journal *Basic and Clinical Immunology*, patients with uveitis had elevated serum levels of IL-17. In addition, in a published study in the peer reviewed *Journal of Translational Medicine*, patients with dry AMD and geographic atrophy, a serious disease of the retina, had increased serum concentrations of IL-17 compared to healthy individuals.

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The two most common forms of the inflammatory cytokine IL-17 are IL-17A and IL-17F. We believe that blocking both of these two forms of IL-17 may be important to inhibit the harmful effects of IL-17 in certain diseases of the eye such as uveitis and dry AMD.

We designed and engineered EBI-028 using our AMP-Rx platform to block IL-17A and IL-17F. We are unable to test EBI-028 in animal models because EBI-028 only blocks human IL-17. In an *in vivo* study in a mouse model of uveitis of the retina and choroid, we used a commercially available anti-IL-17 antibody that blocks mouse IL-17. In this study, we observed a significant reduction in inflammation in the eyes of animals treated with this anti-IL-17 antibody compared to animals that received placebo.

The graphs below illustrate the blocking of IL-17A and IL-17F signaling in an *in vitro* cell-based assay by increasing concentrations of EBI-028 and of a reference IL-17 receptor fusion protein, comprised of the natural, human IL-17 receptor fused to a carrier protein, or H17RA-Fc. EBI-028 blocked signaling of IL-17A (left panel) and also IL-17F (right panel). In contrast, H17RA-Fc blocked signaling of IL-17A (left panel) but did not effectively block signaling of IL-17F (right panel). We believe the ability of EBI-028 to block both IL-17A and IL-17F could lead to improved biological effect.



Intellectual Property

Our success depends in part on our ability to obtain and maintain proprietary protection for our candidate products, technology and know-how, to operate without infringing the proprietary rights of others and to prevent others from infringing our proprietary rights. We seek to protect our proprietary position by, among other things, filing U.S. and certain foreign patent applications related to our proprietary technology, inventions and improvements that are important to the development of our business, where patent protection is available. We also rely on trade secrets, know-how, continuing technological innovation and in-licensing opportunities to develop and maintain our proprietary position.

As of December 6, 2013, we owned or exclusively in-licensed a total of 18 U.S. patent applications, as well as numerous foreign counterparts of some of these patent applications. Our patent portfolio includes the following patent applications that we own or, where noted below, license:

- composition-of-matter patent applications filed in the United States, Australia, Brazil, Canada, China, Europe, India, Israel, Japan, Korea, Mexico, New Zealand, Russia, Singapore, South Africa and Taiwan covering EBI-005, which, if granted, are expected to expire in 2031;
- a provisional U.S. patent application covering the formulation of EBI-005, which, if granted, is expected to expire in 2034;

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- a Patent Cooperation Treaty, or PCT, patent application covering methods of manufacturing EBI-005, which, if granted is expected to expire in 2033;
- two patent applications that are licensed from Schepens that are each pending in the United States, Australia, Canada, Europe and Japan covering the use of IL-1 inhibitors to treat certain ocular disease, one of which, if granted, is expected to expire in 2028 and the other of which, if granted, is expected to expire in 2030;
- a PCT patent application covering EBI-029, which, if granted, is expected to expire in 2033;
- a provisional U.S. patent application covering a candidate IL-17 inhibitor, which, if granted, is expected to expire in 2034; and
- two provisional U.S. patent applications and a PCT patent application related to our technologies, including methods and compositions for improving the serum half-life of proteins which, if granted, are expected to expire beginning in 2032.

The term of individual patents depends upon the legal term for patents in the countries in which they are granted. In most countries, including the United States, the patent term is generally 20 years from the earliest claimed filing date of a non-provisional patent application in the applicable country. In the United States, a patent's term may, in certain cases, be lengthened by patent term adjustment, which compensates a patentee for administrative delays by the United States Patent and Trademark Office in examining and granting a patent, or may be shortened if a patent is terminally disclaimed over a commonly owned patent or a patent naming a common inventor and having an earlier expiration date. The Drug Price Competition and Patent Term Restoration Act of 1984, or the Hatch-Waxman Act, permits a patent term extension of up to five years beyond the expiration date of a U.S. patent as partial compensation for the length of time the drug is under regulatory review while the patent is in force. A patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval, only one patent applicable to each regulatory review period may be extended and only those claims covering the approved drug, a method for using it or a method for manufacturing it may be extended.

Similar provisions are available in the European Union and certain other foreign jurisdictions to extend the term of a patent that covers an approved drug. In the future, if and when our product candidates, including EBI-005, receive approval by the FDA or foreign regulatory authorities, we expect to apply for patent term extensions on issued patents covering those products, depending upon the length of the clinical trials for each drug and other factors. The expiration dates referred to above are without regard to potential patent term extension or other market exclusivity that may be available to us.

We may rely, in some circumstances, on trade secrets to protect our technology. However, trade secrets can be difficult to protect. We seek to protect our proprietary technology and processes, in part, by confidentiality agreements with our employees, consultants, scientific advisors and contractors. We also seek to preserve the integrity and confidentiality of our data and trade secrets by maintaining physical security of our premises and physical and electronic security of our information technology systems.

License and Collaboration Agreements

We are a party to a number of license agreements under which we license patents, patent applications and other intellectual property from third parties. We enter into these agreements to augment our proprietary intellectual property portfolio. The licensed intellectual property covers some of the compounds that we are researching and developing and some of the scientific processes that we use. These licenses impose various diligence and financial payment obligations on us. We expect to continue to enter into these types of license agreements in the future. The only existing license that we consider to be material to our current product portfolio is our agreement with The Schepens Eye Research Institute, Inc., or Schepens, which is described below.

The Schepens Eye Research Institute, Inc.

In July 2010, we entered into a license agreement with Schepens, under which we hold an exclusive worldwide license under specified patents and technology owned or controlled by Schepens to research, develop, make, have made, use, sell, offer for sale and import products for the treatment of inflammation of the eye and adjoining tissues, or anti-IL-1 products, including EBI-005. Schepens has retained rights to practice the patents and technology licensed to us under the agreement for internal research and educational purposes.

Financial Terms. In connection with the agreement, we paid Schepens an upfront licensing fee and are obligated to make future milestone payments to Schepens with respect to the first covered anti-IL-1 product to achieve each milestone, which we expect will be EBI-005, of up to an aggregate of \$1,950,000 if we achieve specified clinical and regulatory milestones and an additional \$1,000,000 if we achieve a specified commercial milestone. We also are obligated to make additional future payments to Schepens of up to an aggregate of \$1,600,000 if we achieve specified clinical and regulatory milestones with respect to a second covered anti-IL-1 product. We are also obligated to make additional payments to Schepens of up to an aggregate of \$145,000 upon the occurrence of certain other events which we believe are unlikely to occur.

We are obligated to pay Schepens a tiered royalty ranging from low single digit to mid-single digit percentages of net sales made by us, our affiliates or our sublicensees. These royalties may be reduced in specified circumstances. Our obligation to pay royalties will expire on a product-by-product and country-by-country basis upon the expiration of the last to expire valid claim of specified patents that cover the composition, manufacture or use of each covered product in each country.

In addition, we are obligated to pay Schepens a mid-single digit percentage of any non-royalty payments that we receive from any sublicensee of our rights under the agreement.

Diligence Obligations. We are required to use commercially reasonable efforts to research, develop and commercialize at least one covered product for the diagnosis, prophylaxis or treatment of a disease or condition in humans or animals.

Term and Termination. The agreement, unless earlier terminated by us or Schepens, will remain in effect until we no longer have a royalty obligation to Schepens. The agreement provides that either party may terminate the agreement in the event of the other party's insolvency, bankruptcy or comparable proceedings, or if the other party materially breaches the agreement and does not cure such breach during a specified cure period.

ThromboGenics, N.V.

In May 2013, we entered into a collaboration and license agreement with ThromboGenics. Under the agreement, we and ThromboGenics are collaborating to identify protein or peptide therapeutics that directly modulate any of a specified set of targets in a novel pathway in retinal disease. We call the therapeutics that are identified, and whose modulation of one of the targets is confirmed, in the course of the collaboration, collaboration products.

During the term of the agreement, neither we nor ThromboGenics, nor our respective affiliates other than any entities which become affiliates as a result of an acquisition of us or ThromboGenics, are permitted to research, develop, manufacture or commercialize any protein or peptide therapeutic that directly modulates one of the specified targets, except as otherwise provided in the agreement.

Research and Development Obligations. The initial research term is for a specified number of months from the date we entered into the agreement, but may be extended on mutual agreement. The research is conducted in accordance with a mutually agreed plan and budget. We are responsible for specified non-clinical activities during the research term. ThromboGenics is responsible for all development, manufacturing and

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commercialization activities with respect to the collaboration products. ThromboGenics is obligated to use commercially reasonable efforts to research, develop and obtain all necessary regulatory approvals for the collaboration products and, upon receipt of the applicable marketing approval, to commercialize the collaboration products.

Intellectual Property. We and ThromboGenics jointly own any know-how made by or on behalf of either of us in the course of the research and any patent rights claiming such know-how. We call these patent rights and know-how collaboration intellectual property. We have granted ThromboGenics an exclusive, sublicenseable, royalty-bearing license under our rights in these patent rights and know-how, as well as under any other patent rights and know-how that we control during the research term that are necessary for ThromboGenics to perform its obligations to research, develop, manufacture and commercialize collaboration products.

Financial Terms. In connection with the agreement, ThromboGenics paid us a technology licensing fee of \$1,750,000 and is obligated to pay us to perform our activities under the agreement at a set rate per full-time equivalent person working on the collaboration. ThromboGenics also is obligated to make future payments to us of up to an aggregate of \$10,000,000 if ThromboGenics achieves specified preclinical and clinical milestones with respect to collaboration products and up to an aggregate of \$15,000,000 if ThromboGenics achieves specified regulatory milestones with respect to collaboration products. ThromboGenics is obligated to pay us a low single digit royalty on sales of collaboration products by ThromboGenics, its affiliates or sublicensees. These royalties may be reduced in specified circumstances. ThromboGenics' obligation to pay us royalties will expire on a collaboration product-by-collaboration product and country-by-country basis on the latest of ten years after the first commercial sale of such compound in such country, the expiration of the patent rights we licensed to ThromboGenics that cover such compound in such country, and the expiration of any data or other regulatory exclusivity for such compound in such country, after which the licenses granted to ThromboGenics will become perpetual and fully paid-up.

Term and Termination. The agreement expires when all of ThromboGenics' payment obligations expire. The agreement provides that either party may terminate the agreement in the event of the other party's insolvency, bankruptcy or comparable proceedings, or if the other party materially breaches the agreement and does not cure such breach during a specified cure period. We may terminate the agreement if ThromboGenics or any of its affiliates or licensees challenges the patent rights that we licensed to ThromboGenics. The agreement may be terminated by ThromboGenics for convenience by giving us a specified period of notice following the end of the research term. If ThromboGenics terminates the agreement for our breach or bankruptcy, ThromboGenics' diligence obligations will terminate, the licenses we granted to ThromboGenics will remain in effect on a perpetual basis, and all milestone and royalty obligations of ThromboGenics will be reduced by a specified percentage.

Manufacturing

We do not currently own or operate manufacturing facilities for the production of clinical or commercial quantities of EBI-005 or any other of our product candidates. We currently rely, and expect to continue to rely, on third parties for the manufacture of EBI-005 and our other product candidates. We have personnel with the experience to manage the third-party contract manufacturers producing EBI-005 and other products that we may develop in the future.

The process for manufacturing EBI-005 has two main stages: drug substance manufacturing and drug product manufacturing, which results in our finished drug product. We currently engage a single third-party manufacturer to provide clinical supplies of EBI-005 and another single third-party manufacturer to provide fill-finish services for clinical supplies of EBI-005. We obtain these supplies and services on a purchase order basis. The drug substance manufacturing process utilizes a well-established expression system for recombinant protein therapeutics and includes downstream purification steps using readily available materials. The drug product manufacturing process utilizes our proprietary formulation, is conducted with materials that have been utilized in other approved ophthalmic products, and is configured in a blow fill seal, single-use vial that has also been used

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for other topical ocular therapeutic products. The manufacturing process and drug product formulation are proprietary to us and were transferred to third-party vendors for the execution of manufacturing.

Commercialization

In light of our stage of development, we have not yet established a commercial organization or distribution capabilities. We generally expect to retain commercial rights in the United States for our product candidates for which we may receive marketing approvals and which we believe can commercialize through a focused, specialty sales force. We expect to utilize a variety of types of collaboration, distribution and other marketing arrangements with one or more third parties to commercialize EBI-005 and any other products that we develop in markets outside the United States.

We hold worldwide commercialization rights to EBI-005. We believe that specialists in the United States who treat most of the moderate to severe dry eye disease patients are sufficiently concentrated that if EBI-005 receives marketing approval in the United States we could effectively promote EBI-005 to these specialists with a specialty sales and marketing group. Therefore, we may decide to build our own focused, specialty sales force in order to commercialize EBI-005 in the United States. We intend to enter into strategic collaborations for the development and commercialization of EBI-005 outside of the United States.

We also plan to build key capabilities, such as marketing, market access, sales management and medical affairs, to implement marketing and medical strategies for any products that we market through our own sales organization and to oversee and support our sales force. The responsibilities of the marketing organization would include developing educational initiatives with respect to approved products and establishing relationships with thought leaders in relevant fields of medicine.

Competition

The biotechnology and pharmaceutical industries are characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products. While we believe that our technologies, knowledge, experience and scientific resources provide us with competitive advantages, we face potential competition from many different sources, including major pharmaceutical, specialty pharmaceutical and biotechnology companies, academic institutions and governmental agencies and public and private research institutions. Any product candidates that we successfully develop and commercialize will compete with existing therapies and new therapies that may become available in the future.

Our potential competitors include large pharmaceutical and biotechnology companies, and specialty pharmaceutical and generic drug companies. Many of our competitors have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than we do. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs. Smaller or early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies.

The key competitive factors affecting the success of each of our product candidates, if approved for marketing, are likely to be its efficacy, safety, method of administration, convenience, price, the level of generic competition and the availability of coverage and adequate reimbursement from government and other third-party payors.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any products that we may develop. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours, which could result in our

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competitors' establishing a strong market position before we are able to enter the market. In addition, our ability to compete may be affected in many cases by insurers or other third party payors seeking to encourage the use of generic products. Generic products currently being used for the indications that we may pursue, and additional products are expected to become available on a generic basis over the coming years. If our product candidates achieve marketing approval, we expect that they will be priced at a significant premium over competitive generic products.

Allergan currently markets Restasis in the United States. If we receive marketing approval in the United States for EBI-005 for the treatment of moderate to severe dry eye disease, EBI-005 will compete with Restasis. In June 2013, the FDA issued draft bioequivalence guidance recommending that a biochemical analysis outside the body, or *in vitro*, alone may be sufficient for generic competitors to establish bioequivalence between their products and Restasis. In August 2013, Allergan submitted comments in response to the FDA's draft guidance urging the agency to require comparative clinical studies to demonstrate that a proposed generic product is bioequivalent to Restasis. It is unclear when the FDA will issue final bioequivalence guidance or when, if at all, the FDA will approve generic versions of Restasis. If generic versions of Restasis are approved for marketing by the FDA, they would likely be offered at a lower price than EBI-005. As a result, healthcare professionals and third-party payors may choose to rely on such products rather than EBI-005.

There are a number of products in preclinical research and clinical development by third parties for the treatment of dry eye disease. We expect that product candidates currently in clinical development, or that could enter clinical development in the near future, may represent significant competition if approved. These product candidates may provide efficacy, safety, convenience and other benefits that are not provided by currently marketed therapies. Based on publicly available information, we have identified, among others, the following product candidates in clinical development for the treatment of dry eye disease:

- Shire Plc has a small molecule integrin antagonist, lifitegrast, which is formulated for topical, ophthalmic delivery and is currently in Phase 3 clinical development. In December 2013, the results of the first Phase 3 clinical trial of lifitegrast in patients with dry eye disease were published in *Ophthalmology*.
- Acucela Inc., in collaboration with Otsuka Pharmaceutical Co., Ltd., has a small molecule that stimulates prostaglandin generation, rebamipide, which is formulated for topical ophthalmic delivery and is currently in Phase 3 clinical development. Rebamipide has been approved for sale for the treatment of dry eye disease in Japan.
- Mimetogen Pharmaceuticals Inc., in collaboration with Bausch + Lomb Corporation, has a small molecule TrkA agonist, MIM-D3, which is formulated for topical, ophthalmic delivery and is currently in Phase 3 clinical development.
- OphthaliX Inc. has a small molecule A3 adenosine receptor agonist, CF101, which is designed to be administered orally and is currently in Phase 3 clinical development.
- Rigel Pharmaceuticals, Inc. has a small molecule Jak/Syk inhibitor, R9348, which is being formulated for topical ophthalmic delivery and is currently in Phase 2 clinical development.
- Allergan, Inc. has a molecule, AGN-195263, which is being formulated for topical ophthalmic delivery and is currently in Phase 2 clinical development.

Because there are a variety of means to block the activity and signaling of IL-1, our patents and other proprietary protections for EBI-005 will not prevent development or commercialization of product candidates that are different from EBI-005.

Government Regulation

Government authorities in the United States and in other countries and jurisdictions, including the European Union, extensively regulate, among other things, the research, development, testing, manufacture, packaging,

storage, recordkeeping, labeling, advertising, promotion, distribution, marketing, and import and export of pharmaceutical products. Obtaining regulatory approvals in the United States and in foreign countries and jurisdictions, along with subsequent compliance with applicable statutes and regulations and other regulatory authorities, requires the expenditure of substantial time and financial resources.

Review and Licensure of Biologics in the United States

In the United States, the FDA regulates biological products, or biologics, under the Public Health Service Act, or PHSA, and the Federal Food, Drug, and Cosmetic Act, or FDCA, and regulations and guidances implementing these laws. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations requires the expenditure of substantial time and financial resources. 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 and/or sponsor to a variety of administrative or judicial sanctions, including refusal by the FDA to approve pending applications, withdrawal of an approval, imposition of a clinical hold, issuance of warning letters and other types of letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement of profits, or civil or criminal investigations and penalties brought by the FDA and the Department of Justice, or DOJ, or other governmental entities.

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

- completion of preclinical laboratory tests, animal studies and formulation studies in compliance with the FDA's good laboratory practice, or GLP, regulations;
- submission to the FDA of an investigational new drug application, or IND, which must take effect before human clinical trials may begin;
- approval by an independent institutional review board, or IRB, representing each clinical site before each clinical trial may be initiated;
- performance of adequate and well-controlled human clinical trials in accordance with good clinical practices, or GCP, to establish the safety and efficacy of the proposed product for each indication;
- preparation and submission of a BLA to the FDA;
- review of the product by an FDA advisory committee, where appropriate or if applicable;
- satisfactory completion of one or more FDA inspections of the manufacturing facility or facilities at which the product, or components thereof, are produced to assess compliance with current Good Manufacturing Practices, or cGMP, requirements and to assure that the facilities, methods and controls are adequate to preserve the product's identity, strength, quality and purity;
- payment of user fees and securing FDA approval of the BLA and licensure of the new biologic product; and
- compliance with any post-approval requirements, including risk evaluation and mitigation strategies, or REMS, and any post-approval studies required by the FDA.

Preclinical Studies and an IND

Preclinical studies include laboratory evaluation of the purity and stability of the biologic product, as well as *in vitro* and animal studies to assess the safety of the product for initial testing in humans and to establish a rationale for therapeutic use. The conduct of preclinical studies is subject to federal regulations and requirements, including GLP regulations. An IND sponsor must submit the results of the preclinical tests, together with manufacturing information, analytical data, any available clinical data or literature and plans for clinical studies,

among other things, to the FDA as part of an IND. Some long-term preclinical testing, such as animal tests of reproductive toxicology and carcinogenicity, may continue after the IND is submitted. An IND automatically becomes effective 30 days after receipt by the FDA, unless before that time the FDA raises concerns or questions related to one or more proposed clinical trials and places the trial on clinical hold. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. As a result, submission of an IND may not result in the FDA allowing clinical trials to commence.

Human Clinical Studies in Support of a BLA

Clinical trials involve the administration of the investigational biologic product to human subjects under the supervision of qualified investigators in accordance with GCP requirements, which include, among other things, the requirement that all research subjects provide their informed consent in writing before their participation in any clinical trial. Clinical trials are conducted under written study protocols detailing, among other things, the objectives of the study, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated. A protocol for each clinical trial and any subsequent protocol amendments must be submitted to the FDA as part of the IND. An IND automatically becomes effective 30 days after receipt by the FDA, unless before that time the FDA raises concerns or questions related to a proposed clinical trial and places the trial on clinical hold. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin.

In addition, an IRB representing each institution participating in the clinical trial must review and approve the plan for any clinical trial before it commences at that institution, and the IRB must conduct continuing review and reapprove the study at least annually. The IRB must review and approve, among other things, the study protocol and informed consent information to be provided to study subjects. An IRB must operate in compliance with the FDA regulations.

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

- Phase 1: The biologic product is initially introduced into healthy human subjects or patients with the target disease or condition and tested for safety, dosage tolerance, absorption, metabolism, distribution, excretion and, if possible, to gain an early indication of its effectiveness and to determine optimal dosage.
- Phase 2: The biologic product is administered to a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance and optimal dosage.
- Phase 3: The biologic product is administered to an expanded patient population, generally at geographically dispersed clinical trial sites, in well-controlled clinical trials to generate enough data to statistically evaluate the efficacy and safety of the product for approval, to establish the overall risk-benefit profile of the product, and to provide adequate information for the labeling of the product.

Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA and more frequently if serious adverse events occur. Phase 1, Phase 2 and Phase 3 clinical trials may not be completed successfully within any specified period, or at all. Furthermore, the FDA or the sponsor may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research subjects are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution, or an institution it represents, if the clinical trial is not being conducted in accordance with the IRB's requirements or if the biologic has been associated with unexpected serious harm to patients. The FDA will typically inspect one or more clinical sites to assure compliance with GCP and the integrity of the clinical data submitted.

Sponsors of clinical trials for investigational products must publicly disclose certain clinical trial information, including detailed trial design and trial results in public databases maintained by the National Institutes of Health, or NIH, at ClinicalTrials.gov. These requirements are subject to specific timelines and apply to most controlled clinical trials of FDA-regulated products.

Compliance with cGMP Requirements

Before approving a BLA, the FDA typically will inspect the facility or facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in full compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. The PHSA emphasizes the importance of manufacturing control for products like biologics whose attributes cannot be precisely defined.

Manufacturers and others involved in the manufacture and distribution of biologic products must also register their establishments with the FDA and certain state agencies. Both domestic and foreign manufacturing establishments must register and provide additional information to the FDA upon their initial participation in the manufacturing process. Any product manufactured by or imported from a facility that has not registered, whether foreign or domestic, is deemed misbranded under the FDCA. Establishments may be subject to periodic unannounced inspections by government authorities to ensure compliance with cGMPs and other laws. Inspections must follow a “risk-based schedule” that may result in certain establishments being inspected more frequently. Manufacturers may also have to provide, on request, electronic or physical records regarding their establishments. Delaying, denying, limiting, or refusing inspection by the FDA may lead to a biologic being deemed to be adulterated.

Submission of a BLA to the FDA

Assuming successful completion of required clinical testing and other requirements, the results of the preclinical and clinical studies, together with detailed information relating to the product’s chemistry, manufacture, controls and proposed labeling, among other things, are submitted to the FDA as part of a BLA requesting licensure of the biologic product for one or more indications. Under federal law, the submission of most BLAs is additionally subject to an application user fee, currently exceeding \$2.1 million, and the sponsor of an approved BLA is also subject to annual product and establishment user fees, currently exceeding \$104,000 per product and \$554,600 per establishment. These fees are typically increased annually.

The FDA conducts a preliminary review of a BLA within 60 days of its receipt and informs the sponsor by the 74th day after the FDA’s receipt of the submission to determine whether the application is sufficiently complete to permit substantive review. The FDA may request additional information rather than accept a BLA for filing. In this event, the application must be resubmitted with the additional information. The resubmitted application is also subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review. The FDA has agreed to specified performance goals in the review process of BLAs. Most such applications are meant to be reviewed within ten months from the date of filing, and most applications for “priority review” products are meant to be reviewed within six months of filing. The review process may be extended by the FDA for three additional months to consider new information or clarification provided by the applicant to address an outstanding deficiency identified by the FDA following the original submission.

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

FDA’s Decision on a BLA

Under the PHSA, the FDA may approve a BLA if it determines that the product is safe, pure and potent and the facility where the product will be manufactured meets standards designed to ensure that it continues to be safe, pure and potent.

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

If the FDA approves a new biologic product, it may limit the approved indications for use of the product. It may also require that contraindications, warnings or precautions be included in the product labeling. In addition, the FDA may call for post-approval studies, including Phase 4 clinical trials, to further assess the product's safety after approval. The agency may also require testing and surveillance programs to monitor the product after commercialization, or impose other conditions, including distribution restrictions or other risk management mechanisms, including REMS, to help ensure that the benefits of the biologic outweigh the potential risks. REMS can include medication guides, communication plans for healthcare professionals, and elements to assure safe use or ETASU. ETASU can include, but are not limited to, special training or certification for prescribing or dispensing, dispensing only under certain circumstances, special monitoring, and the use of patent registries. The FDA may prevent or limit further marketing of a product based on the results of post-market studies or surveillance programs. After approval, many types of changes to the approved product, such as adding new indications, manufacturing changes and additional labeling claims, are subject to further testing requirements and FDA review and approval.

Post-Approval Requirements

Biologics manufactured or distributed pursuant to FDA approvals are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to recordkeeping, periodic reporting, product sampling and distribution, advertising and promotion and reporting of adverse experiences with the product. After approval, most changes to the approved product, such as adding new indications or other labeling claims, are subject to prior FDA review and approval. There also are continuing, annual user fee requirements for any marketed products and the establishments at which such products are manufactured, as well as new application fees for supplemental applications with clinical data.

A biologic product may also be subject to official lot release, meaning that 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, the manufacturer must submit samples of each lot, 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, to the FDA. The FDA may in addition perform certain confirmatory tests on lots of some products before releasing the lots for distribution. Finally, the FDA will conduct laboratory research related to the safety, purity, potency, and effectiveness of biological products.

In addition, changes to the manufacturing process are strictly regulated and often require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting and documentation requirements upon the sponsor and any third-party manufacturers that the sponsor may decide to use. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP compliance.

The FDA may withdraw the license for a biologic if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with the manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the

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approved labeling to add new safety information; imposition of post-market studies or clinical trials to assess new safety risks; or imposition of distribution or other restrictions under a REMS program. Other potential consequences include, among other things:

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

The FDA strictly regulates marketing, labeling, advertising and promotion of products that are placed on the market. 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.

Biosimilars and Exclusivity

The 2010 Patient Protection and Affordable Care Act, which was signed into law on March 23, 2010, included a subtitle called the Biologics Price Competition and Innovation Act of 2009 or BPCIA. That Act established a regulatory scheme authorizing the FDA to approve biosimilars and interchangeable biosimilars. To date, no biosimilar or interchangeable biosimilar has been licensed under the BPCIA, although biosimilars have been approved in Europe. The FDA has issued several draft guidance documents outlining an approach to review and approval of biosimilars. Those guidances are expected to be finalized sometime in 2014.

Under the Act, a manufacturer may submit an application for licensure of a biologic product that is “biosimilar to” or “interchangeable with” a previously approved biological product or “reference product.” In order for the FDA to approve a biosimilar product, it must find that there are no clinically meaningful differences between the reference product and proposed biosimilar product in terms of safety, purity, and potency. For the FDA to approve a biosimilar product as interchangeable with a reference product, the agency must find that the biosimilar product can be expected to produce the same clinical results as the reference product, and (for products administered multiple times) that the biologic and the reference biologic may be switched after one has been previously administered without increasing safety risks or risks of diminished efficacy relative to exclusive use of the reference biologic.

Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date of approval of the reference product. The FDA may not approve a biosimilar product until 12 years from the date on which the reference product was approved. Even if a product is considered to be a reference product eligible for exclusivity, another company could market a competing version of that product if the FDA approves a full BLA for such 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.

Orphan Designation and Exclusivity

Under the Orphan Drug Act, the FDA may designate a biologic product as an “orphan drug” if it is intended to treat a rare disease or condition (generally meaning that it affects fewer than 200,000 individuals in the United

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States, or more in cases in which there is no reasonable expectation that the cost of developing and making a biologic product available in the United States for treatment of the disease or condition will be recovered from sales of the product). A company must request orphan product designation before submitting a BLA. If the request is granted, the FDA will disclose the identity of the therapeutic agent and its potential use. Orphan product designation does not convey any advantage in or shorten the duration of the regulatory review and approval process.

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

Pediatric Studies and Exclusivity

Under the Pediatric Research Equity Act of 2003, a BLA or supplement thereto must contain data that are adequate to assess the safety and effectiveness of the product for the claimed indications in all relevant pediatric subpopulations, and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. With enactment of the Food and Drug Administration Safety and Innovation Act, or FDASIA in 2012, sponsors must also submit pediatric study plans prior to the assessment data. Those plans must contain an outline of the proposed pediatric study or studies the applicant plans to conduct, including study objectives and design, any deferral or waiver requests, and other information required by regulation. The applicant, the FDA, and the FDA's internal review committee must then review the information submitted, consult with each other, and agree upon a final plan. The FDA or the applicant may request an amendment to the plan at any time.

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

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

Patent Term Restoration and Extension

A patent claiming a new biologic product may be eligible for a limited patent term extension under the Hatch-Waxman Act, which permits a patent restoration of up to five years for patent term lost during product development and the FDA regulatory review. The restoration period granted is typically one-half the time between the effective date of an IND and the submission date of a BLA, plus the time between the submission

date of a BLA and the ultimate approval date. Patent term restoration cannot be used to extend the remaining term of a patent past a total of 14 years from the product's approval date. Only one patent applicable to an approved product is eligible for the extension, and the application for the extension must be submitted prior to the expiration of the patent in question. A patent that covers multiple products for which approval is sought can only be extended in connection with one of the approvals. The United States Patent and Trademark Office reviews and approves the application for any patent term extension or restoration in consultation with the FDA.

Review and Approval of Biologics in the European Union

In order to market any product outside of the United States, a company must also comply with numerous and varying regulatory requirements of other countries and jurisdictions regarding quality, safety and efficacy and governing, among other things, clinical trials, marketing authorization, commercial sales and distribution of products. Whether or not it obtains FDA approval for a product, the company would need to obtain the necessary approvals by the comparable foreign regulatory authorities before it can commence clinical trials or marketing of the product in those countries or jurisdictions. The approval process ultimately varies between countries and jurisdictions and can involve additional product testing and additional administrative review periods. The time required to obtain approval in other countries and jurisdictions might differ from and be longer than that required to obtain FDA approval. Regulatory approval in one country or jurisdiction does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country or jurisdiction may negatively impact the regulatory process in others.

Pursuant to the European Clinical Trials Directive, a system for the approval of clinical trials in the European Union has been implemented through national legislation of the member states. Under this system, an applicant must obtain approval from the competent national authority of a European Union member state in which the clinical trial is to be conducted. Furthermore, the applicant may only start a clinical trial after a competent ethics committee has issued a favorable opinion. Clinical trial application must be accompanied by an investigational medicinal product dossier with supporting information prescribed by the European Clinical Trials Directive and corresponding national laws of the member states and further detailed in applicable guidance documents.

To obtain marketing approval of a product under European Union regulatory systems, an applicant must submit a marketing authorization application, or MAA, either under a centralized or decentralized procedure.

The centralized procedure provides for the grant of a single marketing authorization by the European Commission that is valid for all European Union member states. The centralized procedure is compulsory for specific products, including for medicines produced by certain biotechnological processes, products designated as orphan medicinal products, advanced therapy products and products with a new active substance indicated for the treatment of certain diseases. For products with a new active substance indicated for the treatment of other diseases and products that are highly innovative or for which a centralized process is in the interest of patients, the centralized procedure may be optional.

Under the centralized procedure, the Committee for Medicinal Products for Human Use, or the CHMP, established at the EMA is responsible for conducting the initial assessment of a product. The CHMP is also responsible for several post-authorization and maintenance activities, such as the assessment of modifications or extensions to an existing marketing authorization. Under the centralized procedure in the European Union, the maximum timeframe for the evaluation of an MAA is 210 days, excluding clock stops, when additional information or written or oral explanation is to be provided by the applicant in response to questions of the CHMP. Accelerated evaluation might be granted by the CHMP in exceptional cases, when a medicinal product is of major interest from the point of view of public health and in particular from the viewpoint of therapeutic innovation. In this circumstance, the EMA ensures that the opinion of the CHMP is given within 150 days.

The decentralized procedure is available to applicants who wish to market a product in various European Union member states where such product has not received marketing approval in any European Union member

states before. The decentralized procedure provides for approval by one or more other, or concerned, member states of an assessment of an application performed by one member state designated by the applicant, known as the reference member state. Under this procedure, an applicant submits an application based on identical dossiers and related materials, including a draft summary of product characteristics, and draft labeling and package leaflet, to the reference member state and concerned member states. The reference member state prepares a draft assessment report and drafts of the related materials within 210 days after receipt of a valid application. Within 90 days of receiving the reference member state's assessment report and related materials, each concerned member state must decide whether to approve the assessment report and related materials.

If a member state cannot approve the assessment report and related materials on the grounds of potential serious risk to public health, the disputed points are subject to a dispute resolution mechanism and may eventually be referred to the European Commission, whose decision is binding on all member states.

Data and Market Exclusivity in the European Union

In the European Union, new chemical entities qualify for eight years of data exclusivity upon marketing authorization and an additional two years of market exclusivity. This data exclusivity, if granted, prevents regulatory authorities in the European Union from referencing the innovator's data to assess a generic (abbreviated) application for eight years, after which generic marketing authorization can be submitted, and the innovator's data may be referenced, but not approved for two years. The overall ten-year period will 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. Even if a compound is considered to be a new chemical entity and the sponsor is able to gain the prescribed period of data exclusivity, another company nevertheless could also market another version of the product if such company can complete a full MAA with a complete database of pharmaceutical test, preclinical tests and clinical trials and obtain marketing approval of its product.

Pharmaceutical Coverage, Pricing and Reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of any product candidates for which we may receive regulatory approval by the FDA and other government authorities. In the United States and in other countries, sales of any products for which we receive regulatory approval for commercial sales will depend, in part, on the availability of coverage and adequate reimbursement from third-party payors, including government health programs in the United States such as Medicare and Medicaid, commercial health insurers and managed care organizations. The process for determining whether a payor will provide coverage for a product may be separate from the process for setting the price or reimbursement rate that the payor will pay for the product once coverage is approved. Third-party payors may limit coverage to specific products on an approved list, or formulary, which might not include all of the approved products for a particular indication.

In order to secure coverage and reimbursement for any product that might be approved for sale, a company may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of the product, in addition to the costs required to obtain FDA or other comparable regulatory approvals. A payor's decision to provide coverage for a product does not imply that an adequate reimbursement rate will be approved. Third-party reimbursement may not be sufficient to maintain price levels high enough to realize an appropriate return on investment in product development.

The containment of healthcare costs has become a priority of federal and state and foreign governments, and the prices of pharmaceuticals have been a focus in this effort. Third-party payors are increasingly challenging the prices charged for medical products and services and examining the medical necessity and cost-effectiveness of medical products and services, in addition to their safety and efficacy. If these third-party payors do not consider a product to be cost-effective compared to other available therapies, they may not cover the product after

approval as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow a company to sell its products at a profit. The federal government, state legislatures and foreign governments have shown significant interest in implementing cost containment programs to limit the growth of government-paid healthcare costs, including price controls, restrictions on reimbursement and requirements for substitution of generic products for branded prescription products. Adoption of such controls and measures, and tightening of restrictive policies in jurisdictions with existing controls and measures, could limit payments for pharmaceuticals.

As a result, the marketability of any of our product candidates that receive regulatory approval for commercial sale may suffer if the government or other third-party payors fail to provide coverage and adequate reimbursement. In addition, an increasing emphasis on managed care in the United States has increased and will likely continue to increase the pressure on product pricing. Coverage policies, third-party reimbursement rates and product pricing regulation may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products that receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

In the European Union and other foreign countries, pricing and reimbursement schemes vary widely from country to country. Some countries provide that products may be marketed only after a reimbursement price has been agreed upon. Some countries may require the completion of additional studies that compare the cost-effectiveness of a particular biologic candidate to currently available therapies. For example, the European Union provides options for its member states to restrict the range of products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. European Union member states may approve a specific price for a product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the product on the market. Other member states allow companies to fix their own prices for products, but monitor and control company profits. In addition, in some countries, cross-border imports from low-priced markets exert competitive pressure that may reduce pricing within a country. Price controls or reimbursement limitations for pharmaceuticals in foreign countries may not allow for favorable reimbursement and pricing arrangements for any of our product candidates that may be approved for sale.

Federal and State Fraud and Abuse and Data Privacy and Security Laws and Regulations

In addition to FDA restrictions on marketing of pharmaceutical products, federal and state fraud and abuse laws restrict business practices in the pharmaceutical industry. These laws include anti-kickback and false claims laws and regulations as well as data privacy and security laws and regulations. The federal Anti-Kickback Statute prohibits, among other things, knowingly and willfully offering, paying, soliciting or receiving remuneration 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 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 exemptions and regulatory safe harbors protecting some common activities from prosecution, the exemptions 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 qualify for an exemption or safe harbor. 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.

The reach of the Anti-Kickback Statute was also broadened by the Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act of 2010, or collectively PPACA, which, among other things, amended the intent requirement of the federal Anti-Kickback Statute such that a person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it in order to have committed a violation. In addition, PPACA 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 civil False Claims Act or the civil monetary penalties statute, which 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. PPACA also created new federal requirements for reporting, by applicable manufacturers of covered drugs, payments and other transfers of value to physicians and teaching hospitals.

The federal False Claims Act prohibits any person from knowingly presenting, or causing to be presented, a false claim for payment to 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. 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, and thus non-reimbursable, uses. The federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, created new federal criminal statutes that prohibit knowingly and willfully executing a scheme to defraud any healthcare benefit program, including private third-party payors, 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. Also, many states 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.

In addition, we may 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 and Clinical Health Act, or HITECH, and their respective implementing regulations, including the final omnibus rule published on January 25, 2013, imposes specified requirements relating to the privacy, security and transmission of individually identifiable health information. Among other things, HITECH and the omnibus rule make 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 effect, thus complicating compliance efforts.

Because of the breadth of these laws and the narrowness of available statutory and regulatory exemptions, it is possible that some of our business activities could be subject to challenge under one or more of such laws. If our operations are found to be in violation of any of the federal and state laws described above or any other governmental regulations that apply to us, we may be subject to significant civil, criminal, and administrative penalties, including, without limitation, damages, fines, imprisonment, exclusion from participation in government healthcare programs, and the curtailment or restructuring of our operations. To the extent that any of our product candidates receive approval and are sold in a foreign country, we may be subject to 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 transfers of value to healthcare professionals.

Impact of Healthcare Reform on Coverage, Reimbursement, and Pricing

In the United States and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of our product candidates, restrict or regulate post-approval activities and/or affect our ability to profitably sell any product candidates for which we obtain marketing approval.

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In the United States, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, or the MMA, established the Medicare Part D program and provided authority for limiting the number of drugs that will be covered in any therapeutic class thereunder. The MMA, including, without limitation, its cost reduction initiatives, could limit the coverage of and reduce the reimbursement rate that we receive for any of our approved products. Furthermore, private payors often follow Medicare coverage policies and payment limitations in setting their own reimbursement rates. Therefore, any reduction in reimbursement that results from the MMA may result in a similar reduction in payments from private payors.

PPACA, among other things, imposes a significant annual fee on companies that manufacture or import branded prescription drug products. It also contains substantial new provisions intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against healthcare fraud and abuse, add new transparency requirements for the healthcare industry, impose new taxes and fees on pharmaceutical manufacturers, and impose additional health policy reforms, any or all of which may affect our business. A significant number of provisions are not yet, or have only recently become, effective, but PPACA is likely to continue the downward pressure on pharmaceutical pricing, especially under the Medicare program, and may also increase our regulatory burdens and operating costs.

Other legislative changes have also been proposed and adopted since PPACA was enacted. For example, the Budget Control Act of 2011 resulted in aggregate reductions in Medicare payments to providers of up to 2% per fiscal year, starting in 2013, and the American Taxpayer Relief Act of 2012, among other things, reduced Medicare payments to several types of providers and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These new laws may result in additional reductions in Medicare and other healthcare funding.

We expect that PPACA, as well as other healthcare reform measures that have been and may be adopted in the future, may result in more rigorous coverage criteria and in additional downward pressure on the price that we receive for any approved product. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability or commercialize our products.

Legal proceedings

We are not currently subject to any material legal proceedings.

Employees

As of December 6, 2013, we had 14 full-time employees, including a total of eight with M.D. or Ph.D. degrees. Of these full-time employees, 10 employees are engaged in research and development activities and four employees are engaged in finance, legal, human resources, facilities and general management. None of our employees are represented by labor unions or covered by collective bargaining agreements. We consider our relations with our employees to be good.

Facilities

Our sole facility currently consists of approximately 17,500 square feet of office and laboratory space in Cambridge, Massachusetts that we occupy under a lease that expires on January 31, 2016. Under the terms of our lease agreement, the square footage of this space is expected to decrease from 17,500 to 11,022 in February 2014.

MANAGEMENT

The following table sets forth the name, age as of December 6, 2013 and position of each of our executive officers and directors.

<u>Name</u>	<u>Age</u>	<u>Position</u>
Abbie C. Celniker, Ph.D.	54	President and Chief Executive Officer and Director
Eric S. Furfine, Ph.D.	54	Chief Scientific Officer
Karen L. Tubridy, Pharm.D.	51	Chief Development Officer
John J. McCabe, C.P.A.	46	Vice President, Finance and Business Operations, Treasurer and Secretary
Noubar B. Afeyan, Ph.D.	51	Director
David A. Berry, M.D., Ph.D.	35	Director
Kenji Harada, Ph.D.	53	Director
Mark J. Levin	63	Director
Cary G. Pfeffer, M.D.	51	Director
Jane V. Henderson	48	Director

- (1) Member of the Audit Committee.
- (2) Member of the Compensation Committee.
- (3) Member of the Nominating and Corporate Governance Committee.

Abbie C. Celniker, Ph.D. has served as our President and Chief Executive Officer and as a member of our board of directors since September 2011. Prior to joining Eleven Biotherapeutics, Dr. Celniker served as the Executive Vice President, Translational Medicine of Alexion Pharmaceuticals, Inc., a biopharmaceutical company, from January 2011 to August 2011. Prior to joining Alexion Pharmaceuticals, Dr. Celniker served as the President and Chief Executive Officer and as a member of the board of directors of Taligen Therapeutics, Inc., a biotechnology company, from July 2008 to January 2011, when Taligen Therapeutics was acquired by Alexion Pharmaceuticals. Previously, Dr. Celniker served as the Global Head of Biologics of Novartis AG, the Senior Vice President of Research and Development Strategy and Operations of Millennium Pharmaceuticals, Inc. and the Vice President Protein Technologies of the Wyeth Research facilities in Cambridge, Massachusetts. Dr. Celniker received a B.A. in Biology from the University of California, San Diego, and a Ph.D. in Molecular Biology from the University of Arizona. We believe that Dr. Celniker is qualified to serve on our board of directors because of her extensive executive leadership experience in the life sciences industry and her extensive knowledge of our company based on her position as President and Chief Executive Officer.

Eric S. Furfine, Ph.D. has served as our Chief Scientific Officer since June 2013 and served as our President of Research and Development from December 2010 to June 2013. Prior to joining Eleven Biotherapeutics, Dr. Furfine served as the Senior Vice President of Research and Preclinical Development of Adnexus Therapeutics, Inc., a Bristol-Myers Squibb research and development company, from August 2006 to December 2010. Previously, Dr. Furfine served as the Vice President of Preclinical Development of Regeneron Pharmaceuticals, Inc., and in various senior level research positions at GlaxoSmithKline plc. Dr. Furfine received an A.B. from Washington University in St. Louis and a Ph.D. in Biochemistry from Brandeis University.

Karen L. Tubridy, Pharm.D. has served as our Chief Development Officer since June 2013. Prior to joining Eleven Biotherapeutics, Ms. Tubridy served as the Senior Vice President, Clinical Development and Medical Affairs of Inspiration Biopharmaceuticals, Inc., a biopharmaceutical company, from December 2011 to March 2013. Inspiration Biopharmaceuticals filed a bankruptcy petition under Chapter 11 of the U.S. Bankruptcy Code in October 2012. Prior to joining Inspiration Biopharmaceuticals, Ms. Tubridy served as the Executive Director, Clinical Operations and Regulatory Affairs, Translational Medicine of Alexion Pharmaceuticals from January 2011 to November 2011, when Taligen Therapeutics was acquired by Alexion Pharmaceuticals, and as Vice President of Clinical Operations and Regulatory Affairs of Taligen Therapeutics from April 2010 to January 2011. Prior to that, Ms. Tubridy served as Vice President of Clinical Operations Hemophilia of Biogen Idec, a

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biotechnology company, from January 2007 through March 2010. Ms. Tubridy received a B.S. and a Pharm.D. from the Massachusetts College of Pharmacy and Allied Health Sciences.

John J. McCabe, C.P.A. has served as our Vice President of Finance and Business Operations since June 2013, as our treasurer since September 2012 and as our secretary since October 2013, and served as our Senior Director of Finance from April 2012 to June 2013. Prior to joining Eleven Biotherapeutics, Mr. McCabe provided independent financial and accounting consulting services from June 2011 to April 2012. Prior to that, Mr. McCabe served as the Vice President of Finance of Clinical Data, Inc., a biotechnology company, from December 2010 to June 2011 and as the Senior Director of Financial Reporting of Clinical Data from August 2007 to December 2010. Mr. McCabe received a B.S. from the University of Vermont and is a certified public accountant.

Noubar B. Afeyan, Ph.D. has served as a member of our board of directors since February 2008. Since 1999, Dr. Afeyan has served as the Managing Partner and Chief Executive Officer of Flagship Ventures, an early stage venture capital firm that he co-founded. Dr. Afeyan has served on the board of directors of BG Medicine, Inc. since 2000 and on the board of directors of BIND Therapeutics, Inc. since 2007. Dr. Afeyan received a B.S. in chemical engineering from McGill University and a Ph.D. in biochemical engineering from the Massachusetts Institute of Technology. We believe that Dr. Afeyan is qualified to serve on our board of directors because of his extensive experience as an entrepreneur and venture capital investor in the life sciences industry and his service on the boards of directors of other life sciences companies.

David A. Berry, M.D., Ph.D. has served as a member of our board of directors since August 2009. Dr. Berry has been with Flagship Ventures since 2005, where he has served as a Partner since 2008. Dr. Berry received a B.S. from the Massachusetts Institute of Technology, a M.D. from Harvard Medical School and a Ph.D. from the Massachusetts Institute of Technology. We believe that Dr. Berry is qualified to serve on our board of directors because of his extensive experience as a venture capital investor in the life sciences industry and his service on the boards of directors of other life sciences companies.

Kenji Harada, Ph.D. has served as a member of our board of directors since May 2012. Since 2004, Dr. Harada has served as the Senior Manager and Principal of JAFCO Co. Ltd., a venture capital firm. Dr. Harada received a B.S. and a M.S. from the University of Tokyo and a Ph.D. in pharmacology from the University of Tokyo. We believe that Dr. Harada is qualified to serve on our board of directors because of his extensive experience as a venture capital investor in the life sciences industry and his service on the boards of directors of other life sciences companies.

Mark J. Levin has served as a member of our board of directors since September 2008. Since 2007, Mr. Levin has served as a partner of Third Rock Ventures, an early stage life sciences venture capital firm that he co-founded. While at Third Rock Ventures, Mr. Levin also served as our President and Chief Executive Officer from August 2009 to September 2011. Mr. Levin has served on the board of directors of Foundation Medicines, Inc. since 2010. Mr. Levin received a B.S. and M.S., each in Chemical and Biomedical Engineering, from Washington University. We believe Mr. Levin is qualified to serve on our board of directors because of his extensive experience as a venture capital investor in the life sciences industry, his service on the boards of directors of other life sciences companies, his prior service as our Chief Executive Officer and his extensive executive leadership experience at other life science companies for over 20 years.

Cary G. Pfeffer, M.D. has served as a member of our board of directors since August 2009. Since 2007, Dr. Pfeffer has served as a Partner of Third Rock Ventures. While at Third Rock Ventures, Dr. Pfeffer also served as our Chief Business Officer from February 2010 to September 2011. Dr. Pfeffer received a B.A. in Biochemistry from Columbia University, a M.B.A. from the Wharton School and a M.D. from the University of Pennsylvania School of Medicine. We believe that Dr. Pfeffer is qualified to serve on our board of directors because of his extensive experience as a venture capital investor in the life sciences industry, his service on the boards of directors of other life sciences companies, his prior service as our Chief Business Officer and his extensive executive leadership experience at other life science companies for over 10 years.

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Jane V. Henderson has served as a member of our board of directors since October 2013. Since February 2013, Ms. Henderson has served as the Senior Vice President, Chief Business Officer of Kolltan Pharmaceuticals, Inc., a biopharmaceutical company. Prior to joining Kolltan Pharmaceuticals, Ms. Henderson served as the Vice President, Business Development of ISTA Pharmaceuticals, Inc., an eye care company, from June 2010 to June 2012, when ISTA Pharmaceuticals was acquired by Bausch + Lomb Incorporated. Prior to joining ISTA Pharmaceuticals, Ms. Henderson served as the Executive Vice President, Chief Financial Officer and Head of Business Development, Business Development of Axerion Pharmaceuticals, Inc., a pharmaceutical company, from September 2009 to June 2010, provided independent consulting services from February 2009 to September 2009 and served as the Executive Vice President, Chief Financial Officer and Chief Business Officer of Panacos Pharmaceuticals, Inc., a pharmaceutical company, from January 2008 to February 2009. Prior to that, Ms. Henderson served in a variety of senior investment banking roles at HSBC Holdings plc, Canadian Imperial Bank of Commerce, Lehman Brothers and Salomon Brothers. Ms. Henderson received a B.S. in Psychology from Duke University. We believe that Ms. Henderson is qualified to serve on our board of directors because of her extensive executive leadership experience in and knowledge of the life sciences industry and her extensive finance background as an investment banker for over 19 years.

Board Composition and Election of Directors

Board Composition

Our board of directors is currently authorized to have and currently consists of seven members. Our directors hold office until their successors have been elected and qualified or until the earlier of their resignation or removal.

Our certificate of incorporation and bylaws that will become effective upon the closing of this offering provide that the authorized number of directors may be changed only by resolution of our board of directors. Our certificate of incorporation and bylaws will also provide that our directors may be removed only for cause by the affirmative vote of the holders of 75% of our shares of capital stock present in person or by proxy and entitled to vote, and that any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, may be filled only by vote of a majority of our directors then in office.

In accordance with the terms of our certificate of incorporation and bylaws that will become effective upon the closing of this offering, our board of directors will be divided into three classes, class I, class II and class III, with members of each class serving staggered three-year terms. Upon the closing of this offering, the members of the classes will be divided as follows:

- the class I directors will be _____ and _____, and their term will expire at the annual meeting of stockholders to be held in _____;
- the class II directors will be _____ and _____, and their term will expire at the annual meeting of stockholders to be held in _____; and
- the class III directors will be _____, _____ and _____ their term will expire at the annual meeting of stockholders to be held in _____.

Upon the expiration of the term of a class of directors, directors in that class will be eligible to be elected for a new three-year term at the annual meeting of stockholders in the year in which their term expires.

Director Independence

Applicable NASDAQ rules require a majority of a listed company's board of directors to be comprised of independent directors within one year of listing. In addition, the NASDAQ rules require that, subject to specified exceptions, each member of a listed company's audit, compensation and nominating and corporate governance committees be independent and that audit committee members also satisfy independence criteria set forth in Rule 10A-3 under the Securities Exchange Act of 1934, as amended, or the Exchange Act. Under applicable

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NASDAQ rules, a director will only qualify as an “independent director” if, in the opinion of the listed company’s board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In order to be considered independent for purposes of Rule 10A-3, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors, or any other board committee, accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries or otherwise be an affiliated person of the listed company or any of its subsidiaries.

In 2013, our board of directors undertook a review of the composition of our board of directors and its committees and the independence of each director. Based upon information requested from and provided by each director concerning his or her background, employment and affiliations, including family relationships, our board of directors has determined that each of our directors, with the exception of Dr. Celniker, Mr. Levin and Dr. Pfeffer, is an “independent director” as defined under applicable NASDAQ rules. In making such determination, our board of directors considered the relationships that each such non-employee director has with our company and all other facts and circumstances that our board of directors deemed relevant in determining his or her independence, including the beneficial ownership of our capital stock by each non-employee director. Dr. Celniker is not an independent director under these rules because she is our President and Chief Executive Officer. Mr. Levin is not an independent director under these rules because he served as our President and Chief Executive Officer from August 2009 to September 2011. Dr. Pfeffer is not an independent director under these rules because he served as our Chief Business Officer from February 2010 to September 2011. In addition, each of Mr. Levin and Dr. Pfeffer is not an independent director as a result of a consulting arrangement that we had with Third Rock Ventures, LLC, or TRV LLC, which was terminated in September 2011.

There are no family relationships among any of our directors or executive officers.

Board Committees

Our board of directors has established an audit committee, a compensation committee and a nominating and corporate governance committee. The composition of each committee will be effective as of the date of this prospectus.

Audit Committee

The members of our audit committee are _____, _____ and _____. _____ is the chair of the audit committee. Our audit committee’s responsibilities will include:

- appointing, approving the compensation of, and assessing the independence of our registered public accounting firm;
- overseeing the work of our independent registered public accounting firm, including through the receipt and consideration of reports from that firm;
- reviewing and discussing with management and our independent registered public accounting firm our annual and quarterly financial statements and related disclosures;
- monitoring our internal control over financial reporting, disclosure controls and procedures and code of business conduct and ethics;
- overseeing our internal audit function;
- overseeing our risk assessment and risk management policies;
- establishing policies regarding hiring employees from our independent registered public accounting firm and procedures for the receipt and retention of accounting related complaints and concerns;
- meeting independently with our internal auditing staff, if any, our independent registered public accounting firm and management;

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- reviewing and approving or ratifying any related person transactions; and
- preparing the audit committee report required by Securities and Exchange Commission, or SEC, rules.

All audit and non-audit services, other than *de minimis* non-audit services, to be provided to us by our independent registered public accounting firm must be approved in advance by our audit committee.

Our board of directors has determined that _____ is an “audit committee financial expert” as defined in applicable SEC rules. We believe that the composition of our audit committee will meet the requirements for independence under current NASDAQ and SEC rules and regulations.

Compensation Committee

The members of our compensation committee are _____, _____ and _____. _____ is the chair of the compensation committee. Our compensation committee’s responsibilities will include:

- reviewing and approving, or making recommendations to our board of directors with respect to, the compensation of our chief executive officer and our other executive officers;
- overseeing an evaluation of our senior executives;
- overseeing and administering our cash and equity incentive plans;
- reviewing and making recommendations to our board of directors with respect to director compensation;
- reviewing and discussing annually with management our “Compensation Discussion and Analysis” disclosure if and to the extent then required by SEC rules; and
- preparing the compensation committee report if and to the extent then required by SEC rules.

We believe that the composition of our compensation committee will meet the requirements for independence under current NASDAQ and SEC rules and regulations.

Nominating and Corporate Governance Committee

The members of our nominating and corporate governance committee are _____, _____ and _____. _____ is the chair of the nominating and corporate governance committee. Our nominating and corporate governance committee’s responsibilities will include:

- identifying individuals qualified to become members of our board of directors;
- recommending to our board of directors the persons to be nominated for election as directors and to each of our board’s committees;
- reviewing and making recommendations to our board with respect to our board leadership structure;
- reviewing and making recommendations to our board with respect to management succession planning;
- developing and recommending to our board of directors corporate governance principles; and
- overseeing an annual evaluation of our board of directors.

We believe that the composition of our nominating and corporate governance committee will meet the requirements for independence under current NASDAQ and SEC rules and regulations.

Compensation Committee Interlocks and Insider Participation

None of our executive officers serves as a member of the board of directors or compensation committee, or other committee serving an equivalent function, of any other entity that has one or more of its executive officers serving as a member of our board of directors or our compensation committee. None of the members of our compensation committee is, or has ever been, an officer or employee of our company.

EXECUTIVE COMPENSATION

This section describes the material elements of compensation awarded to, earned by or paid to each of our named executive officers in 2013. Our named executive officers for 2013 are Abbie C. Celniker, Ph.D., our President and Chief Executive Officer, Eric S. Furfine, Ph.D., our Chief Scientific Officer and Karen L. Tubridy, Pharm.D. our Chief Development Officer. This section also provides qualitative information regarding the manner and context in which compensation is awarded to and earned by our executive officers and is intended to place in perspective the data presented in the tables and narrative that follow.

Summary Compensation Table

The following table sets forth information regarding compensation awarded to, earned by or paid to each of our named executive officers for the year ended December 31, 2013.

<u>Name and Principal Position</u>	<u>Year</u>	<u>Salary (\$)</u>	<u>Bonus \$(1)</u>	<u>Option awards \$(2)</u>	<u>All other compensation (\$)</u>	<u>Total (\$)</u>
Abbie C. Celniker, Ph.D. President and Chief Executive Officer	2013	375,000	—	273,372	—	648,372
Eric S. Furfine, Ph.D. Chief Scientific Officer	2013	309,000	—	91,876	—	400,876
Karen L. Tubridy, Pharm.D. Chief Development Officer	2013	158,654(3)	7,500(4)	364,808	—	530,962

- (1) Our compensation committee has not yet determined the amounts of discretionary annual cash bonuses payable to our executive officers for 2013. Discretionary annual cash bonuses, if any, for 2013 will be determined by our compensation committee during the first quarter of 2014.
- (2) The amounts reported in the "Option awards" column reflect the aggregate fair value of stock-based compensation awarded during the year computed in accordance with the provisions of Financial Accounting Standards Board Accounting Standard Codification, or ASC, Topic 718. See Note 11 to our financial statements appearing at the end of this prospectus regarding assumptions underlying the valuation of equity awards.
- (3) Ms. Tubridy joined our company on June 3, 2013. Ms. Tubridy's annual base salary is \$275,000.
- (4) The bonus amount for Ms. Tubridy represents the first installment of a signing bonus that was paid in 2013 upon the commencement of her employment with us. Ms. Tubridy is eligible to receive the second installment of her signing bonus in the amount of \$7,500 upon the one-year anniversary of the commencement of her employment with us.

Narrative to Summary Compensation Table

In 2013, we paid annual base salaries of \$375,000 to Dr. Celniker, \$309,000 to Dr. Furfine and \$275,000 to Ms. Tubridy. Base salaries are used to recognize the experience, skills, knowledge and responsibilities required of all our employees, including our named executive officers. None of our named executive officers is currently party to an employment agreement or other agreement or arrangement that provides for automatic or scheduled increases in base salary.

We do not have a formal performance-based bonus plan. From time to time, our board of directors has approved discretionary annual cash bonuses to our named executive officers with respect to their prior year performance. During the first quarter of 2013, we paid discretionary annual cash bonuses of \$25,875 to Dr. Celniker and \$20,700 to Dr. Furfine for their 2012 performance. Discretionary annual cash bonuses, if any, for 2013 will be determined by our compensation committee during the first quarter of 2014. In 2013, we paid Ms. Tubridy the first installment of a signing bonus in the amount of \$7,500 upon the commencement of her employment with us. Ms. Tubridy is eligible to receive the second installment of her signing bonus in the amount of \$7,500 upon the one-year anniversary of the commencement of her employment with us.

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Although we do not have a formal policy with respect to the grant of equity incentive awards to our executive officers, or any formal equity ownership guidelines applicable to them, we believe that equity grants provide our executives with a strong link to our long-term performance, create an ownership culture and help to align the interests of our executives and our stockholders. In addition, we believe that equity grants with a time-based vesting feature promote executive retention because this feature incents our executive officers to remain in our employment during the vesting period. Accordingly, our board of directors periodically reviews the equity incentive compensation of our named executive officers and from time to time may grant equity incentive awards to them in the form of stock options. In 2013, based upon our overall performance, we granted to Dr. Celniker options to purchase 875,000 shares of our common stock, to Dr. Furfine options to purchase 300,000 shares of our common stock and to Ms. Tubridy options to purchase 545,000 shares of our common stock.

Outstanding Option Awards at December 31, 2013

The following table sets forth information regarding all outstanding stock options and restricted stock held by each of our named executive officers as of December 31, 2013.

Name	Option Awards				Stock Awards	
	Number of securities underlying unexercised options (#) exercisable	Number of securities underlying unexercised options (#) unexercisable	Option exercise price (\$)	Option expiration date	Number of shares of stock that have not vested (#)	Market value of shares that have not vested (\$)
Abbie C. Celniker, Ph.D.	107,812	467,188(1)	0.13	3/14/2023	984,375(2)	
	—	300,000(1)	1.16	10/30/2023		
Eric S. Furfine, Ph.D.	562,500	187,500(3)	0.01	2/16/2021	—	—
	37,500	162,500(3)	0.13	2/13/2023		
	—	100,000(3)	1.16	10/30/2023		
Karen L. Tubridy, Pharm.D.	—	470,000(4)	0.98	8/14/2023	—	—
	—	75,000(4)	1.16	10/30/2023		

- (1) Dr. Celniker's option to purchase 575,000 shares of common stock vests over four years, with 6.25% of the shares underlying the option vesting quarterly after January 1, 2013. Dr. Celniker's option to purchase 300,000 shares of common stock vests over four years in equal quarterly installments, with the first installment vesting on January 1, 2014.
- (2) Dr. Celniker's shares of restricted stock vest over four years, with 25% of the shares vested on September 12, 2012 and 6.25% of the shares vesting quarterly thereafter.
- (3) Dr. Furfine's option to purchase 750,000 shares of common stock vests over four years, with 25% of the shares underlying the option vested on December 20, 2011 and 6.25% of the shares underlying the option vesting quarterly thereafter. Dr. Furfine's option to purchase 200,000 shares of common stock vest over four years, with 6.25% of the shares underlying the option vesting quarterly after January 1, 2013. Dr. Furfine's option to purchase 100,000 shares of common stock vests over four years in equal quarterly installments, with the first installment vesting on January 1, 2014.
- (4) Ms. Tubridy's option to purchase 470,000 shares of common stock vests over four years, with 25% of the shares underlying the option vesting on June 3, 2014 and 6.25% of the shares underlying the option vesting quarterly thereafter. Ms. Tubridy's option to purchase 75,000 shares of common stock vests over four years in equal quarterly installments, with the first installment vesting on January 1, 2014.

Equity Incentive Plans

2009 Stock Incentive Plan

Our 2009 Stock Incentive Plan, or 2009 Plan, is administered by our board of directors and provides for the grant of incentive stock options within the meaning of Section 422 of the U.S. Internal Revenue Code of 1986, as amended, or the Code, non-statutory stock options and restricted stock. Our employees, officers, directors, consultants and advisors are eligible to receive awards under our 2009 Plan. However, incentive stock options may only be granted to our employees. The terms of awards are set forth in the applicable award agreements. Our

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board of directors may amend, suspend or terminate our 2009 Plan at any time. Awards under our 2009 Plan are subject to adjustment in the event of certain corporate transactions affecting our common stock such as reorganizations, recapitalization, stock splits or similar transactions.

Upon a change in control transaction (as defined in our 2009 Plan), our board of directors, may, in its sole discretion, take any one or more of the following actions pursuant to the 2009 Plan, as to some or all outstanding options:

- provide that all outstanding options will be assumed, or substantially equivalent options shall be substituted, by the acquiring or successor corporation or an affiliate thereof;
- upon written notice to a participant, provide that the participant's unexercised options will terminate immediately prior to the consummation of the transaction unless exercised by the participant;
- make or provide for a cash payment to an optionee equal to the difference between (1) the fair market value of the per share consideration (whether cash, securities or other property or any combination of the above) the holder of a share of common stock will receive upon consummation of the Change in Control Transaction, or the Per Share Transaction Price, times the number of shares of common stock subject to outstanding vested options (to the extent then exercisable at prices not equal to or in excess of the Per Share Transaction Price) and (2) the aggregate exercise price of such outstanding vested options, in exchange for the termination of such options; and
- provide that all or any outstanding options shall become exercisable immediately prior to such event.

Upon the occurrence of a change in control transaction, our board of directors, may, in its sole discretion, take any one or more of the following actions pursuant to the 2009 Plan, as to some or all outstanding restricted stock awards:

- upon written notice to a grantee, provide that all unvested shares of restricted stock held by the grantee shall be repurchased at cost immediately prior to the consummation of the transaction; and
- provide that all or any outstanding restricted stock awards shall vest in part or in full immediately prior to such event.

In the case of a business combination or other reorganization event, any securities, cash or other property received in exchange for shares of restricted stock shall continue to be governed by the provisions of any restricted stock agreement pursuant to which they were issued including any provision regarding vesting, and such securities, cash or other property may be held in escrow on such terms as the board of directors may direct, to insure compliance with the terms of any such restricted stock agreement. At any time, our board of directors may, in its sole discretion, accelerate the date or dates on which any award under the 2009 Plan may be exercised or extend the period or periods of time during which any award may be exercised.

As of December 6, 2013, under our 2009 Plan, there were options to purchase an aggregate of 7,450,610 shares of common stock outstanding at a weighted average exercise price of \$0.30 per share, and we had granted 3,737,500 shares of restricted stock, of which 758,959 shares of restricted stock were repurchased by us, and all but 1,126,667 shares were vested as of December 6, 2013. There were 1,135,569 shares remaining and available for issuance under the 2009 Plan as of that date. Upon the closing of this offering, we will grant no further stock options or other awards under our 2009 Plan. However, any shares of common stock subject to awards under our 2009 Plan that expire, terminate, or are otherwise surrendered, canceled, forfeited or repurchased without having been fully exercised or resulting in any common stock being issued will become available for issuance under our 2014 Stock Incentive Plan, or the 2014 Plan, up to a specified number of shares.

2014 Stock Incentive Plan

We expect our board of directors to adopt and our stockholders to approve the 2014 Stock Incentive Plan, or 2014 Plan, which will become effective immediately prior to the closing of this offering. The 2014 Plan will be administered by our board of directors or by a committee appointed by our board of directors. The 2014 Plan provides for the grant of incentive stock options, nonstatutory stock options, restricted stock awards, restricted stock units, stock appreciation rights and other stock-based awards. Upon effectiveness of the 2014 Plan, the number of shares of our common stock that will be reserved for issuance under the 2014 Plan will be the sum of (1) _____ shares, plus the number of shares (up to _____ shares) equal to the sum of the number of shares reserved for issuance under the 2009 Plan that remain available for future issuance as of the closing of this offering and the number of shares of our common stock subject to outstanding awards under our 2009 Plan that expire, terminate or are otherwise surrendered, cancelled, forfeited or repurchased without having been fully exercised or resulting in any common stock being issued, plus (2) an annual increase, to be added on the first day of each fiscal year, equal to the lowest of _____ shares of our common stock, _____ % of the number of shares of our common stock outstanding on the first day of the applicable fiscal year and an amount determined by our board of directors.

Our employees, officers, directors, consultants and advisors will be eligible to receive awards under the 2014 Plan. However, incentive stock options may only be granted to our employees. The maximum number of shares of common stock with respect to which awards may be granted to any participant under the 2014 Plan is per calendar year. For purposes of this limit on the maximum number of shares that may be awarded to any participant, the combination of an option in tandem with a stock appreciation right will be treated as a single award.

Subject to any limitation in the 2014 Plan, our board of directors or any committee or officer to which our board of directors has delegated authority will select the recipients of awards and determine:

- the number of shares of common stock covered by options and stock appreciation rights and the dates upon which those awards become exercisable;
- the type of options to be granted;
- the exercise price of options and measurement price of stock appreciation rights, neither of which may be less than 100% of the fair market value of our common stock on the grant date;
- the duration of options and stock appreciation rights which may not be in excess of ten years;
- the methods of payment of the exercise price of options; and
- the number of shares of common stock subject to any restricted stock awards, restricted stock units or other stock-based awards and the terms and conditions of such awards, including the issue price, conditions for repurchase, repurchase price and performance conditions, if any.

If our board of directors delegates authority to an executive officer to grant awards other than restricted stock under the 2014 Plan, the executive officer will have the power to make awards to all of our employees, other than executive officers. Our board of directors will fix the terms of the awards to be granted by such executive officer, including the exercise price of such awards, and the maximum number of shares subject to awards that such executive officer may make.

Upon a merger or other reorganization event, our board of directors, may, in its sole discretion, take any one or more of the following actions pursuant to the 2014 Plan, as to some or all outstanding awards, other than restricted stock:

- provide that all outstanding awards will be assumed, or substantially equivalent awards shall be substituted, by the acquiring or successor corporation or an affiliate thereof;
- upon written notice to a participant, provide that the participant's unexercised options or awards will terminate immediately prior to the consummation of such transaction unless exercised by the participant;

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- provide that outstanding awards will become exercisable, realizable or deliverable, or restrictions applicable to an award will lapse, in whole or in part, prior to or upon the reorganization event;
- in the event of a reorganization event pursuant to which holders of our common stock will receive a cash payment for each share surrendered in the reorganization event, make or provide for a cash payment to the participants with respect to each award held by the participant equal to (1) the number of shares of our common stock subject to the vested portion of the award, after giving effect to any acceleration of vesting that occurs upon or immediately prior to such reorganization event, multiplied by (2) the excess, if any, of the cash payment for each share surrendered in the reorganization event over the exercise, measurement or purchase price of such award and any applicable tax withholdings, in exchange for the termination of such awards; and
- provide that, in connection with a liquidation or dissolution, awards convert into the right to receive liquidation proceeds.

In the case of specified restricted stock units, no assumption or substitution is permitted, and the restricted stock units will instead be settled in accordance with the terms of the applicable restricted stock unit agreement.

Upon the occurrence of a reorganization event other than a liquidation or dissolution, the repurchase and other rights under each outstanding restricted stock award will continue for the benefit of the successor company and will, unless our board of directors may otherwise determine, apply to the cash, securities or other property into which our common stock is converted pursuant to the reorganization event. Upon the occurrence of a reorganization event involving a liquidation or dissolution, all restrictions and conditions on each outstanding restricted stock award will automatically be deemed terminated or satisfied, unless otherwise provided in the agreement evidencing the restricted stock award.

At any time, our board of directors may, in its sole discretion, provide that any award under the 2014 Plan will become immediately exercisable in full or in part, free of some or all restrictions or conditions, or otherwise realizable in full or in part.

No award may be granted under the 2014 Plan after _____, 2024. Our board of directors may amend, suspend or terminate the 2014 Plan at any time, except that stockholder approval will be required to comply with applicable law or stock market requirements.

2014 Employee Stock Purchase Plan

We expect our board of directors to adopt and our stockholders to approve the 2014 Employee Stock Purchase Plan, or the 2014 ESPP. The 2014 ESPP will be administered by our board of directors or by a committee appointed by our board of directors. The 2014 ESPP will initially provide participating employees with the opportunity to purchase an aggregate of _____ shares of our common stock. The number of shares of our common stock reserved for issuance under the 2014 ESPP will automatically increase on the first day of each fiscal year, commencing on January 1, 2015 and ending on December 31, 2024, in an amount equal to the least of (1) _____ shares of our common stock, (2) _____ % of the total number of shares of our common stock outstanding on the first day of the applicable year and (3) an amount determined by our board of directors.

All of our employees and employees of any of our designated subsidiaries, as defined in the 2014 ESPP, are eligible to participate in the 2014 ESPP, provided that:

- such person is customarily employed by us or a designated subsidiary for more than 20 hours a week and for more than five months in a calendar year;
- such person has been employed by us or by a designated subsidiary for at least _____ months prior to enrolling in the 2014 ESPP; and
- such person was our employee or an employee of a designated subsidiary on the first day of the applicable offering period under the 2014 ESPP.

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No employee may purchase shares of our common stock under the 2014 ESPP and any of our other employee stock purchase plans in excess of \$25,000 of the fair market value of our common stock (as of the date of the option grant) in any calendar year. In addition, no employee may purchase shares of our common stock under the 2014 ESPP that would result in the employee owning 5% or more of the total combined voting power or value of our stock.

We expect to make one or more offerings to our eligible employees to purchase stock under the 2014 ESPP beginning at such time as our board of directors may determine. Each offering will consist of a six-month offering period during which payroll deductions will be made and held for the purchase of our common stock at the end of the offering period. Our board of directors may, at its discretion, choose a different period of not more than 12 months for offerings.

On the commencement date of each offering period, each eligible employee may authorize up to a maximum of _____ % percent of his or her compensation to be deducted by us during the offering period. Each employee who continues to be a participant in the 2014 ESPP on the last business day of the offering period will be deemed to have exercised an option to purchase from us the number of whole shares of our common stock that his or her accumulated payroll deductions on such date will pay for, not in excess of the maximum numbers set forth above. Under the terms of the 2014 ESPP, the purchase price shall be determined by our board of directors for each offering period and will be at least 85% of the applicable closing price of our common stock. If our board of directors does not make a determination of the purchase price, the purchase price will be 85% of the lesser of the closing price of our common stock on the first business day of the offering period or on the last business day of the offering period.

An employee may for any reason withdraw from participation in an offering prior to the end of an offering period and permanently draw out the balance accumulated in the employee's account. If an employee elects to discontinue his or her payroll deductions during an offering period but does not elect to withdraw his or her funds, funds previously deducted will be applied to the purchase of common stock at the end of the offering period. If a participating employee's employment ends before the last business day of an offering period, no additional payroll deductions will be made and the balance in the employee's account will be paid to the employee.

We will be required to make equitable adjustments to the number and class of securities available under the 2014 ESPP, the share limitations under the 2014 ESPP and the purchase price for an offering period under the 2014 ESPP to reflect stock splits, reverse stock splits, stock dividends, recapitalizations, combinations of shares, reclassifications of shares, spin-offs and other similar changes in capitalization or events or any dividends or distributions to holders of our common stock other than ordinary cash dividends.

In connection with a merger or other reorganization event (as defined in the 2014 ESPP), our board of directors or a committee of our board of directors may take any one or more of the following actions as to outstanding options to purchase shares of our common stock under the 2014 ESPP on such terms as our board or committee determines:

- provide that options shall be assumed, or substantially equivalent options shall be substituted, by the acquiring or succeeding corporation (or an affiliate thereof);
- upon written notice to employees, provide that all outstanding options will be terminated immediately prior to the consummation of such reorganization event and that all such outstanding options will become exercisable to the extent of accumulated payroll deductions as of a date specified by our board or committee in such notice, which date shall not be less than ten days preceding the effective date of the reorganization event;
- upon written notice to employees, provide that all outstanding options will be cancelled as of a date prior to the effective date of the reorganization event and that all accumulated payroll deductions will be returned to participating employees on such date;

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- in the event of a reorganization event under the terms of which holders of our common stock will receive upon consummation thereof a cash payment for each share surrendered in the reorganization event, change the last day of the offering period to be the date of the consummation of the reorganization event and make or provide for a cash payment to each employee equal to (1) the cash payment for each share surrendered in the reorganization event times the number of shares of our common stock that the employee's accumulated payroll deductions as of immediately prior to the reorganization event could purchase at the applicable purchase price, where the acquisition price is treated as the fair market value of our common stock on the last day of the applicable offering period for purposes of determining the purchase price and where the number of shares that could be purchased is subject to the applicable limitations under the 2014 ESPP minus (2) the result of multiplying such number of shares by the purchase price; and/or
- provide that, in connection with our liquidation or dissolution, options shall convert into the right to receive liquidation proceeds (net of the purchase price thereof).

Our board of directors may at any time, and from time to time, amend or suspend the 2014 ESPP or any portion thereof. We will obtain stockholder approval for any amendment if such approval is required by Section 423 of the Code. Further, our board of directors may not make any amendment that would cause the 2014 ESPP to fail to comply with Section 423 of the Code. The 2014 ESPP may be terminated at any time by our board of directors. Upon termination, we will refund all amounts in the accounts of participating employees.

401(k) Plan

We maintain a defined contribution employee retirement plan for our employees. Our 401(k) plan is intended to qualify as a tax-qualified plan under Section 401 of the Code so that contributions to our 401(k) plan, and income earned on such contributions, are not taxable to participants until withdrawn or distributed from the 401(k) plan. Our 401(k) plan provides that each participant may contribute up to 90% of his or her pre-tax compensation, up to a statutory limit, which is \$17,500 for 2013. Participants who are at least 50 years old can also make "catch-up" contributions, which in 2013 may be up to an additional \$5,500 above the statutory limit. Under our 401(k) plan, each employee is fully vested in his or her deferred salary contributions. Employee contributions are held and invested by the plan's trustee, subject to participants' ability to give investment directions by following certain procedures. We do not currently make discretionary contributions or matching contributions to our 401(k) plan.

Limitation of Liability and Indemnification

Our certificate of incorporation, which will become effective upon the closing of this offering, limits the personal liability of directors for breach of fiduciary duty to the maximum extent permitted by the Delaware General Corporation Law, or the DGCL, and provides that no director will have personal liability to us or to our stockholders for monetary damages for breach of fiduciary duty as a director. However, these provisions do not eliminate or limit the liability of any of our directors:

- for any breach of the director's duty of loyalty to us or our stockholders;
- for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- for voting for or assenting to unlawful payments of dividends, stock repurchases or other distributions; or
- for any transaction from which the director derived an improper personal benefit.

Any amendment to or repeal of these provisions will not eliminate or reduce the effect of these provisions in respect of any act, omission or claim that occurred or arose prior to such amendment or repeal. If the DGCL is

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amended to provide for further limitations on the personal liability of directors of corporations, then the personal liability of our directors will be further limited to the greatest extent permitted by the DGCL.

In addition, our certificate of incorporation, which will become effective upon the closing of this offering, provides that we must indemnify our directors and officers and we must advance expenses, including attorneys' fees, to our directors and officers in connection with legal proceedings, subject to very limited exceptions.

We maintain a general liability insurance policy that covers specified liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers. In addition, we have entered into indemnification agreements with all of our directors, and we intend to enter into indemnification agreements with all of our executive officers prior to the completion of this offering. These indemnification agreements may require us, among other things, to indemnify each such director and executive officer for some expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by him in any action or proceeding arising out of his or her service as one of our directors or executive officers.

Some of our non-employee directors may, through their relationships with their employers, be insured or indemnified against specified liabilities incurred in their capacities as members of our board of directors.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, or the Securities Act, may be permitted to directors, executive officers or persons controlling us, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Director Compensation

During and prior to 2013, we did not pay cash compensation to any non-employee director for his or her service as a director. We reimburse our non-employee directors for reasonable travel and other expenses incurred in connection with attending board of director and committee meetings or otherwise in direct service of our company.

The table below shows all compensation to our non-employee directors during 2013.

<u>Name</u>	<u>Stock awards \$(1)</u>	<u>Total (\$)</u>
Noubar B. Afeyan, Ph.D.	—	—
David A. Berry, M.D., Ph.D.	—	—
Kenji Harada, Ph.D.	—	—
Mark J. Levin	—	—
Cary G. Pfeffer, M.D.	—	—
Jane V. Henderson	119,040	119,040

(1) The amounts reported in the "Stock awards" column reflect the aggregate fair value of stock-based compensation awarded during the year computed in accordance with the provisions of Financial Accounting Standards Board ASC Topic 718. See Note 11 to our financial statements appearing at the end of this prospectus regarding assumptions underlying the valuation of equity awards.

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During 2013, we did not provide any additional compensation to Abbie C. Celniker, Ph.D., our President and Chief Executive Officer, for her service as a director. Dr. Celniker's compensation as an executive officer is set forth above under "Executive Compensation—Summary Compensation Table."

Following this offering, our non-employee directors will be compensated for their services on our board of directors as follows:

TRANSACTIONS WITH RELATED PERSONS

Since January 1, 2010, we have engaged in the following transactions with our directors, executive officers and holders of more than 5% of our voting securities, and affiliates of our directors, executive officers and holders of more than 5% of our voting securities. We believe that all of these transactions were on terms as favorable as could have been obtained from unrelated third parties.

2010 Bridge Loan Financing

In January 2010, we issued and sold 6% convertible promissory notes in the aggregate principal amount of \$900,000 to two of our 5% stockholders. We refer to these convertible promissory notes as the January 2010 convertible notes.

The following table sets forth the principal amount of January 2010 convertible notes we issued and sold to our 5% stockholders and their affiliates in this transaction:

<u>Purchaser</u>	<u>Principal amount of notes</u>
Flagship Ventures Fund 2007, L.P.(1)	\$ 450,000
Third Rock Ventures, L.P.(2)	\$ 450,000

- (1) The January 2010 convertible notes were issued to Flagship Ventures Fund 2007, L.P., or Flagship 2007 LP. Flagship Ventures General Partner LLC, the general partner of Flagship 2007 LP, may be deemed to share voting and dispositive power with respect to the notes held by Flagship 2007 LP. In addition, investment decisions with respect to the shares held by Flagship 2007 LP were made in part by Dr. Afeyan, a member of our board of directors, as the managing partner and chief executive officer of Flagship Ventures Management, Inc., or Flagship Ventures. Dr. Berry, a member of our board of directors, is a partner of Flagship Ventures.
- (2) The January 2010 convertible notes were issued to Third Rock Ventures, L.P., or TRV LP. Each of Third Rock Ventures GP, LP, or TRV GP LP, the general partner of TRV LP, and Third Rock Ventures GP, LLC, or TRV GP LLC, the general partner of TRV GP LP, may be deemed to share voting and dispositive power with respect to all shares held by TRV LP. In addition, investment decisions with respect to the notes held by TRV LP were made by an investment committee at TRV GP LP of which Mr. Levin and Dr. Pfeffer, each of whom is a member of our board of directors, are members.

Series A Preferred Stock Financings

In February 2010, we issued and sold an aggregate of 4,500,000 shares of our series A preferred stock, at a price per share of \$1.00 for an aggregate purchase price of \$4.5 million, consisting of \$2.3 million in cash and \$2.2 million for the conversion of promissory notes previously issued and sold to two of our 5% stockholders. The converted promissory notes included the January 2010 convertible notes and additional convertible promissory notes issued and sold to two of our 5% stockholders in September 2008, March 2009 and October 2009 in the aggregate original principal amount of \$1.2 million. We issued and sold an additional 4,250,000 shares of our series A preferred stock at a price per share of \$1.00 for an aggregate purchase price of \$4.3 million in cash to two of our 5% stockholders and one additional investor in September 2010.

In February 2011, we issued and sold an aggregate of 11,000,000 shares of our series A preferred stock at a price per share of \$1.00 for an aggregate purchase price of \$11.0 million to two of our 5% stockholders. In January 2012, we issued and sold an aggregate of 5,000,000 shares of our series A preferred Stock at a price per share of \$1.00 for an aggregate purchase price of \$5.0 million to two of our 5% stockholders. In April 2012, we issued and sold an aggregate of 20,500,000 shares of our series A preferred stock at a price per share of \$1.00 for an aggregate purchase price of \$20.5 million to three of our 5% stockholders.

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The following table sets forth the aggregate number of shares of our series A preferred stock that we issued and sold to our 5% stockholders and their affiliates in these transactions and the aggregate purchase price for such shares:

<u>Purchaser</u>	<u>Shares of series A preferred stock</u>	<u>Cash purchase price</u>	<u>Conversion of convertible promissory notes</u>
Entities affiliated with Flagship Ventures Management, Inc.(1)	14,250,000	\$ 13,161,962	\$ 1,088,038
JAFCO Super V3 Investment Limited Partnership(2)	10,000,000	10,000,000	—
Third Rock Ventures, L.P.(3)	20,750,000	19,661,962	1,088,038

- (1) Consists of (i) 9,000,000 shares held by Flagship 2007 LP, (ii) 4,200,000 shares held by Flagship Ventures Fund IV, L.P., or Flagship IV LP and (iii) 1,050,000 shares held by Flagship Ventures Fund IV-RX, L.P., or Flagship IV-RX LP. Each of Flagship Ventures General Partner LLC, the general partner of Flagship 2007 LP, and Flagship Ventures Fund IV General Partner LLC, the general partner of Flagship IV LP and Flagship IV-RX LP, may be deemed to share voting and dispositive power with respect to the shares held by Flagship 2007 LP, Flagship IV LP and Flagship IV-RX LP respectively. In addition, investment decisions with respect to the shares held by each of Flagship 2007 LP, Flagship IV LP and Flagship IV-RX LP, or collectively, the Flagship Funds, are made in part by Dr. Afeyan, a member of our board of directors, as the managing partner and chief executive officer of Flagship Ventures. Dr. Berry, a member of our board of directors, is a partner of Flagship Ventures. Each of Dr. Afeyan and Dr. Berry disclaim beneficial ownership of all shares held by the Flagship Funds, except to the extent of his pecuniary interest therein.
- (2) All shares are held by JAFCO Super V3 Investment Limited Partnership. Dr. Harada, a member of our board of directors, is a partner of JAFCO Super V3 Investment Limited Partnership and is a member of its investment committee, and may be deemed to share voting and dispositive power with respect to all shares held by JAFCO Super V3 Investment Limited Partnership. Mr. Harada disclaims beneficial ownership of all shares held by JAFCO Super V3 Investment Limited Partnership, except to the extent of his pecuniary interest therein.
- (3) All shares are held by TRV LP. Each of TRV GP LP and TRV GP LLC may be deemed to share voting and dispositive power with respect to all shares held by TRV LP. In addition, investment decisions with respect to the shares held by TRV LP are made by an investment committee at TRV GP LP of which our directors Mr. Levin and Dr. Pfeffer are members. Each of Mr. Levin and Dr. Pfeffer disclaim beneficial ownership of all shares held by TRV LP, except to the extent of his pecuniary interest therein.

2013 Bridge Loan Financing

In June 2013, we issued and sold 7% convertible promissory notes in the aggregate principal amount of \$3.5 million and accompanying warrants to purchase shares of our common stock to four of our 5% stockholders. The warrants are initially exercisable at a price of \$0.01 per share for up to an aggregate of 1,750,000 shares of our common stock and will expire, to the extent not exercised, upon the closing of this offering. We refer to these convertible promissory notes as the June 2013 convertible notes.

The following table sets forth the principal amount of June 2013 convertible notes we issued and sold to our 5% stockholders and their affiliates in this transaction and the number of shares of our common stock that may be issued and sold to our 5% stockholders and their affiliates upon the exercise of the warrants issued in connection with the June 2013 convertible notes:

<u>Purchaser</u>	<u>Principal amount of notes</u>	<u>Warrants to purchase common stock</u>
Entities affiliated with Flagship Ventures Management, Inc.(1)	\$1,108,334	554,167
JAFCO Super V3 Investment Limited Partnership(2)	777,776	388,888
Third Rock Ventures, L.P.(3)	1,613,890	806,945

- (1) The 2013 convertible notes and accompanying warrants to purchase shares of our common stock are held by each of Flagship IV LP and Flagship IV-RX LP. Flagship Ventures Fund IV General Partner LLC, the general partner of Flagship IV LP and Flagship IV-RX LP, may be deemed to share voting and dispositive power with respect to the 2013 convertible notes and the accompanying warrants held by Flagship IV LP and Flagship IV-RX LP. In addition, investment decisions with respect to the notes and accompanying warrants held by Flagship IV LP and Flagship IV-RX LP are made in part by Dr. Afeyan, a member of our board of directors, as the managing partner and chief executive officer of Flagship Ventures. Dr. Berry, a member of our board of directors, is a partner of Flagship Ventures. Each of Dr. Afeyan and Dr. Berry disclaim beneficial ownership of the 2013 convertible notes and accompanying warrants to purchase shares of our common stock held by Flagship IV LP and Flagship IV-RX LP except to the extent of his pecuniary interest therein.

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- (2) The 2013 convertible notes and accompanying warrants to purchase shares of our common stock are held by JAFCO Super V3 Investment Limited Partnership. Dr. Harada, a member of our board of directors, is a partner of JAFCO Super V3 Investment Limited Partnership and is a member of its investment committee, and may be deemed to share voting and dispositive power with respect to the 2013 convertible notes and the accompanying warrants held by JAFCO Super V3 Investment Limited Partnership. Mr. Harada disclaims beneficial ownership of the 2013 convertible notes and accompanying warrants to purchase shares of our common stock held by JAFCO Super V3 Investment Limited Partnership, except to the extent of his pecuniary interest therein.
- (3) The 2013 convertible notes and accompanying warrants to purchase shares of our common stock are held by TRV LP. Each of TRV GP LP and TRV GP LLC, may be deemed to share voting and dispositive power with respect to the 2013 convertible notes and accompanying warrants held by TRV LP. In addition, investment decisions with respect to the shares held by TRV LP are made by an investment committee at TRV GP LP of which Mr. Levin and Dr. Pfeffer, each of whom is a member of our board of directors, are members. Each of Mr. Levin and Dr. Pfeffer disclaim beneficial ownership of the 2013 convertible notes and accompanying warrants to purchase shares of our common stock held by TRV LP, except to the extent of his pecuniary interest therein.

Series B Preferred Stock Financing

In December 2013, we issued and sold an aggregate of 6,632,416 shares of our series B preferred stock and accompanying warrants to purchase shares of our common stock to four of our 5% stockholders, at a price per share of \$1.75, for an aggregate purchase price of \$11.6 million, consisting of \$8.0 million in cash and \$3.6 million for the conversion of the June 2013 convertible notes, including accrued interest. The warrants are initially exercisable at a price of \$0.01 per share for up to an aggregate of 1,142,855 shares of our common stock and will expire, to the extent not exercised, upon the closing of this offering.

The following table sets forth the aggregate number of shares of our series B preferred stock that we issued and sold to our 5% stockholders and their affiliates in these transactions, the aggregate purchase price for such shares and the number of shares of our common stock that may be issued and sold to our 5% stockholders and their affiliates upon the exercise of the warrants issued in connection with our series B preferred stock financing:

<u>Purchaser</u>	<u>Shares of series B preferred stock</u>	<u>Cash purchase price</u>	<u>Conversion of convertible promissory notes</u>	<u>Warrants to purchase common stock</u>
Entities affiliated with Flagship Ventures Management, Inc.(1)	2,100,266	\$2,533,335	\$ 1,142,131	361,903
JAFCO Super V3 Investment Limited Partnership(2)	1,473,869	1,777,778	801,493	253,968
Third Rock Ventures, L.P.(3)	3,058,281	3,688,889	1,663,103	526,984

- (1) Consists of (i) 1,680,213 shares of our series B preferred stock and warrants to purchase 289,523 shares of our common stock held by Flagship IV LP and (ii) 420,053 shares of our series B preferred stock and warrants to purchase 72,380 shares of our common stock held by Flagship IV-RX LP. Flagship Ventures Fund IV General Partner LLC, the general partner of Flagship IV LP and Flagship IV-RX LP, may be deemed to share voting and dispositive power with respect to the shares held by Flagship IV and Flagship IV-RX LP. In addition, investment decisions with respect to the shares held by Flagship IV and Flagship IV-RX LP, are made in part by Dr. Afeyan, a member of our board of directors, as the managing partner and chief executive officer of Flagship Ventures. Dr. Berry, a member of our board of directors, is a partner of Flagship Ventures. Each of Dr. Afeyan and Dr. Berry disclaim beneficial ownership of all shares held by Flagship IV and Flagship IV-RX LP, except to the extent of his pecuniary interest therein.
- (2) All shares are held by JAFCO Super V3 Investment Limited Partnership. Dr. Harada, a member of our board of directors, is a partner of JAFCO Super V3 Investment Limited Partnership and is a member of its investment committee, and may be deemed to share voting and dispositive power with respect to all shares held by JAFCO Super V3 Investment Limited Partnership. Mr. Harada disclaims beneficial ownership of all shares held by JAFCO Super V3 Investment Limited Partnership, except to the extent of his pecuniary interest therein.
- (3) All shares are held by TRV LP. Each of TRV GP LP and TRV GP LLC may be deemed to share voting and dispositive power with respect to all shares held by TRV LP. In addition, investment decisions with respect to the shares held by TRV LP are made by an investment committee at TRV GP LP of which our directors Mr. Levin and Dr. Pfeffer are members. Each of Mr. Levin and Dr. Pfeffer disclaim beneficial ownership of all shares held by TRV LP, except to the extent of his pecuniary interest therein.

Consulting Services Provided by Third Rock Ventures, LLC

We had a consulting arrangement with TRV LLC, under which it provided us with certain strategic and business operations consulting services, in effect from the fourth quarter of 2008 to September 2011. TRV LLC

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is a management company that is party to a services agreement with TRV LP, one of our 5% stockholders. Mark Levin, a member of our board of directors, is a managing member of TRV GP LLC, which is the general partner of TRV GP LP, the general partner of TRV LP, and a managing member of TRV LLC. Dr. Pfeffer, a member of our board of directors, is a partner of TRV LP. Under this consulting arrangement, Mr. Levin served as our President and Chief Executive Officer from August 2009 to September 2011 and Dr. Pfeffer served as our Chief Business Officer from February 2010 to September 2011. None of the consulting fees paid to TRV LLC pursuant to the agreement were paid directly to Mr. Levin or Dr. Pfeffer. The agreement with TRV LLC was terminated in September 2011, and we do not expect to engage TRV LLC for consulting services in the future.

Registration Rights

We are a party to an investors' rights agreement with the holders of our preferred stock, including our 5% stockholders and their affiliates and entities affiliated with some of our directors. This investors' rights agreement provides these holders the right, following the completion of this offering, to demand that we file a registration statement or to request that their shares be covered by a registration statement that we are otherwise filing.

In addition, under the terms of our existing loan and security agreement with SVB, we issued warrants to purchase shares of our preferred stock, which we refer to as the SVB warrants. The SVB warrants provide SVB the right to request that any shares issued to SVB upon exercise of the SVB warrants be covered by a registration statement that we are otherwise filing to the extent that we are also registering shares held by any parties to the investors' rights agreement on the registration statement.

See "Description of Capital Stock—Registration Rights" for additional information regarding these registration rights.

Indemnification Agreements

Our certificate of incorporation, which will become effective upon the closing of this offering, provides that we will indemnify our directors and officers to the fullest extent permitted by Delaware law. In addition, we have entered into indemnification agreements with all of our directors, and we intend to enter into indemnification agreements with all of our executive officers prior to the completion of this offering.

Policies and Procedures for Related Person Transactions

Our board of directors has adopted written policies and procedures for the review of any transaction, arrangement or relationship in which our company is a participant, the amount involved exceeds \$120,000 and one of our executive officers, directors, director nominees or 5% stockholders, or their immediate family members, each of whom we refer to as a "related person," has a direct or indirect material interest.

If a related person proposes to enter into such a transaction, arrangement or relationship, which we refer to as a "related person transaction," the related person must report the proposed related person transaction to our . The policy calls for the proposed related person transaction to be reviewed and, if deemed appropriate, approved by our audit committee. Whenever practicable, the reporting, review and approval will occur prior to entry into the transaction. If advance review and approval is not practicable, the committee will review, and, in its discretion, may ratify the related person transaction. The policy also permits the chairman of the audit committee to review and, if deemed appropriate, approve proposed related person transactions that arise between committee meetings, subject to ratification by the committee at its next meeting. Any related person transactions that are ongoing in nature will be reviewed annually.

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A related person transaction reviewed under the policy will be considered approved or ratified if it is authorized by the audit committee after full disclosure of the related person's interest in the transaction. As appropriate for the circumstances, the audit committee will review and consider:

- the related person's interest in the related person transaction;
- the approximate dollar value of the amount involved in the related person transaction;
- the approximate dollar value of the amount of the related person's interest in the transaction without regard to the amount of any profit or loss;
- whether the transaction was undertaken in the ordinary course of our business;
- whether the terms of the transaction are no less favorable to us than terms that could have been reached with an unrelated third party;
- the purpose of, and the potential benefits to us of, the transaction; and
- any other information regarding the related person transaction or the related person in the context of the proposed transaction that would be material to investors in light of the circumstances of the particular transaction.

Our audit committee may approve or ratify the transaction only if it determines that, under all of the circumstances, the transaction is in our best interests. Our audit committee may impose any conditions on the related person transaction that it deems appropriate.

In addition to the transactions that are excluded by the instructions to the SEC's related person transaction disclosure rule, our board of directors has determined that the following transactions do not create a material direct or indirect interest on behalf of related persons and, therefore, are not related person transactions for purposes of this policy:

- interests arising solely from the related person's position as an executive officer of another entity, whether or not the person is also a director of the entity, that is a participant in the transaction where the related person and all other related persons own in the aggregate less than a 10% equity interest in such entity, the related person and his or her immediate family members are not involved in the negotiation of the terms of the transaction and do not receive any special benefits as a result of the transaction and the amount involved in the transaction is less than the greater of \$200,000 or 5% of the annual gross revenues of the company receiving payment under the transaction; and
- a transaction that is specifically contemplated by provisions of our certificate of incorporation or by-laws.

The policy provides that transactions involving compensation of executive officers shall be reviewed and approved by our compensation committee in the manner specified in the compensation committee's charter.

We did not have a written policy regarding the review and approval of related person transactions prior to this offering. Nevertheless, with respect to such transactions, it has been the practice of our board of directors to consider the nature of and business reasons for such transactions, how the terms of such transactions compared to those which might be obtained from unaffiliated third parties and whether such transactions were otherwise fair to and in the best interests of, or not contrary to, our best interests. In addition, all related person transactions required prior approval, or later ratification, by our board of directors.

PRINCIPAL STOCKHOLDERS

The following table sets forth information with respect to the beneficial ownership of our common stock as of December 6, 2013 by:

- each of our directors;
- each of our named executive officers;
- all of our directors and executive officers as a group; and
- each person, or group of affiliated persons, who is known by us to beneficially own more than 5% of our common stock.

The column entitled “Percentage of Shares Beneficially Owned—Before Offering” is based on the shares of our common stock outstanding as of December 6, 2013, assuming the automatic conversion of all outstanding shares of our preferred stock into an aggregate of 51,882,416 shares of our common stock upon the closing of this offering and the issuance of 2,892,855 shares of our common stock upon the exercise of outstanding warrants held by some of our preferred stockholders, at an exercise price of \$0.01 per share, which otherwise expire upon the closing of this offering. The column entitled “Percentage of Shares Beneficially Owned—After Offering” is based on _____ shares of our common stock to be outstanding after this offering, including the shares of our common stock that we are selling in this offering, but not including any additional shares issuable upon exercise of outstanding options or issuable upon exercise of outstanding warrants held by SVB.

Beneficial ownership is determined in accordance with the rules and regulations of the SEC and includes voting or investment power with respect to our common stock. Shares of our common stock subject to options and warrants that are currently exercisable or exercisable within 60 days after December 6, 2013 are considered outstanding and beneficially owned by the person holding the options for the purpose of calculating the percentage ownership of that person but not for the purpose of calculating the percentage ownership of any other person. Except as otherwise noted, the persons and entities in this table have sole voting and investing power with respect to all of the shares of our common stock beneficially owned by them, subject to community property laws, where applicable. Except as otherwise set forth below, the address of each beneficial owner is c/o Eleven Biotherapeutics, Inc., 215 First Street, Suite 400, Cambridge, Massachusetts 02142.

Name and Address of Beneficial Owner	Number of shares beneficially owned	Percentage of shares beneficially owned	
		Before offering	After offering
5% Stockholders:			
Entities affiliated with Flagship Ventures Management, Inc.(1)	19,016,336	29.1%	
JAFCO Super V3 Investment Limited Partnership(2)	12,116,725	18.6	
Third Rock Ventures, L.P.(3)	27,242,210	41.8	
Directors and Named Executive Officers:			
Mark J. Levin(3)	27,242,210	41.8	
Cary G. Pfeffer, M.D.(3)	27,242,210	41.8	
Noubar B. Afeyan, Ph.D. (1)	19,016,336	30.1	
David A. Berry, M.D., Ph.D.(1)	19,016,336	30.1	
Kenji Harada, Ph.D.(2)	12,116,725	18.6	
Jane V. Henderson(4)	13,333	*	
Abbie C. Celniker, Ph.D.(5)	2,412,500	3.7	
Eric S. Furfine, Ph.D.(6)	618,750	*	
Karen L. Tubridy, Pharm.D.(7)	4,687	*	
All current executive officers and directors as a group (10 persons)(8)	61,424,541	93.0	

* Less than one percent.

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- (1) Consists of (i) 1,750,000 shares of common stock held by Flagship Ventures, (ii) 9,000,000 shares of common stock issuable upon conversion of preferred stock held by Flagship 2007 LP, (iii) 5,880,213 shares of common stock issuable upon conversion of preferred stock held by Flagship IV LP, (iv) 1,470,053 shares of common stock issuable upon conversion of preferred stock held by Flagship IV-RX LP, (v) 732,857 shares of common stock issuable upon the exercise of warrants exercisable within 60 days after December 6, 2013 held by Flagship IV LP and (vi) 183,213 shares of common stock issuable upon the exercise of warrants exercisable within 60 days after December 6, 2013 held by Flagship IV-RX LP. Each of Flagship Ventures General Partner LLC, the general partner of Flagship 2007 LP, and Flagship Ventures Fund IV General Partner LLC, the general partner of Flagship IV LP and Flagship IV-RX LP, may be deemed to share voting and dispositive power with respect to the shares held by the Flagship Funds respectively. In addition, investment decisions with respect to the shares held by each of the Flagship Funds are made in part by Dr. Afeyan, a member of our board of directors, as the managing partner and chief executive officer of Flagship Ventures. Dr. Berry, a member of our board of directors, is a partner of Flagship Ventures. Each of Dr. Afeyan and Dr. Berry disclaim beneficial ownership of all shares held by the Flagship Funds, except to the extent of his pecuniary interest therein. The Address for Flagship Ventures Management, Inc. is One Memorial Drive, 7th Floor, Cambridge, MA 02142.
- (2) Consists of (i) 642,856 shares of common stock issuable upon the exercise of warrants exercisable within 60 days after December 6, 2013 and (ii) 11,473,869 shares of common stock issuable upon conversion of preferred stock. All shares are held by JAFCO Super V3 Investment Limited Partnership. Dr. Harada, a member of our board of directors, is a partner of JAFCO Super V3 Investment Limited Partnership and is member of its investment committee, and may be deemed to share voting and dispositive power with respect to all shares held by JAFCO Super V3 Investment Limited Partnership. Mr. Harada disclaims beneficial ownership of all shares held by JAFCO Super V3 Investment Limited Partnership, except to the extent of his pecuniary interest therein. The address for JAFCO Super V3 Investment Limited Partnership is Otemachi First Square, West Tower, 11F, 1-5-1 Otemachi Chiyoda-ku, Tokyo 100-0004, Japan.
- (3) Consists of (i) 2,100,000 shares of common stock, (ii) 1,333,929 shares of common stock issuable upon the exercise of warrants exercisable within 60 days after December 6, 2013 and (iii) 23,808,281 shares of common stock issuable upon conversion of preferred stock. All shares are held by TRV LP. Each of TRV GP LP, and TRV GP LLC may be deemed to share voting and dispositive power with respect to all shares held by TRV LP. In addition, investment decisions with respect to the shares held by TRV LP are made by an investment committee at TRV GP LP of which Mr. Levin and Dr. Pfeffer, each of whom is a member of our board of directors, are members. Each of Mr. Levin and Dr. Pfeffer disclaim beneficial ownership of all shares held by TRV LP, except to the extent of his pecuniary interest therein. The address for Third Rock Ventures, L.P. is 29 Newbury Street, Boston, MA 02116.
- (4) Consists of 13,333 shares of common stock issuable upon the exercise of options exercisable within 60 days after December 6, 2013.
- (5) Consists of (i) 2,250,000 shares of restricted common stock and (ii) 162,500 shares of common stock issuable upon the exercise of options exercisable within 60 days after December 6, 2013.
- (6) Consists of 618,750 shares of common stock issuable upon the exercise of options exercisable within 60 days after December 6, 2013.
- (7) Consists of 4,687 shares of common stock issuable upon the exercise of options exercisable within 60 days after December 6, 2013.
- (8) Consists of (i) 51,632,416 shares of common stock issuable upon conversion of shares of preferred stock, (ii) 2,892,855 shares of our common stock issuable upon the exercise of outstanding warrants held by some of our preferred stockholders which otherwise expire upon the closing of this offering, (iii) 6,100,000 shares of common stock and (iv) 799,270 shares of common stock underlying options that are exercisable as of December 6, 2013 or will become exercisable within 60 days after such date.

DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock and provisions of our certificate of incorporation and bylaws are summaries and are qualified by reference to the certificate of incorporation and the bylaws that will be in effect upon the closing of this offering. We have filed copies of these documents with the SEC as exhibits to our registration statement of which this prospectus forms a part. The description of the capital stock reflects changes to our capital structure that will occur upon the closing of this offering.

Upon the closing of this offering, our authorized capital stock will consist of _____ shares of our common stock, par value \$0.001 per share, and _____ shares of our preferred stock, par value \$0.001 per share, all of which preferred stock will be undesignated.

As of December 6, 2013, we had issued and outstanding:

- 10,483,205 shares of our common stock held by 43 stockholders of record;
- 45,250,000 shares of our series A preferred stock held by four stockholders of record that are convertible into 45,250,000 shares of our common stock; and
- 6,632,416 shares of our series B preferred stock held by four stockholders of record that are convertible into 6,632,416 shares of our common stock.

Upon the closing of this offering, all of the outstanding shares of our preferred stock will automatically convert into an aggregate of 51,882,416 shares of our common stock.

Common Stock

Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders and do not have cumulative voting rights. Each election of directors by our stockholders will be determined by a plurality of the votes cast by the stockholders entitled to vote on the election. Holders of common stock are entitled to receive proportionately any dividends as may be declared by our board of directors, subject to any preferential dividend rights of outstanding preferred stock.

In the event of our liquidation or dissolution, the holders of our common stock are entitled to receive proportionately all assets available for distribution to stockholders after the payment of all debts and other liabilities and subject to the prior rights of any of our outstanding preferred stock. Holders of our common stock have no preemptive, subscription, redemption or conversion rights. The rights, preferences and privileges of holders of our common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of our preferred stock that we may designate and issue in the future.

Preferred Stock

Under the terms of our certificate of incorporation that will become effective upon the closing of this offering, our board of directors is authorized to issue shares of preferred stock in one or more series without stockholder approval. Our board of directors has the discretion to determine the rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock.

The purpose of authorizing our board of directors to issue preferred stock and determine its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions, future financings and other corporate purposes, could have the effect of making it more difficult for a third party to acquire, or could discourage a third party from seeking to acquire, a majority of our outstanding voting stock. Upon the closing of this offering, there will be no shares of preferred stock outstanding, and we have no present plans to issue any shares of preferred stock.

Warrants

As of December 6, 2013, we had outstanding:

- warrants held by SVB, or the SVB warrants, to purchase up to an aggregate of 195,000 shares of our series A preferred stock, at an exercise price of \$1.00 per share; and
- warrants held by some of our preferred stockholders to purchase up to an aggregate of 2,892,855 shares of our common stock, at an exercise price of \$0.01 per share.

Upon the closing of this offering:

- the warrants held by SVB to purchase up to an aggregate of 195,000 shares of our series A preferred stock will become exercisable for an aggregate of 195,000 shares of our common stock, at an exercise price of \$1.00 per share; and
- the warrants held by some of our preferred stockholders to purchase up to an aggregate of 2,892,855 shares of our common stock will expire to the extent not exercised prior to the closing of this offering.

These warrants provide for adjustments in the event of specified mergers, reorganizations, reclassifications, stock dividends, stock splits or other changes in our corporate structure.

Options

As of December 6, 2013, options to purchase an aggregate of 7,450,610 shares of our common stock, at a weighted average exercise price of \$0.30 per share, were outstanding.

Delaware Anti-Takeover Law and Certain Charter and Bylaw provisions

Delaware Law

We are subject to Section 203 of the Delaware General Corporation Law. Subject to certain exceptions, Section 203 prevents a publicly held Delaware corporation from engaging in a “business combination” with any “interested stockholder” for three years following the date that the person became an interested stockholder, unless either the interested stockholder attained such status with the approval of our board of directors, the business combination is approved by our board of directors and stockholders in a prescribed manner or the interested stockholder acquired at least 85% of our outstanding voting stock in the transaction in which it became an interested stockholder. A “business combination” includes, among other things, a merger or consolidation involving us and the “interested stockholder” and the sale of more than 10% of our assets. In general, an “interested stockholder” is any entity or person beneficially owning 15% or more of our outstanding voting stock and any entity or person affiliated with or controlling or controlled by such entity or person. The restrictions contained in Section 203 are not applicable to any of our existing stockholders that will own 15% or more of our outstanding voting stock upon the closing of this offering.

Staggered Board; Removal of Directors

Our certificate of incorporation and our bylaws divide our board of directors into three classes with staggered three-year terms. In addition, our certificate of incorporation and our bylaws provide that directors may be removed only for cause and only by the affirmative vote of the holders of 75% of our shares of capital stock present in person or by proxy and entitled to vote. Under our certificate of incorporation and bylaws, 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. Furthermore, our certificate of incorporation provides that the authorized number of directors may be changed only by the resolution of our board of directors. The classification of our board of directors and the limitations on the ability of our stockholders to remove directors, change the authorized number of directors and fill vacancies could make it more difficult for a third party to acquire, or discourage a third party from seeking to acquire, control of our company.

Stockholder Action; Special Meeting of Stockholders; Advance Notice Requirements for Stockholder Proposals and Director Nominations

Our certificate of incorporation and our bylaws provide that any action required or permitted to be taken by our stockholders at an annual meeting or special meeting of stockholders may only be taken if it is properly brought before such meeting and may not be taken by written action in lieu of a meeting. Our certificate of incorporation and our bylaws also provide that, except as otherwise required by law, special meetings of the stockholders can only be called by the chairman of our board of directors, our chief executive officer or our board of directors. In addition, our bylaws establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of stockholders, including proposed nominations of candidates for election to our board of directors. Stockholders at an annual meeting may only consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of our board of directors, or by a stockholder of record on the record date for the meeting who is entitled to vote at the meeting and who has delivered timely written notice in proper form to our secretary of the stockholder's intention to bring such business before the meeting. These provisions could have the effect of delaying until the next stockholder meeting stockholder actions that are favored by the holders of a majority of our outstanding voting securities. These provisions also could discourage a third party from making a tender offer for our common stock because even if the third party acquired a majority of our outstanding voting stock, it would be able to take action as a stockholder, such as electing new directors or approving a merger, only at a duly called stockholders meeting and not by written consent.

Super-Majority Voting

The Delaware General Corporation Law provides generally that the affirmative vote of a majority of the shares entitled to vote on any matter is required to amend a corporation's certificate of incorporation or bylaws unless a corporation's certificate of incorporation or bylaws, as the case may be, requires a greater percentage. Our bylaws may be amended or repealed by a majority vote of our board of directors or the affirmative vote of the holders of at least 75% of the votes that all our stockholders would be entitled to cast in any annual election of directors. In addition, the affirmative vote of the holders of at least 75% of the votes that all our stockholders would be entitled to cast in any election of directors is required to amend or repeal or to adopt any provisions inconsistent with any of the provisions of our certificate of incorporation described above.

Registration Rights

We have entered into an amended and restated investors' rights agreement dated December 4, 2013, which we refer to as the investor rights agreement, with holders of our preferred stock. Upon the closing of this offering, holders of a total of 54,970,271 shares of our common stock outstanding or issuable upon exercise of the SVB warrants as of December 6, 2013, after giving effect to the automatic conversion of all outstanding shares of our preferred stock into an aggregate of 51,882,416 shares of our common stock upon the closing of this offering, the issuance of 2,892,855 shares of our common stock upon the exercise of outstanding warrants held by some of our preferred stockholders, at an exercise price of \$0.01 per share, which otherwise expire upon the closing of this offering and the conversion of the SVB warrants into warrants to purchase common stock as a result of the automatic conversion of all outstanding shares of our preferred stock upon the closing of this offering, will have the right to require us to register these shares under the Securities Act under specified circumstances. After registration pursuant to these rights, these shares will become freely tradable without restriction under the Securities Act. If not otherwise exercised, the rights under the investor rights agreement described below will expire five years after the closing of this offering.

Demand and Form S-3 Registration Rights

Beginning six months after the commencement of this offering, subject to specified limitations set forth in the investor rights agreement, at any time, the holders of at least 25% of the then outstanding shares having rights under the investor rights agreement, which we refer to as registrable securities, may demand that we register at

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least 25% of the registrable securities then outstanding under the Securities Act for purposes of a public offering having an aggregate offering price to the public of not less than \$5,000,000. We are not obligated to file a registration statement pursuant to this provision on more than two occasions.

In addition, subject to specified limitations set forth in the investor rights agreement, at any time after we become eligible to file a registration statement on Form S-3, holders of at least 10% of the registrable securities then outstanding may request that we register their registrable securities on Form S-3 for purposes of a public offering for which the reasonably anticipated aggregate offering price to the public would exceed \$1,000,000. We are not obligated to file a registration statement pursuant to this provision on more than two occasions in any 12-month period.

Incidental Registration Rights

If, at any time after the closing of this offering, we propose to register for our own account any of our securities under the Securities Act, the holders of registrable securities will be entitled to notice of the registration and, subject to specified exceptions, have the right to require us to use our best efforts to register all or a portion of the registrable securities then held by them in that registration. Under the SVB warrants, SVB is also entitled to notice of the registration at the time that we provide notice of the registration to the holders of registrable securities.

In the event that any registration in which the holders of registrable securities participate pursuant to our investor rights agreement or SVB participates pursuant to the SVB warrants is an underwritten public offering, we have agreed to enter into an underwriting agreement containing customary representations and warranties and covenants, including without limitation customary provisions with respect to indemnification of the underwriters of such offering.

In the event that any registration in which the holders of registrable securities participate pursuant to our investor rights agreement or SVB participates pursuant to the SVB warrants is an underwritten public offering, we will use our best efforts to include the requested securities to be included, but such inclusions may be limited by market conditions to the extent set forth in the investor rights agreement.

Expenses

Pursuant to the investor rights agreement, we are required to pay all registration expenses, including the fees and expenses of one counsel to represent the selling stockholders, other than any underwriting discounts, selling commissions and fees and expenses of a selling stockholder's own counsel related to any demand, Form S-3 or incidental registration. We are not required to pay registration expenses if the registration request under the investor rights agreement is withdrawn at the request of holders initiating such registration request, unless the withdrawal is due to discovery of a materially adverse change in our business after the initiation of such registration request.

The investor rights agreement contains customary cross-indemnification provisions, pursuant to which we are obligated to indemnify the selling stockholders in the event of material misstatements or omissions in the registration statement attributable to us or any violation or alleged violation whether by action or inaction by us under the Securities Act, the Exchange Act, any state securities or Blue Sky law or any rule or regulation promulgated under the Securities Act, the Exchange Act or any state securities or Blue Sky law in connection with such registration statement or the qualification or compliance of the offering, and they are obligated to indemnify us for material misstatements or omissions in the registration statement attributable to them.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock will be Computershare Trust Company, Inc.

NASDAQ Global Market

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

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our common stock, and a liquid trading market for our common stock may not develop or be sustained after this offering. Future sales of substantial amounts of our common stock in the public market, including shares issued upon exercise of outstanding options, or the anticipation of these sales, could adversely affect market prices prevailing from time to time and could impair our ability to raise capital through sales of equity securities.

Upon the closing of this offering, we will have outstanding _____ shares of our common stock, after giving effect to the issuance of _____ shares of our common stock in this offering, assuming no exercise by the underwriters of their over-allotment option and no exercise of options and SVB warrants outstanding as of December 6, 2013.

Of the shares to be outstanding immediately after the closing of this offering, we expect that the _____ shares to be sold in this offering will be freely tradable without restriction under the Securities Act unless purchased by our “affiliates,” as that term is defined in Rule 144 under the Securities Act. The remaining _____ shares of our common stock will be “restricted securities” under Rule 144, and we expect that substantially all of these restricted securities will be subject to the 180-day lock-up period under the lock-up agreement as described below. These restricted securities may be sold in the public market upon release or waiver of any applicable lock-up agreements and only if registered or pursuant to an exemption from registration, such as Rule 144 or 701 under the Securities Act.

Rule 144

In general, under Rule 144, beginning 90 days after the date of this prospectus, any person who is not our affiliate and has held their shares for at least six months, including the holding period of any prior owner other than one of our affiliates, may sell those shares without restriction, subject to the availability of current public information about us. In addition, under Rule 144, any person who is not our affiliate and has not been our affiliate at any time during the preceding three months and has held their shares for at least one year, including the holding period of any prior owner other than one of our affiliates, would be entitled to sell an unlimited number of shares immediately upon the closing of this offering without regard to whether current public information about us is available.

Beginning 90 days after the date of this prospectus, a person who is our affiliate or who was our affiliate at any time during the preceding three months and who has beneficially owned restricted securities for at least six months, including the holding period of any prior owner other than one of our affiliates, is entitled to sell a number of shares within any three-month period that does not exceed the greater of:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately _____ shares immediately after this offering; and
- the average weekly trading volume in our common stock on The NASDAQ Global Market during the four calendar weeks preceding the date of filing of a Notice of Proposed Sale of Securities Pursuant to Rule 144 with respect to the sale.

Sales under Rule 144 by our affiliates are also subject to manner of sale provisions and notice requirements and to the availability of current public information about us.

Upon waiver or expiration of the 180-day lock-up period described below, approximately _____ shares of our common stock will be eligible for sale under Rule 144. We cannot estimate the number of shares of our common stock that our existing stockholders will elect to sell under Rule 144.

Rule 701

In general, under Rule 701 of the Securities Act, any of our employees, consultants or advisors, other than our affiliates, who purchased shares from us in connection with a qualified compensatory stock plan or other written agreement is eligible to resell these shares 90 days after the date of this prospectus in reliance on Rule 144, but without compliance with the various restrictions, including the availability of public information about us, holding period and volume limitations, contained in Rule 144. Subject to the 180-day lock-up period described below, approximately _____ shares of our common stock, based on shares outstanding as of December 6, 2013, including 1,230,837 shares of unvested restricted stock which would not be eligible for sale until vested, will be eligible for sale in accordance with Rule 701.

Lock-up Agreements

We and each of our directors and executive officers and holders of substantially all of our outstanding common stock, who collectively own _____ shares of our common stock, based on shares outstanding as of December 6, 2013, have agreed that, without the prior written consent of Citigroup Global Markets Inc. on behalf of the underwriters, we and they will not, subject to limited exceptions, during the period ending 180 days after the date of this prospectus:

- offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or exchangeable for common stock; or
- enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of our common stock.

Registration Rights

Subject to the lock-up agreements described above, upon the closing of this offering, the holders of an aggregate of 54,775,271 shares of our common stock will have rights, subject to some conditions, to require us to file registration statements covering their shares or, along with holders of an additional 195,000 shares of our common stock issuable upon the exercise of the SVB warrants, to include their shares in registration statements that we may file for ourselves or other stockholders. After registration pursuant to these rights, these shares will become freely tradable without restriction under the Securities Act. See “Description of Capital Stock—Registration Rights” for additional information regarding these registration rights.

Stock Options and Form S-8 Registration Statement

As of December 6, 2013, we had outstanding options to purchase an aggregate of 7,450,610 shares of our common stock, of which options to purchase 2,100,071 shares were vested. Following this offering, we intend to file a registration statement on Form S-8 under the Securities Act to register all of the shares of our common stock subject to outstanding options and reserved for future options and other awards under our 2009 Plan and our 2014 Plan. See “Executive Compensation—Equity Incentive Plans” for additional information regarding these plans. Accordingly, shares of our common stock registered under the registration statements will be available for sale in the open market, subject to Rule 144 volume limitations applicable to affiliates, and subject to any vesting restrictions and lock-up agreements applicable to these shares.

MATERIAL U.S. TAX CONSIDERATIONS FOR NON-U.S. HOLDERS OF COMMON STOCK

The following is a general discussion of material U.S. federal income and estate tax considerations relating to ownership and disposition of our common stock by a non-U.S. holder. For purposes of this discussion, the term “non-U.S. holder” means a beneficial owner of our common stock that is not, for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation, or other entity treated as a corporation for U.S. federal income tax purposes, created or organized in or under the laws of the United States or of any political subdivision of the United States;
- an estate the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust, if a U.S. court is able to exercise primary supervision over the administration of the trust and one or more U.S. persons have authority to control all substantial decisions of the trust or if the trust has a valid election to be treated as a U.S. person under applicable U.S. Treasury regulations.

An individual may be treated as a resident instead of a nonresident of the United States in any calendar year for U.S. federal income tax purposes if the individual was present in the United States for at least 31 days in that calendar year and for an aggregate of at least 183 days during the three-year period ending with the current calendar year. For purposes of this calculation, all of the days present in the current year, one-third of the days present in the immediately preceding year and one-sixth of the days present in the second preceding year are counted. Residents are taxed for U.S. federal income tax purposes as if they were U.S. citizens.

This discussion is based on current provisions of the U.S. Internal Revenue Code of 1986, as amended, or the Code, existing and proposed U.S. Treasury Regulations promulgated thereunder, current administrative rulings and judicial decisions, all as in effect as of the date of this prospectus and all of which are subject to change or to differing interpretation, possibly with retroactive effect. Any change could alter the tax consequences to non-U.S. holders described in this prospectus. In addition, the Internal Revenue Service, or the IRS, could challenge one or more of the tax consequences described in this prospectus.

We assume in this discussion that each non-U.S. holder holds shares of our common stock as a capital asset (generally, property held for investment). This discussion does not address all aspects of U.S. federal income and estate taxation that may be relevant to a particular non-U.S. holder in light of that non-U.S. holder’s individual circumstances nor does it address any aspects of U.S. state, local or non-U.S. taxes. 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 organizations;
- financial institutions;
- brokers or dealers in securities;
- regulated investment companies;
- pension plans;
- controlled foreign corporations;
- passive foreign investment companies;
- owners that hold our common stock as part of a straddle, hedge, conversion transaction, synthetic security or other integrated investment; and
- certain U.S. expatriates.

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In addition, this discussion does not address the tax treatment of partnerships or persons who hold their common stock through partnerships or other entities which are pass-through entities for U.S. federal income tax purposes. A partner in a partnership or other pass-through entity that will hold our common stock should consult his, her or its own tax advisor regarding the tax consequences of the ownership and disposition of our common stock through a partnership or other pass-through entity, as applicable.

Prospective investors should consult their own tax advisors regarding the U.S. federal, state, local and non-U.S. income and other tax considerations of acquiring, holding and disposing of our common stock.

Dividends

If we pay distributions on our common stock, those distributions 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 under the heading "Gain on Disposition of Common Stock."

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 U.S. 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 successor form) and satisfy applicable certification and other requirements. Non-U.S. holders are urged to consult their own 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 an appropriate claim with the IRS.

Gain on Disposition of Common Stock

A non-U.S. holder generally will not be subject to U.S. federal income tax on gain recognized on a disposition of our common stock unless:

- the gain is effectively connected with the non-U.S. holder's conduct of a trade or business in the United States, and, if an applicable income tax treaty so provides, the gain is attributable to a permanent establishment or fixed base maintained by the non-U.S. holder in the United States; in these cases, the non-U.S. holder will be taxed on a net income basis at the regular graduated rates and in the manner applicable to U.S. persons, and, if the non-U.S. holder is a foreign corporation, an additional branch profits tax at a rate of 30%, or a lower rate as may be specified by an applicable income tax treaty, may also apply;

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- the non-U.S. holder is a non-resident alien present in the United States for 183 days or more in the taxable year of the disposition and certain other requirements 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) on the net gain derived from the disposition, which may be offset by U.S.-source capital losses of the non-U.S. holder, if any; 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 held no more than 5% of our outstanding common stock, directly or indirectly, during the shorter of the five-year period ending on the date of the disposition or the period that the non-U.S. holder held our common stock. Generally, a corporation is a "U.S. real property holding corporation" 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 believe that we are not currently, and we do not anticipate becoming, a "U.S. real property holding corporation" for U.S. federal income tax purposes. No assurance can be provided that our common stock will be regularly traded on an established securities market for purposes of the rule described above.

Information Reporting and Backup Withholding Tax

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 U.S. person (as defined in the Code) in order to avoid backup withholding at the applicable rate, currently 28%, with respect to dividends on our common stock. Generally, a holder will comply with such procedures if it provides a properly executed IRS Form W-8BEN (or other applicable Form W-8) or otherwise meets documentary evidence requirements for establishing that it is a non-U.S. holder, or otherwise establishes an exemption. Dividends paid to non-U.S. holders subject to withholding of U.S. federal income tax, as described above under "Dividends," will generally be exempt from U.S. backup withholding.

Information reporting and backup withholding generally will 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 own 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 timely filed with the IRS.

Federal Estate Tax

Common stock owned or treated as owned by an individual who is a non-U.S. holder (as specially defined for U.S. federal estate tax purposes) at the time of death will be included in the individual's gross estate for U.S. federal estate tax purposes and, therefore, may be subject to U.S. federal estate tax, unless an applicable estate tax or other treaty provides otherwise.

Recently Enacted Legislation Relating to Foreign Accounts

The Foreign Account Tax Compliance Act, or FATCA, was enacted in March 2010. Generally, FATCA imposes a 30% withholding tax on dividends of, and gross proceeds from the sale or disposition, of our common stock if paid to a foreign entity unless (i) if the foreign entity is a “foreign financial institution,” the foreign entity undertakes certain due diligence, reporting, withholding, and certification obligations, (ii) if the foreign entity is not a “foreign financial institution,” the foreign entity identifies certain of its U.S. investors, or (iii) the foreign entity is otherwise exempt under FATCA.

Although this legislation is effective with regards to amounts paid after December 31, 2012, (1) under IRS Notice 2013-43 issued on July 7, 2013 withholding under FATCA will only apply to payments of dividends on our common stock made after June 30, 2014, and (2) under final regulations issued by the U.S. Department of Treasury on January 17, 2013, withholding under FATCA 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. Non-U.S. holders should consult their own tax advisors regarding the possible implications of this legislation on their investment in our common stock.

The preceding discussion of material U.S. federal tax considerations is for general information only. It is not tax advice. Prospective investors should consult their own tax advisors regarding the particular U.S. federal, state, local and non-U.S. tax consequences of purchasing, holding and disposing of our common stock, including the consequences of any proposed changes in applicable laws.

UNDERWRITING

Citigroup Global Markets Inc., Cowen and Company, LLC and Leerink Swann LLC are acting as joint book-running managers of the offering and as representatives of the underwriters named below. Subject to the terms and conditions stated in the underwriting agreement dated the date of this prospectus, each underwriter named below has severally agreed to purchase, and we have agreed to sell to that underwriter, the number of shares of our common stock set forth opposite the underwriter's name.

<u>Underwriter</u>	<u>Number of shares</u>
Citigroup Global Markets Inc.	
Cowen and Company, LLC	
Leerink Swann LLC	
Total	

The underwriting agreement provides that the obligations of the underwriters to purchase the shares of our common stock included in this offering are subject to approval of legal matters by counsel and to other conditions. The underwriters are obligated to purchase all of the shares of our common stock (other than those covered by the over-allotment option described below) if they purchase any of the shares.

Shares of our common stock sold by the underwriters to the public will initially be offered at the initial public offering price set forth on the cover of this prospectus. Any shares of our common stock sold by the underwriters to securities dealers may be sold at a discount from the initial public offering price not to exceed \$ per share. If all the shares of our common stock are not sold at the initial offering price, the underwriters may change the offering price and the other selling terms. The representatives have advised us that the underwriters do not intend to make sales to discretionary accounts.

If the underwriters sell more shares of our common stock than the total number set forth in the table above, we have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus, to purchase up to additional shares of our common stock at the public offering price less the underwriting discount. The underwriters may exercise the option solely for the purpose of covering over-allotments, if any, in connection with this offering. To the extent the option is exercised, each underwriter must purchase a number of additional shares of our common stock approximately proportionate to that underwriter's initial purchase commitment. Any shares of our common stock issued or sold under the option will be issued and sold on the same terms and conditions as the other shares of our common stock that are the subject of this offering.

We, our officers and directors and substantially all of our stockholders have agreed that, subject to specified limited exceptions, for a period of 180 days from the date of this prospectus, we and they will not, without the prior written consent of Citigroup, dispose of or hedge any shares of our common stock or any securities convertible into or exchangeable for our common stock. Citigroup in its sole discretion may release any of the securities subject to these lock-up agreements at any time, which, in the case of officers and directors, shall be with notice.

Prior to this offering, there has been no public market for our shares. Consequently, the initial public offering price for the shares of our common stock will be determined by negotiations between us and the representatives. Among the factors considered in determining the initial public offering price will be our results of operations, our current financial condition, our future prospects, our markets, the economic conditions in and future prospects for the industry in which we compete, our management, and currently prevailing general conditions in the equity securities markets, including current market valuations of publicly traded companies considered comparable to our company. We cannot assure you, however, that the price at which the shares of our common stock will sell in the public market after this offering will not be lower than the initial public offering price or that an active trading market in our shares of common stock will develop and continue after this offering.

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We have applied to have our shares of common stock listed on the Nasdaq Global Market under the symbol “EBIO.”

The following table shows the underwriting discounts and commissions that we are to pay to the underwriters in connection with this offering. These amounts are shown assuming both no exercise and full exercise of the underwriters’ over-allotment option.

	Paid by Eleven Biotherapeutics, Inc.	
	No exercise	Full exercise
Per share	\$	\$
Total	\$	\$

We estimate that our portion of the total expenses of this offering will be \$.

In connection with the offering, the underwriters may purchase and sell shares of our common stock in the open market. Purchases and sales in the open market may include short sales, purchases to cover short positions, which may include purchases pursuant to the over-allotment option, and stabilizing purchases.

- Short sales involve secondary market sales by the underwriters of a greater number of shares of our common stock than they are required to purchase in the offering.
 - “Covered” short sales are sales of shares of our common stock in an amount up to the number of shares of our common stock represented by the underwriters’ over-allotment option.
 - “Naked” short sales are sales of shares of our common stock in an amount in excess of the number of shares of our common stock represented by the underwriters’ over-allotment option.
- Covering transactions involve purchases of shares of our common stock either pursuant to the underwriters’ over-allotment option or in the open market in order to cover short positions.
 - To close a naked short position, the underwriters must purchase shares of our common stock in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the shares of our common stock in the open market after pricing that could adversely affect investors who purchase in the offering.
 - To close a covered short position, the underwriters must purchase shares of our common stock in the open market or must exercise the over-allotment option. In determining the source of shares of our common stock to close the covered short position, the underwriters will consider, among other things, the price of shares of our common stock available for purchase in the open market as compared to the price at which they may purchase shares of our common stock through the over-allotment option.
- Stabilizing transactions involve bids to purchase shares of our common stock so long as the stabilizing bids do not exceed a specified maximum.

Purchases to cover short positions and stabilizing purchases, as well as other purchases by the underwriters for their own accounts, may have the effect of preventing or retarding a decline in the market price of the shares. They may also cause the price of the shares of our common stock to be higher than the price that would otherwise exist in the open market in the absence of these transactions. The underwriters may conduct these transactions on the Nasdaq Global Market, in the over-the-counter market or otherwise. If the underwriters commence any of these transactions, they may discontinue them at any time.

Conflicts of Interest

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. The underwriters and their respective affiliates may, from time to time, engage in transactions with and perform services for us in the ordinary course of their business

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for which they may receive customary fees and reimbursement of expenses. In the ordinary course of their various business activities, the underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (which may include bank loans or credit default swaps) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. The underwriters and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long or short positions in such securities and instruments.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriters may be required to make because of any of those liabilities.

Notice to Prospective Investors in the European Economic Area

In relation to each member state of the European Economic Area that has implemented the Prospectus Directive (each, a relevant member state), with effect from and including the date on which the Prospectus Directive is implemented in that relevant member state (the relevant implementation date), an offer of shares of our common stock described in this prospectus may not be made to the public in that relevant member state other than:

- to any legal entity which 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 2010 PD Amending Directive, 150 natural or legal persons (other than qualified investors as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the relevant Dealer or Dealers nominated by us for any such offer; or
- in any other circumstances falling within Article 3(2) of the Prospectus Directive,

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

For purposes of this provision, the expression an “offer of securities to the public” 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 the shares of our common stock to be offered so as to enable an investor to decide to purchase or subscribe for the shares of our common stock, as the expression may be varied in that 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 the 2010 PD Amending Directive, to the extent implemented in the relevant member state) and includes any relevant implementing measure in the relevant member state. The expression 2010 PD Amending Directive means Directive 2010/73/EU.

The sellers of the shares of our common stock have not authorized and do not authorize the making of any offer of shares of our common stock through any financial intermediary on their behalf, other than offers made by the underwriters with a view to the final placement of the shares of our common stock as contemplated in this prospectus. Accordingly, no purchaser of the shares of our common stock, other than the underwriters, is authorized to make any further offer of the shares of our common stock on behalf of the sellers or the underwriters.

Notice to Prospective Investors in the United Kingdom

This prospectus is only being distributed to, and is only directed at, persons in the United Kingdom that are qualified investors within the meaning of Article 2(1)(e) of the Prospectus Directive that are also (i) investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion)

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Order 2005, or the Order, or (ii) high net worth entities, and other persons to whom it may lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (each such person being referred to as a relevant person). This prospectus and its contents are confidential and should not be distributed, published or reproduced (in whole or in part) or disclosed by recipients to any other persons in the United Kingdom. Any person in the United Kingdom that is not a relevant person should not act or rely on this document or any of its contents.

Notice to Prospective Investors in Australia

No prospectus or other disclosure document (as defined in the Corporations Act 2001 (Cth) of Australia, or Corporations Act) in relation to the common stock has been or will be lodged with the Australian Securities & Investments Commission, or ASIC. This document has not been lodged with ASIC and is only directed to certain categories of exempt persons. Accordingly, if you receive this document in Australia:

- you confirm and warrant that you are either:
 - a “sophisticated investor” under section 708(8)(a) or (b) of the Corporations Act;
 - a “sophisticated investor” under section 708(8)(c) or (d) of the Corporations Act and that you have provided an accountant’s certificate to us which complies with the requirements of section 708(8)(c)(i) or (ii) of the Corporations Act and related regulations before the offer has been made;
 - a person associated with the company under section 708(12) of the Corporations Act; or
 - a “professional investor” within the meaning of section 708(11)(a) or (b) of the Corporations Act, and to the extent that you are unable to confirm or warrant that you are an exempt sophisticated investor, associated person or professional investor under the Corporations Act any offer made to you under this document is void and incapable of acceptance; and
- you warrant and agree that you will not offer any of the common stock for resale in Australia within 12 months of that common stock being issued unless any such resale offer is exempt from the requirement to issue a disclosure document under section 708 of the Corporations Act.

Notice to Prospective Investors in France

Neither this prospectus nor any other offering material relating to the shares of our common stock described in this prospectus has been submitted to the clearance procedures of the *Autorité des Marchés Financiers* or of the competent authority of another member state of the European Economic Area and notified to the *Autorité des Marchés Financiers*. The shares of our common stock have not been offered or sold and will not be offered or sold, directly or indirectly, to the public in France. Neither this prospectus nor any other offering material relating to the shares of our common stock has been or will be:

- released, issued, distributed or caused to be released, issued or distributed to the public in France; or
- used in connection with any offer for subscription or sale of the shares of our common stock to the public in France.

Such offers, sales and distributions will be made in France only:

- to qualified investors (*investisseurs qualifiés*) and/or to a restricted circle of investors (*cercle restreint d’investisseurs*), in each case investing for their own account, all as defined in, and in accordance with articles L.411-2, D.411-1, D.411-2, D.734-1, D.744-1, D.754-1 and D.764-1 of the French *Code monétaire et financier*;
- to investment services providers authorized to engage in portfolio management on behalf of third parties; or

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- in a transaction that, in accordance with article L.411-2-II-1°-or-2°-or 3° of the French *Code monétaire et financier* and article 211-2 of the General Regulations (*Règlement Général*) of the *Autorité des Marchés Financiers*, does not constitute a public offer (*appel public à l'épargne*).

The shares of our common stock may be resold directly or indirectly, only in compliance with articles L.411-1, L.411-2, L.412-1 and L.621-8 through L.621-8-3 of the French *Code monétaire et financier*.

Notice to Prospective Investors in Hong Kong

The shares of our common stock may not be offered or sold in Hong Kong by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong), or (ii) to “professional investors” within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a “prospectus” within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong) and no advertisement, invitation or document relating to the shares of our common stock may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to shares of our common stock which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

Notice to Prospective Investors in Japan

The shares of our common stock offered in this prospectus have not been and will not be registered under the Financial Instruments and Exchange Law of Japan. The shares of our common stock have not been offered or sold and will not be offered or sold, directly or indirectly, in Japan or to or for the account of any resident of Japan (including any corporation or other entity organized under the laws of Japan), except (i) pursuant to an exemption from the registration requirements of the Financial Instruments and Exchange Law and (ii) in compliance with any other applicable requirements of Japanese law.

Notice to Prospective Investors in Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares of our common stock may not be circulated or distributed, nor may the shares of our common stock be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore, or the SFA, (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA, in each case subject to compliance with conditions set forth in the SFA.

Where the shares of our common stock are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

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shares, debentures and units of shares of our common stock and debentures of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the shares of our common stock pursuant to an offer made under Section 275 of the SFA except:

- to an institutional investor (for corporations, under Section 274 of the SFA) or to a relevant person defined in Section 275(2) of the SFA, or to any person pursuant to an offer that is made on terms that such shares, debentures and units of shares of our common stock and debentures of that corporation or such rights and interest in that trust are acquired at a consideration of not less than \$200,000 (or its equivalent in a foreign currency) for each transaction, whether such amount is to be paid for in cash or by exchange of securities or other assets, and further for corporations, in accordance with the conditions specified in Section 275 of the SFA;
- where no consideration is or will be given for the transfer; or
- where the transfer is by operation of law.

LEGAL MATTERS

The validity of the shares of common stock offered hereby is being passed upon for us by Wilmer Cutler Pickering Hale and Dorr LLP. Cooley LLP is acting as counsel for the underwriters in connection with this offering.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our financial statements as of December 31, 2011 and 2012, and for the years then ended, as set forth in their report. We have included our financial statements in the prospectus and elsewhere in this registration statement in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of common stock we are offering to sell. This prospectus, which constitutes part of the registration statement, does not include all of the information contained in the registration statement and the exhibits, schedules and amendments to the registration statement. For further information with respect to us and our common stock, we refer you to the registration statement and to the exhibits and schedules to the registration statement. Statements contained in this prospectus about the contents of any contract, agreement or other document are not necessarily complete, and, in each instance, we refer you to the copy of the contract, agreement or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference.

You may read and copy the registration statement of which this prospectus is a part at the SEC's public reference room, which is located at 100 F Street, N.E., Room 1580, Washington, DC 20549. You can request copies of the registration statement by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the SEC's public reference room. In addition, the SEC maintains an Internet website, which is located at <http://www.sec.gov>, that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. You may access the registration statement of which this prospectus is a part at the SEC's Internet website. Upon completion of this offering, we will be subject to the information reporting requirements of the Securities Exchange Act of 1934, as amended and we will file reports, proxy statements and other information with the SEC.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders of
Eleven Biotherapeutics, Inc.

We have audited the accompanying balance sheets of Eleven Biotherapeutics, Inc. (the “Company”) as of December 31, 2011 and 2012, and the related statements of operations and comprehensive loss, convertible preferred stock and stockholders’ (deficit) equity, and cash flows for the years then ended. 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. We were not engaged to perform an audit of the Company’s internal control over financial reporting. Our audits 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, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Eleven Biotherapeutics, Inc. at December 31, 2011 and 2012, and the results of its operations and its cash flows for the years then ended in conformity with U.S. generally accepted accounting principles.

Since the date of completion of our audit of the accompanying financial statements and initial issuance of our report thereon dated November 6, 2013, which report contained an explanatory paragraph regarding the Company’s ability to continue as a going concern, the Company, as discussed in Note 1, has completed an issuance of its Series B Preferred Stock resulting in gross proceeds of \$8.0 million. Therefore, the conditions that raised substantial doubt about whether the Company will continue as a going concern no longer exist. However, as further discussed in Note 1, the Company will need to obtain additional financing in 2014 in order to continue to fund its operations.

/s/ Ernst & Young LLP

Boston, Massachusetts
November 6, 2013,
except for Note 1 and 16(B), as to which the date is
December 6, 2013

ELEVEN BIOTHERAPEUTICS, INC.
BALANCE SHEETS
(in thousands, except share and per share data)

	December 31,		September	Pro forma
	2011	2012	30, 2013	September 30, 2013
	(unaudited)			
Assets				
Current assets:				
Cash and cash equivalents	\$ 700	\$ 7,882	\$ 3,881	\$ 11,910
Restricted cash	—	134	134	134
Prepaid expenses and other current assets	289	255	149	149
Total current assets	989	8,271	4,164	12,193
Property and equipment, net	1,535	1,197	862	862
Restricted cash	134	—	—	—
Other assets	7	35	25	25
Total assets	<u>\$ 2,665</u>	<u>\$ 9,503</u>	<u>\$ 5,051</u>	<u>\$ 13,080</u>
Liabilities, convertible preferred stock, and stockholders' (deficit) equity				
Current liabilities:				
Accounts payable	\$ 1,057	\$ 1,107	\$ 670	\$ 670
Accrued expenses	551	482	272	272
Equipment loan, current portion	121	94	11	11
Convertible notes payable	—	—	3,401	—
Notes payable, current portion	489	142	1,642	1,642
Deferred revenue, current portion	—	—	1,116	1,116
Total current liabilities	2,218	1,825	7,112	3,711
Deferred revenue, net of current portion	—	—	542	542
Deferred rent, net of current portion	104	—	—	—
Restricted stock liability	45	23	13	13
Equipment loan, net of current portion	94	—	—	—
Notes payable, net of current portion	325	1,769	3,287	3,287
Warrant liability	26	147	246	—
Commitments and contingencies (Note 7)				
Series A convertible preferred stock, \$0.001 par value; 35,295,000 shares authorized at December 31, 2011 and 45,445,000 shares authorized at December 31, 2012 and September 30, 2013 (unaudited), 19,750,000 shares issued and outstanding at December 31, 2011, 45,250,000 shares issued and outstanding at December 31, 2012 and September 30, 2013 (unaudited) and no shares issued and outstanding at September 30, 2013 (pro forma) (unaudited); (aggregate liquidation preference of \$50,223 and \$52,938 at December 31, 2012 and September 30, 2013 (unaudited), respectively)				
	19,644	45,035	45,035	—
Series B convertible preferred stock, par value \$0.001 per share; no shares authorized, issued and outstanding at December 31, 2011, December 31, 2012 and September 30, 2013 (unaudited) and 6,635,868 shares authorized at September 30, 2013 (pro forma) (unaudited) and no shares issued and outstanding at September 30, 2013 (pro forma) (unaudited)				
	—	—	—	—
Stockholders' (deficit) equity:				
Common stock, \$0.001 par value; 55,795,000, 65,795,000, and 67,545,000 shares authorized at December 31, 2011 and 2012, and September 30, 2013 (unaudited), respectively, and 5,708,066, 7,651,992, and 9,111,474 shares issued and outstanding at December 31, 2011 and 2012, and September 30, 2013 (unaudited), respectively, and 76,973,723 shares authorized at September 30, 2013 (pro forma) (unaudited), and 63,886,745 shares issued and outstanding at September 30, 2013 (pro forma) (unaudited)				
	6	8	9	64
Additional paid-in capital	115	265	1,335	58,197
Accumulated deficit	(19,912)	(39,569)	(52,528)	(52,734)
Total stockholders' (deficit) equity	(19,791)	(39,296)	(51,184)	5,527
Total liabilities, convertible preferred stock, and stockholders' (deficit) equity	<u>\$ 2,665</u>	<u>\$ 9,503</u>	<u>\$ 5,051</u>	<u>\$ 13,080</u>

See accompanying notes.

ELEVEN BIOTHERAPEUTICS, INC.
STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(in thousands, except per share data)

	Year Ended December 31,		Nine Months Ended September 30,	
	2011	2012	2012 (unaudited)	2013 (unaudited)
Collaboration revenue	\$ —	\$ —	\$ —	\$ 824
Operating expenses:				
Research and development	9,411	15,263	11,367	10,576
General and administrative	3,267	4,213	3,081	2,606
Total operating expenses	<u>12,678</u>	<u>19,476</u>	<u>14,448</u>	<u>13,182</u>
Loss from operations	(12,678)	(19,476)	(14,448)	(12,358)
Other income (expense):				
Other income (expense), net	3	(13)	7	(96)
Interest expense	(151)	(168)	(122)	(505)
Total other expense, net	<u>(148)</u>	<u>(181)</u>	<u>(115)</u>	<u>(601)</u>
Net loss and comprehensive loss	<u>\$ (12,826)</u>	<u>\$ (19,657)</u>	<u>\$ (14,563)</u>	<u>\$ (12,959)</u>
Cumulative preferred stock dividends	(1,452)	(3,111)	(2,201)	(2,715)
Net loss applicable to common stockholders	<u>\$ (14,278)</u>	<u>\$ (22,768)</u>	<u>\$ (16,764)</u>	<u>\$ (15,674)</u>
Net loss per share applicable to common stockholders—basic and diluted	<u>\$ (2.80)</u>	<u>\$ (3.61)</u>	<u>\$ (2.81)</u>	<u>\$ (1.87)</u>
Weighted-average number of common shares used in net loss per share applicable to common stockholders—basic and diluted	<u>5,092</u>	<u>6,308</u>	<u>5,971</u>	<u>8,384</u>
Pro forma net loss per share—basic and diluted (unaudited)		<u>\$ (0.43)</u>		<u>\$ (0.24)</u>
Weighted average number of common shares used in pro forma net loss per share—basic and diluted (unaudited)		<u>45,199</u>		<u>54,224</u>

See accompanying notes.

ELEVEN BIOTHERAPEUTICS, INC.
STATEMENTS OF CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' (DEFICIT) EQUITY
(in thousands, except share data)

	Series A Convertible Preferred Stock		Series B Convertible Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Stockholders' (Deficit) Equity
	Shares	Amount	Shares	Amount	Shares	Amount			
Balance at December 31, 2010	8,750,000	\$ 8,644	—	\$ —	4,597,938	\$ 5	\$ 63	\$ (7,086)	\$ (7,018)
Exercise of stock awards and vesting of restricted stock awards	—	—	—	—	1,101,061	1	10	—	11
Issuance of series A convertible preferred stock	11,000,000	11,000	—	—	—	—	—	—	—
Issuance of common stock in exchange for services	—	—	—	—	9,067	—	4	—	4
Stock-based compensation expense	—	—	—	—	—	—	38	—	38
Net loss	—	—	—	—	—	—	—	(12,826)	(12,826)
Balance at December 31, 2011	19,750,000	19,644	—	—	5,708,066	6	115	(19,912)	(19,791)
Exercise of stock awards and vesting of restricted stock awards	—	—	—	—	1,926,426	2	20	—	22
Issuance of series A convertible preferred stock, net of issuance costs of \$109	25,500,000	25,391	—	—	—	—	—	—	—
Issuance of common stock in exchange for services	—	—	—	—	17,500	—	—	—	—
Stock-based compensation expense	—	—	—	—	—	—	130	—	130
Net loss	—	—	—	—	—	—	—	(19,657)	(19,657)
Balance at December 31, 2012	45,250,000	45,035	—	—	7,651,992	8	265	(39,569)	(39,296)
Exercise of stock awards and vesting of restricted stock awards (unaudited)	—	—	—	—	1,459,482	1	28	—	29
Issuance of warrants for the purchase of common stock (unaudited)	—	—	—	—	—	—	287	—	287
Stock-based compensation expense (unaudited)	—	—	—	—	—	—	755	—	755
Net loss (unaudited)	—	—	—	—	—	—	—	(12,959)	(12,959)
Balance at September 30, 2013 (unaudited)	45,250,000	45,035	—	—	9,111,474	9	1,335	(52,528)	(51,184)
Conversion of series A convertible preferred stock into common stock (unaudited)	(45,250,000)	(45,035)	—	—	45,250,000	45	44,990	—	45,035
Conversion of series B convertible preferred stock into common stock (unaudited)	—	—	—	—	6,632,416	7	11,600	(206)	11,401
Exercise of common stock warrants (unaudited)	—	—	—	—	2,892,855	3	26	—	29
Conversion of preferred stock warrants into common stock warrants (unaudited)	—	—	—	—	—	—	246	—	246
Pro forma balance at September 30, 2013 (unaudited)	—	\$ —	—	\$ —	63,886,745	\$ 64	\$ 58,197	\$ (52,734)	\$ 5,527

See accompanying notes.

ELEVEN BIOTHERAPEUTICS, INC.
STATEMENTS OF CASH FLOWS
(in thousands)

	<u>Year Ended December 31,</u>		<u>Nine Months Ended September 30,</u>	
	<u>2011</u>	<u>2012</u>	<u>2012</u>	<u>2013</u>
Operating activities				
Net loss	\$ (12,826)	\$ (19,657)	\$ (14,563)	\$ (12,959)
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation and amortization	364	448	333	335
Non-cash interest expense	20	47	38	28
Change in fair value of warrant liability	(12)	24	—	99
Change in fair value of convertible notes payable	—	—	—	188
Stock-based compensation expense	38	130	100	755
Common stock issued for services	4	—	—	—
Changes in operating assets and liabilities:				
Prepaid expenses and other current assets	(169)	39	151	106
Other receivables	839	—	—	—
Restricted cash	20	—	—	—
Accounts payable	632	50	31	(437)
Accrued expenses	221	(173)	(325)	(210)
Deferred revenue	—	—	—	1,658
Net cash used in operating activities	<u>(10,869)</u>	<u>(19,092)</u>	<u>(14,235)</u>	<u>(10,437)</u>
Investing activities				
Purchases of property and equipment	(805)	(110)	(110)	—
Net cash used in investing activities	<u>(805)</u>	<u>(110)</u>	<u>(110)</u>	<u>—</u>
Financing activities				
Proceeds from issuance of convertible notes payable	—	—	—	3,500
Proceeds from issuance of notes payable	—	2,000	2,000	3,000
Debt issuance costs	—	(53)	(53)	—
Payments on equipment financing and notes payable	(583)	(955)	(925)	(83)
Proceeds from issuance of series A convertible preferred stock, net of issuance costs	11,000	25,391	25,391	—
Proceeds from issuance of common stock	30	—	—	—
Repurchase of unvested restricted stock	(2)	(5)	—	—
Proceeds from exercise of common stock options	3	6	1	19
Net cash provided by financing activities	<u>10,448</u>	<u>26,384</u>	<u>26,414</u>	<u>6,436</u>
Net (decrease) increase in cash and cash equivalents	(1,226)	7,182	12,069	(4,001)
Cash and cash equivalents at beginning of period	1,926	700	700	7,882
Cash and cash equivalents at end of period	<u>\$ 700</u>	<u>\$ 7,882</u>	<u>\$ 12,769</u>	<u>\$ 3,881</u>
Supplemental non-cash financing activities				
Issuance of warrants	<u>\$ —</u>	<u>\$ 97</u>	<u>\$ 97</u>	<u>\$ 287</u>
Supplemental cash flow information				
Cash paid for interest	<u>\$ 119</u>	<u>\$ 136</u>	<u>\$ 83</u>	<u>\$ 197</u>

See accompanying notes.

ELEVEN BIOTHERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS

Information as of September 30, 2013 and for the nine months ended September 30, 2012 and 2013 is unaudited.

1. Organization and Basis of Presentation

Eleven Biotherapeutics, Inc. (the "Company"), formerly known as Denovo Therapeutics, Inc. and Newco LS14, Inc., a Delaware corporation formed on February 25, 2008, is a biopharmaceutical company with a proprietary protein engineering platform, called AMP-Rx, that it applies to the discovery and development of protein therapeutics to treat diseases of the eye. The Company's most advanced product candidate is EBI-005, which it designed, engineered and generated using its AMP-Rx platform and is developing as a topical treatment for dry eye disease and allergic conjunctivitis. In 2013, the Company completed a Phase 1b/2a clinical trial of EBI-005 in patients with moderate to severe dry eye disease.

On May 28, 2013, the Company entered into a collaboration and license agreement with ThromboGenics N.V. ("ThromboGenics"). Under the agreement, the Company and ThromboGenics are collaborating to identify protein or peptide therapeutics that directly modulate any of a specified set of targets in a novel pathway in retinal disease (Note 3). In prior years, the Company had been in the development stage. In 2013, as a result of the execution of this agreement with ThromboGenics, the Company emerged from the development stage.

Liquidity

The Company had an accumulated deficit at December 31, 2012 of \$39.6 million and will require substantial additional capital to fund operations. The future success of the Company is dependent on its ability to develop its product candidates and ultimately upon its ability to attain profitable operations. The Company is subject to a number of risks similar to other life science companies, including, but not limited to, successful discovery and development of its drug candidates, raising additional capital, development by its competitors of new technological innovations, protection of proprietary technology and market acceptance of the Company's products. At December 31, 2012, the Company had \$7.9 million of unrestricted cash and cash equivalents and \$3.0 million available under its loan and security agreement (the "Loan and Security Agreement") with its venture debt lender, Silicon Valley Bank ("SVB"). In February 2013, the Company drew down the remaining \$3.0 million. In May 2013, the Company entered into a collaboration and license agreement with ThromboGenics (Note 3) pursuant to which the Company received an up-front cash payment of \$1.75 million and is eligible for future payments based on the achievement of future development and regulatory milestones. In addition, the Company will be reimbursed on a fee-for-service basis for research work it will conduct under the agreement. In June 2013, the Company entered into a bridge financing agreement with the holders of the Company's series A convertible preferred stock (the "Series A Preferred Stock") in which the Company issued and sold 7% convertible promissory notes (the "June 2013 Convertible Notes") and accompanying warrants to purchase shares of its common stock ("Common Stock") at an exercise price of \$0.01 per share for aggregate proceeds of \$3.5 million. In December 2013, the Company issued and sold 6,632,416 shares of its series B convertible preferred Stock (the "Series B Preferred Stock") and warrants to purchase up to 1,142,855 shares of Common Stock for an aggregate purchase price of \$11.6 million, consisting of \$8.0 million in cash and \$3.6 million for the conversion of the June 2013 Convertible Notes, including accrued interest. The Company believes the cash and cash equivalents of \$7.9 million at December 31, 2012, together with the proceeds from the loan agreement, the collaboration and license agreement with Thrombogenics, the bridge financing agreement and the sale of Series B Preferred Stock will be sufficient to fund the Company's current operating plan and continue as a going concern through at least January 1, 2014. Thereafter, the Company will be required to obtain additional funding in order to continue to fund its operations and intends to pursue a public offering of its common stock to fund future operations. However, if the Company is unable to complete a sufficient public offering in a timely manner it would need to pursue other financing alternatives, such as private financing of debt or equity or collaboration agreements. There can be no assurances, however, that the current operating plan will be achieved or that additional funding will be available on terms acceptable to the Company, or at all.

ELEVEN BIOTHERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS (continued)

Information as of September 30, 2013 and for the nine months ended September 30, 2012 and 2013 is unaudited.

The Company will be required to obtain additional funding in order to continue to fund its operations and intends to pursue a public offering of Common Stock to fund future operations. However if the Company is unable to complete a sufficient public offering in a timely manner it would need to pursue other financing alternatives including private financing of debt or equity or collaboration agreements. There can be no assurances, however, that the current operating plan will be achieved or that additional funding will be available on terms acceptable to the Company, or at all.

2. Significant Accounting Policies

Unaudited interim financial information

The unaudited interim financial statements as of September 30, 2013 and for the nine months ended September 30, 2012 and 2013 and the related interim information contained within the notes to the financial statements are unaudited. The interim unaudited financial statements have been prepared on the same basis as the annual audited financial statements, and in the opinion of management, reflect all adjustments, which include only normal recurring adjustments necessary for the fair presentation of the Company's financial position as of September 30, 2013, and the statements of operations and comprehensive loss and cash flows for the nine months ended September 30, 2012 and 2013. The results for the nine months ended September 30, 2013 are not necessarily indicative of results to be expected for the year ending December 31, 2013, or any other future annual or interim periods.

Unaudited pro forma balance sheet information

On November 5, 2013, the Company's board of directors (the "Board of Directors") authorized the management of the Company to file a registration statement with the Securities and Exchange Commission ("SEC") for the Company to sell shares of its Common Stock to the public. The unaudited pro forma balance sheet as of September 30, 2013 assumes (1) the completion of the Company's series B preferred stock financing in December 2013 in which it issued and sold an aggregate of 6,632,416 shares of Series B Preferred Stock and warrants to purchase 1,142,855 shares of Common Stock for an aggregate purchase price of \$11.6 million, consisting of \$8.0 million in cash and \$3.6 million for the conversion of outstanding convertible promissory notes, including accrued interest, (2) the conversion of all of the outstanding preferred stock, including the shares of Series B Preferred Stock that the Company issued in December 2013, into 51,882,416 shares of Common Stock, which will occur automatically upon the completion of this proposed offering, (3) the reclassification of the Company's warrant liability to additional paid-in capital, as a result of warrants to purchase Series A Preferred Stock becoming warrants to purchase Common Stock upon the completion of this proposed offering, and (4) the issuance of 2,892,855 shares of Common Stock upon the exercise of warrants held by some of the Company's preferred stockholders, at an exercise price of \$0.01 per share, including shares of Common Stock issuable upon the exercise of the warrants that the Company issued in December 2013, which otherwise expire upon the completion of the proposed offering.

Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Management considers many factors in selecting appropriate financial accounting policies and controls, and in developing the estimates and assumptions that are used in the preparation of these financial statements. Management must apply significant judgment in this process. In addition, other factors may affect estimates, including: expected business and operational changes, sensitivity and volatility associated with the assumptions used in developing estimates, and whether historical trends are expected to be representative of future

ELEVEN BIOTHERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS (continued)

Information as of September 30, 2013 and for the nine months ended September 30, 2012 and 2013 is unaudited.

trends. The estimation process often may yield a range of potentially reasonable estimates of the ultimate future outcomes and management must select an amount that falls within that range of reasonable estimates. This process may result in actual results differing materially from those estimated amounts used in the preparation of the financial statements. Estimates are used in the following areas, among others: stock-based compensation expense, fair value of convertible notes, fair value of Common Stock and convertible preferred stock, liability-classified warrants and accrued expenses. Actual results could differ from those estimates.

The Company utilizes significant estimates and assumptions in determining the fair value of Common Stock. The Board of Directors determined the estimated fair value of the Common Stock based on a number of objective and subjective factors, including external market conditions affecting the biotechnology industry sector and the prices at which the Company sold shares of convertible preferred stock, the superior rights and preferences of securities senior to the Common Stock at the time and the likelihood of achieving a liquidity event, such as an initial public offering or sale of the Company.

The Company utilized various valuation methodologies in accordance with the framework of the American Institute of Certified Public Accountants (“AICPA”), *Audit and Accounting Practice Aid Series: Valuation of Privately Held Company Equity Securities Issued as Compensation* (the “AICPA Practice Guide”), to estimate the fair value of its Common Stock. The methodologies include the Option Pricing Method utilizing the Black Scholes Method (a form of the market approach defined in the AICPA Practice Guide) and the Probability-Weighted Expected Return Method based upon the probability of occurrence of certain future liquidity events such as an initial public offering or sale of the Company. Each valuation methodology includes estimates and assumptions that require the Company’s judgment. Significant changes to the key assumptions used in the valuations could result in different fair values of Common Stock at each valuation date.

Revenue Recognition

To date, the Company’s only source of revenue has been the collaboration and license agreement with ThromboGenics (Note 3).

The Company recognizes revenue in accordance with Accounting Standards Codification (“ASC”) 605, *Revenue Recognition* (“ASC 605”). Accordingly, revenue is recognized 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.

Amounts received prior to satisfying the revenue recognition criteria are recorded as deferred revenue. Amounts expected to be recognized as revenue within the 12 months following the balance sheet date are classified in current liabilities. Amounts not expected to be recognized as revenue within the 12 months following the balance sheet date are classified as deferred revenue, net of current portion.

The Company evaluates multiple-element arrangements based on the guidance in ASC Topic 605-25, *Revenue Recognition-Multiple-Element Arrangements* (“ASC 605-25”). Pursuant to the guidance in ASC 605-25, the Company evaluates multiple-element arrangements to determine (1) the deliverables included in the arrangement and (2) whether the individual deliverables represent separate units of accounting or whether they must be

ELEVEN BIOTHERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS (continued)

Information as of September 30, 2013 and for the nine months ended September 30, 2012 and 2013 is unaudited.

accounted for as a combined unit of accounting. This evaluation involves subjective determinations and 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 the delivered item has value to the customer on a standalone basis and, if the arrangement includes a general right of return relative 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 a 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 using the relative selling price method. The Company determines the estimated selling price for units of accounting within each arrangement using vendor-specific objective evidence ("VSOE") of selling price, if available, third-party evidence ("TPE") of selling price if VSOE is not available, or best estimate of selling price ("BESP") if neither VSOE nor TPE is available. Determining the BESP for a unit of accounting requires significant judgment. In developing the BESP 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 BESP for units of accounting by evaluating whether changes in the key assumptions used to determine the BESP 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 in ASC 605 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 Company's contractual or estimated performance period for the undelivered elements, 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 in 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 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.

At the inception of an arrangement that includes milestone payments, 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: (1) the consideration is commensurate with either the Company's performance to achieve the milestone or the enhancement of the value of the delivered item(s) as a result of a specific outcome resulting from its performance to achieve the milestone, (2) the consideration relates solely to past performance and (3) 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 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. Milestones that are not considered substantive are recognized as earned if there are no remaining performance obligations or over the remaining period of performance, assuming all other revenue recognition criteria are met.

ELEVEN BIOTHERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS (continued)

Information as of September 30, 2013 and for the nine months ended September 30, 2012 and 2013 is unaudited.

Research and Development Costs

Expenditures relating to research and development are expensed in the period incurred. Research and development expenses consist of both internal and external costs associated with the development of the Company's proprietary protein engineering platform called AMP-Rx and its protein-based therapeutics, including its lead development candidate, EBI-005, for dry eye disease and allergic conjunctivitis. The research and development costs include personnel-related costs, stock-based compensation, facilities, research-related overhead, clinical trial costs, manufacturing costs and other contracted services, license fees, and other external costs.

In certain circumstances, the Company is required to make advance payments to vendors for goods or services that will be received in the future for use in research and development activities. In such circumstances, the advance payments are deferred and are expensed when the activity has been performed or when the goods have been received.

Stock-Based Compensation

The Company accounts for its stock-based compensation awards in accordance with ASC Topic 718, *Compensation—Stock Compensation* ("ASC 718"). ASC 718 requires all stock-based payments to employees, including grants of employee stock options, to be recognized as expense in the statements of operations based on their grant date fair values. For stock options granted to employees and to members of the Board of Directors for their services on the Board of Directors, the Company estimates the grant date fair value of each option award using the Black-Scholes option-pricing model. The use of the Black-Scholes option-pricing model requires management to make assumptions with respect to the expected term of the option, the expected volatility of the Common Stock consistent with the expected life of the option, risk-free interest rates and expected dividend yields of the Common Stock. For awards subject to service-based vesting conditions, the Company recognizes stock-based compensation expense, net of estimated forfeitures, equal to the grant date fair value of stock options on a straight-line basis over the requisite service period. For awards subject to both performance and service-based vesting conditions, the Company recognizes stock-based compensation expense using an accelerated recognition method.

The Company expenses restricted stock awards based on the fair value of the award on a straight-line basis over the associated service period of the award. Awards of restricted stock to non-employees are adjusted through stock-based compensation expense at each reporting period end to reflect the current fair value of such awards and expensed on a straight-line basis.

The Company records the expense for stock option grants subject to performance-based milestone vesting using the accelerated attribution method over the remaining service period when management determines that achievement of the milestone is probable. Management evaluates when the achievement of a performance-based milestone is probable based on the relative satisfaction of the performance conditions as of the reporting date.

Share-based payments issued to non-employees are recorded at their fair values, and are periodically revalued as the equity instruments vest and are recognized as expense over the related service period in accordance with the provisions of ASC 718 and ASC Topic 505, *Equity*. For equity instruments granted to non-employees, the Company recognizes stock-based compensation expense on a straight-line basis.

ELEVEN BIOTHERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS (continued)

Information as of September 30, 2013 and for the nine months ended September 30, 2012 and 2013 is unaudited.

During the years ended December 31, 2011 and 2012, and the nine months ended September 30, 2012 and 2013, the Company recorded stock-based compensation expense for employee and non-employee stock options and restricted stock, which was allocated as follows in the statements of operations (in thousands):

	<u>Year Ended December 31,</u>		<u>Nine Months Ended September 30,</u>	
	<u>2011</u>	<u>2012</u>	<u>2012</u>	<u>2013</u>
Research and development expense	\$ 37	\$ 117	\$ 92	\$ 715
General and administrative expense	1	13	8	40
	<u>\$ 38</u>	<u>\$ 130</u>	<u>\$ 100</u>	<u>\$ 755</u>

No related tax benefits were recognized for the years ended December 31, 2011 and 2012 or for the nine months ended September 30, 2012 and 2013.

Income Taxes

The Company provides for income taxes using the liability method. Under this method, deferred tax assets and liabilities are determined based on differences between the financial statement carrying amounts and the tax bases of the assets and liabilities using the enacted tax rates in effect in the years in which the differences are expected to reverse. A valuation allowance against deferred tax assets is recorded if, based on the weight of the available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized.

The Company accounts for uncertain tax positions in accordance with the provisions of ASC 740. When uncertain tax positions exist, the Company recognizes the tax benefit of tax positions to the extent that the benefit will more likely than not be realized. The determination as to whether the tax benefit will more likely than not be realized is based upon the technical merits of the tax position as well as consideration of the available facts and circumstances. As of December 31, 2011 and 2012 and September 30, 2013, the Company did not have any significant uncertain tax positions.

Comprehensive Loss

Comprehensive loss is defined as the change in equity of a business enterprise during a period from transactions and other events and circumstances from non-owner sources. For the years ended December 31, 2011 and 2012 and for the nine months ended September 30, 2012 and 2013, comprehensive loss was equal to net loss.

Cash and Cash Equivalents

The Company considers highly liquid investments with a maturity of three months or less when purchased to be cash equivalents. Cash equivalents, which consist primarily of money market funds, are stated at fair value. Cash and cash equivalents consist of the following (in thousands):

	<u>December 31,</u>		<u>September 30,</u>
	<u>2011</u>	<u>2012</u>	<u>2013</u>
Cash	\$ 392	\$ 7,882	\$ 3,881
Money market fund	308	—	—
	<u>\$ 700</u>	<u>\$ 7,882</u>	<u>\$ 3,881</u>

ELEVEN BIOTHERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS (continued)

Information as of September 30, 2013 and for the nine months ended September 30, 2012 and 2013 is unaudited.

Concentrations of Credit Risk and Off-Balance-Sheet Risk

The Company has no significant off-balance-sheet risk, such as foreign exchange contracts, option contracts, or other foreign hedging arrangements. Financial instruments that potentially expose the Company to concentrations of credit risk primarily consist of cash and cash equivalents. The Company places its cash and cash equivalents in a custodian account in accredited financial institutions.

Fair Value of Financial Instruments

The fair value hierarchy prioritizes the inputs to valuation techniques used to measure fair value into three broad levels as follows: Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities; Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly; and Level 3 inputs are unobservable inputs that reflect the Company's own assumptions about the assumptions market participants would use in pricing the asset or liability. Financial assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement.

The following table presents information about the Company's financial assets and liabilities that have been measured at fair value, and indicates the fair value hierarchy of the valuation inputs utilized to determine such fair value. The Company determines the fair value of the convertible notes payable (Note 6) and preferred stock warrants (Note 10) using Level 3 inputs.

The following table summarizes the assets and liabilities measured at fair value on a recurring basis at December 31, 2011 (in thousands):

<u>Description</u>	<u>December 31, 2011</u>	<u>Active Markets (Level 1)</u>	<u>Observable Inputs (Level 2)</u>	<u>Unobservable Inputs (Level 3)</u>
Assets:				
Cash equivalents	\$ 308	\$ 308	\$ —	\$ —
Total	<u>\$ 308</u>	<u>\$ 308</u>	<u>\$ —</u>	<u>\$ —</u>
Liabilities:				
Warrant liability	\$ 26	\$ —	\$ —	\$ 26
Total	<u>\$ 26</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 26</u>

The following table summarizes the liabilities measured at fair value on a recurring basis at December 31, 2012 (in thousands):

<u>Description</u>	<u>December 31, 2012</u>	<u>Active Markets (Level 1)</u>	<u>Observable Inputs (Level 2)</u>	<u>Unobservable Inputs (Level 3)</u>
Liabilities:				
Warrant liability	\$ 147	\$ —	\$ —	\$ 147
Total	<u>\$ 147</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 147</u>

ELEVEN BIOTHERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS (continued)

Information as of September 30, 2013 and for the nine months ended September 30, 2012 and 2013 is unaudited.

The following table summarizes the liabilities measured at fair value on a recurring basis at September 30, 2013 (in thousands):

<u>Description</u>	<u>September 30, 2013</u>	<u>Active Markets (Level 1)</u>	<u>Observable Inputs (Level 2)</u>	<u>Unobservable Inputs (Level 3)</u>
Liabilities:				
Warrant liability	\$ 246	\$ —	\$ —	\$ 246
Convertible notes payable	3,401	—	—	3,401
Total	<u>\$ 3,647</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 3,647</u>

The carrying amounts reflected in the balance sheets for cash and cash equivalents, restricted cash, prepaid expenses and other current assets, other assets, accounts payable and accrued expenses approximate their fair values at December 31, 2011 and 2012 and September 30, 2013, due to their short-term nature.

There have been no changes to the valuation methods during the years ended December 31, 2011 and 2012 or the nine months ended September 30, 2012 and 2013. The Company evaluates transfers between levels at the end of each reporting period. There were no transfers of assets or liabilities between levels during the years ended December 31, 2011 and 2012 or the nine months ended September 30, 2012 and 2013.

Fair Value Option

Under the Fair Value Option Subsections of ASC Topic 825-10, *Financial Instruments—Overall* (“ASC 825-10”), the Company has the irrevocable option to report most financial assets and financial liabilities at fair value on an instrument by instrument basis, with changes in fair value reported in earnings. The Company has elected the fair value option for the convertible notes payable.

Property and Equipment

Property and equipment consists of lab equipment, furniture and fixtures, computer equipment, software, and leasehold improvements. Expenditures for maintenance and repairs are recorded to expense as incurred. Major betterments are capitalized as additions to property and equipment. Depreciation is calculated over the estimated useful lives of the assets using the straight-line method.

Impairment of Long-Lived Assets

The Company periodically evaluates its long-lived assets for potential impairment in accordance with ASC Topic 360, *Property, Plant and Equipment*. Potential impairment is assessed when there is evidence that events or changes in circumstances indicate that the carrying amount of an asset may not be recovered. Recoverability of these assets is assessed based on undiscounted expected future cash flows from the assets, considering a number of factors, including past operating results, budgets and economic projections, market trends and product development cycles. If impairments are identified, assets are written down to their estimated fair value. The Company has not recognized any impairment charges through September 30, 2013.

Warrant Liability

The Company accounts for warrant instruments that either conditionally or unconditionally obligate the issuer to transfer assets as liabilities regardless of the timing of the redemption feature or price, even though the

ELEVEN BIOTHERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS (continued)

Information as of September 30, 2013 and for the nine months ended September 30, 2012 and 2013 is unaudited.

underlying shares may be classified as permanent or temporary equity. These warrants are subject to revaluation at each balance sheet date, and any changes in fair value are recorded as a component of other expense, until the earlier of their exercise or expiration or the completion of a liquidation event, including the completion of an initial public offering, at which time the warrant liability may be reclassified to stockholders' (deficit) equity if the criteria for recording the warrant as an equity instrument are met. The warrant liability totaled \$26,000, \$147,000 and \$246,000 at December 31, 2011 and 2012 and September 30, 2013, respectively (Note 10).

Segment Information

Operating segments are identified as components of an enterprise for which separate discrete financial information is available for evaluation by the chief operating decision maker, or decision making group, in making decisions on how to allocate resources and assess performance. The Company views its operations and manages its business in one operating segment. The Company operates in one geographic segment.

Subsequent Events

The Company considers events or transactions that occur after the balance sheet date, but prior to the issuance of the financial statements, to provide additional evidence relative to certain estimates or to identify matters that require additional disclosure. Subsequent events have been evaluated through the date these financial statements were issued.

Net loss per share and unaudited pro forma net loss per share

Basic net loss per share applicable to common stockholders is calculated by dividing net loss applicable to common stockholders by the weighted average shares outstanding during the period, without consideration for common stock equivalents. Diluted net loss per share is calculated by adjusting weighted average shares outstanding for the dilutive effect of common stock equivalents outstanding for the period, determined using the treasury-stock method and the if-converted method. For purposes of the diluted net loss per share calculation, convertible preferred stock, stock options, unvested restricted stock, and warrants are considered to be common stock equivalents but have been excluded from the calculation of diluted net loss per share, as their effect would be anti-dilutive for all periods presented. Therefore, basic and diluted net loss per share was the same for all periods presented.

The following common stock equivalents were excluded from the calculation of diluted net loss per share applicable to common stockholders for the periods indicated because including them would have had an anti-dilutive effect.

	<u>As of December 31,</u>		<u>As of September 30,</u>	
	<u>2011</u>	<u>2012</u>	<u>2012</u>	<u>2013</u>
Convertible preferred stock	19,750,000	45,250,000	45,250,000	45,250,000
Stock options	4,700,510	5,250,848	5,532,627	6,408,922
Unvested restricted stock	4,537,357	2,305,105	3,209,169	1,336,669
Common stock warrants	—	—	—	1,750,000
Preferred stock warrants	45,000	195,000	195,000	195,000
	<u>29,032,867</u>	<u>53,000,953</u>	<u>54,186,796</u>	<u>54,940,591</u>

ELEVEN BIOTHERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS (continued)

Information as of September 30, 2013 and for the nine months ended September 30, 2012 and 2013 is unaudited.

In addition to the potentially dilutive securities noted above, the Company had \$3.5 million of outstanding convertible notes payable as of September 30, 2013 that are convertible into convertible preferred stock upon the occurrence of future events at prices that are not determinable until the occurrence of those future events. Accordingly, the Company has excluded these convertible notes payable from the table above.

The calculations for the unaudited pro forma basic and diluted net loss per share assume: (1) the conversion of all outstanding shares of preferred stock into shares of Common Stock, and (2) the exercise of warrants to purchase 1,750,000 shares of Common Stock by the Company's preferred stockholders, which would otherwise expire upon the closing of the proposed offering, as if the conversions or exercise had occurred at the beginning of the period or the date of issuance during the period, if later, and excludes the accretion of dividends. The 6,632,416 shares of Series B Preferred Stock and the warrants to purchase up to 1,142,855 shares of Common Stock are not reflected in the weighted-average number of common shares outstanding because the issuance of these securities occurred after September 30, 2013. Upon the conversion of preferred stock into Common Stock in the event of an initial public offering, the holders of convertible preferred stock are not entitled to receive undeclared dividends.

3. Collaboration Agreement

On May 28, 2013, the Company entered into the collaboration and license agreement with ThromboGenics. Under this agreement, the Company and ThromboGenics are collaborating to identify protein or peptide therapeutics that directly modulate any of a specified set of targets in a novel pathway in retinal disease. The Company and ThromboGenics jointly own any know-how made by or on behalf of either party in the course of the research and any patent rights claiming such know-how. The Company has granted ThromboGenics an exclusive, sublicenseable, royalty-bearing license under the Company's rights in these patent rights and know-how, as well as under any other patent rights and know-how that the Company controls during the research term that are necessary for ThromboGenics to perform its obligations to research, develop, manufacture and commercialize collaboration products.

ThromboGenics will fund certain research and development services performed by the Company during the research term, which is initially thirty (30) months and automatically extends to the extent that the parties mutually agree in writing. The activities under the agreement are governed by a Joint Research Committee ("JRC"). The JRC is responsible for overseeing the research activities under the agreement. The JRC will disband at the end of the research term.

The Company received a \$1.75 million upfront payment and will receive a set rate per annual full time equivalent personnel working on the collaboration, which will be paid quarterly in advance. The Company is also eligible to receive up to an aggregate of \$25.0 million in milestone payments and may also receive low single-digit royalties on sales of any commercialized products resulting from the collaboration. There are no commercialization or sales-based milestones under the agreement.

The agreement expires when all of ThromboGenics' payment obligations expire. The agreement provides that either party may terminate the agreement in the event of the other party's insolvency, bankruptcy or comparable proceedings, or if the other party materially breaches the agreement and does not cure such breach during a specified cure period. The Company may terminate the agreement if ThromboGenics or any of its affiliates or licensees challenges the patent rights licensed to ThromboGenics. ThromboGenics may terminate the agreement for convenience by providing the Company with notice following the end of the research term. There are no refund provisions in this agreement.

ELEVEN BIOTHERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS (continued)

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The Company accounts for this agreement pursuant to ASC 605-25. The Company identified the following deliverables in this agreement:

- an exclusive license to the Company's intellectual property that is necessary for ThromboGenics to perform its obligations during the research term. ("Research License Deliverable");
- the Company's obligation to provide research services ("Research Services Deliverable"); and
- the Company's participation on the JRC ("JRC Deliverable").

The Company determined that the licenses to future collaboration product candidates are contingent upon the identification of future product candidates as a result of the Research Services, and as such, have not been identified as a separate deliverable at the inception of the arrangement.

The Company determined that the Research License Deliverable did not have standalone value from the Research Services Deliverable because the License is not sold separately and could not be resold on a standalone basis. While the intellectual property rights granted to ThromboGenics under this agreement are sublicensable, the Company determined that the Research License Deliverable does not have value without the Research Services Deliverable as the Company's intellectual property could not be sold separately or utilized to develop product candidates without the expertise of the Company that is provided through the Research Services Deliverable. The Company concluded that ThromboGenics does not have the expertise to perform the specialized research activities and such expertise is not readily available in the marketplace. As such, the Company has accounted for the Research License Deliverable and the Research Services Deliverable as a combined unit of accounting. The Company determined that the JRC Deliverable has standalone value from the Research License Deliverable and the Research Services Deliverable (the combined unit of account). The Company has determined that the best estimate of selling price of the JRC Deliverable is de minimis, and thus the non-contingent arrangement consideration has been allocated to the combined unit of accounting.

The Company is recognizing the arrangement consideration using the proportional performance method, by which the amounts are recognized in proportion to the costs incurred based on full time equivalent personnel efforts. The Company recorded revenue of \$824,000 for the nine months ended September 30, 2013. The costs incurred by the Company related to the research activities are recorded as research and development expense in the statement of operations and comprehensive loss.

The potential milestone payments under this agreement are comprised of (i) up to an aggregate of \$10.0 million of milestone payments due upon the achievement of specified preclinical and clinical development milestone events, and (ii) up to an aggregate of \$15.0 million in milestone payments due upon the achievement of specified regulatory milestone events. The Company believes that certain of the preclinical and clinical development milestone payments are consistent with the definition of substantive milestones, and, accordingly, the Company will recognize these payments upon the achievement of such milestones, if any, in the period that such milestone is achieved. The remaining clinical development and regulatory milestone payments were not considered substantive and will be recognized upon achievement of the revenue recognition criteria of ASC 605. Factors considered in the evaluation of whether the milestones are substantive included the degree of risk associated with performance of the milestone, the level of effort and investment required, whether the milestone consideration was reasonable relative to the deliverables and whether the milestone was earned at least in part based on the Company's performance.

As of September 30, 2013, the Company had not received any milestone or royalty payments.

ELEVEN BIOTHERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS (continued)

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4. Property and Equipment

Property and equipment and related accumulated depreciation are as follows (\$ in thousands):

	Estimated Useful Life (Years)	December 31,		September 30,
		2011	2012	2013
Lab equipment	5	\$ 1,635	\$ 1,740	\$ 1,740
Furniture and fixtures	4	48	48	48
Computer equipment	3	201	206	206
Software	3	25	25	25
	Lesser of useful life or remaining lease term			
Leasehold improvements		77	77	77
		1,986	2,096	2,096
Less accumulated depreciation and amortization		(451)	(899)	(1,234)
Total property and equipment, net		<u>\$ 1,535</u>	<u>\$ 1,197</u>	<u>\$ 862</u>

Depreciation expense, including amortization expense for assets recorded under capital leases, amounted to \$364,000 and \$448,000 for the years ended December 31, 2011 and 2012, respectively, and \$333,000 and \$335,000 for nine months ended September 30, 2012 and 2013, respectively. Lab equipment included assets recorded under capital leases of \$329,000 at December 31, 2011 and 2012 and September 30, 2013. Accumulated depreciation and amortization included amortization from assets recorded under capital leases of \$83,000, \$149,000 and \$199,000 at December 31, 2011 and 2012 and September 30, 2013, respectively.

5. Accrued Expenses

Accrued expenses consisted of the following (in thousands):

	December 31,		September 30,
	2011	2012	2013
Development costs	\$ 232	\$ —	\$ 55
Deferred rent	90	105	21
Consulting fees	110	—	—
Employee compensation	62	328	104
Professional fees	22	32	23
Interest	32	17	67
Other	3	—	2
	<u>\$ 551</u>	<u>\$ 482</u>	<u>\$ 272</u>

6. Indebtedness**Term Loan**

In May, 2010, the Company entered into the Loan and Security Agreement with SVB pursuant to which the Company could borrow up to \$1.5 million. The debt facility is secured by substantially all of the Company's assets, excluding its intellectual property. Outstanding borrowings bear interest at a fixed per annum rate equal to 8.25%. The Company borrowed the entire \$1.5 million in two advances in June 2010 and July 2010, and

ELEVEN BIOTHERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS (continued)

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principal and interest payments were due through September 2013. In September 2012, the Company modified the Loan and Security Agreement with SVB such that the Company was able to borrow up to \$5.0 million. On September 4, 2012, the Company borrowed \$2.0 million under the modification to the Loan and Security Agreement, of which \$0.5 million of the proceeds was used to repay the outstanding balance of the original Loan and Security Agreement. The interest rate on the amount borrowed in 2012 was fixed at 5.75% per annum. On February 1, 2013, the Company borrowed the remaining loan amount of \$3.0 million under the amended Loan and Security Agreement. The interest rate on the amount borrowed in 2013 was fixed at 5.75% per annum. The Company made interest-only payments until October 1, 2013, and will make consecutive equal monthly payments of principal, plus accrued interest, over the remaining term through September 2016. The Company accounted for the amendment as a modification as the terms of the amendment were not substantially different from the original terms of the term loan. The Loan and Security Agreement contains negative covenants restricting the Company's activities, including limitations on dispositions, mergers or acquisitions, incurring indebtedness or liens, paying dividends or making investments and certain other business transactions. There are no financial covenants associated with the Loan and Security Agreement. The obligations under the Loan and Security Agreement are subject to acceleration upon the occurrence of specified events of default, including a material adverse change in the Company's business, operations or financial or other condition. As of September 30, 2013, the Company had made payments of \$1.9 million on the loans, of which \$446,000 related to interest. At December 31, 2011 and 2012 and September 30, 2013, \$833,000, \$2.0 million and \$5.0 million were outstanding on the term loan, respectively. At September 30, 2013, the carrying value of the debt approximates fair value, which was determined using Level 3 inputs, including a quoted rate.

Equipment Financing

In August 2010, the Company entered into an installment purchase agreement with a vendor for certain laboratory equipment. The Company financed \$329,000 and was required to make consecutive equal monthly payments of principal, plus accrued interest at 11.75%, over 36 months through September 2013. As of September 30, 2013, the Company had made payments of \$383,000, of which \$64,000 related to interest. At December 31, 2011 and 2012 and September 30, 2013, \$215,000, \$94,000 and \$11,000, respectively, were outstanding on the equipment loan.

Scheduled monthly principal payments on outstanding debt, including term loan and equipment financing, as of December 31, 2012, are as follows (in thousands):

2013	\$ 260
2014	667
2015	667
2016	500
	<u>\$2,094</u>

Convertible Notes Payable

In June 2013, the Company sold an aggregate principal amount of \$3.5 million of June 2013 Convertible Notes and issued warrants to purchase 1,750,000 shares of Common Stock (collectively the "Bridge Financing").

Unless converted earlier, principal and accrued interest on the June 2013 Convertible Notes is due and payable (i) upon demand of investors holding June 2013 Convertible Notes having an aggregate principal amount outstanding equal to at least 70% of the aggregate principal amount of all of the June 2013 Convertible Notes

ELEVEN BIOTHERAPEUTICS, INC.
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then outstanding (the "Requisite Holders") at any time on or after April 1, 2014, (ii) immediately upon default, including insolvency or bankruptcy, of the Company, or (iii) upon a Deemed Liquidation Event, as defined in the Company's charter. The outstanding amounts on the June 2013 Convertible Notes may be prepaid only with the prior written consent of the Requisite Holders, and only if all of the June 2013 Convertible Notes then outstanding are prepaid in full. Rights to payment under the June 2013 Convertible Notes are subordinated to the Company's indebtedness to the lender under the Loan and Security Agreement.

In the event that the Next Equity Financing, as defined, occurs prior to repayment of amounts outstanding on the June 2013 Convertible Notes, the principal and accrued interest on the June 2013 Convertible Notes is convertible into shares of the series of preferred stock issued in the Next Equity Financing, at the price at which the shares of preferred stock are issued and sold in the Next Equity Financing and on the same terms and conditions.

In connection with the Bridge Financing, the Company issued warrants to the June 2013 Convertible Note holders to purchase an aggregate of 1,750,000 shares of Common Stock at \$0.01 per share, subject to certain limitations and adjustments. The warrants expire upon the earliest of (i) five years from the date of the closing, (ii) a Deemed Liquidation Event of the Company, or (iii) an initial public offering of the Common Stock.

The Company elected to record the June 2013 Convertible Notes at fair value in accordance with ASC 825-10, in order to measure the liability at an amount that more accurately reflects the economics of that instrument. The Company recorded the debt at fair value, and the difference between the unpaid principal balance and the fair value of the June 2013 Convertible Notes of \$287,000 has been allocated to the warrants issued and recorded as additional paid-in capital.

The following table presents the difference between the aggregate fair value and the aggregate unpaid principal balance of long-term debt instruments recorded at fair value (in thousands):

	<u>As of September 30, 2013</u>		
	<u>Aggregate unpaid principal balance</u>	<u>Aggregate fair value</u>	<u>Aggregate unpaid principal balance over aggregate fair value</u>
Convertible notes payable	<u>\$ 3,500</u>	<u>\$ 3,401</u>	<u>\$ 99</u>

The Company remeasures the debt at fair value at each reporting period with the gains and losses from re-measurement recognized as interest expense, which amounted to \$188,000 for the nine months ended September 30, 2013.

The fair value of the June 2013 Convertible Notes was determined by utilizing a probability weighted discounted cash flow analysis. This analysis determined the amount to be paid on the loan in either cash or shares at the occurrence of certain events in which the June 2013 Convertible Notes would be converted into shares of the Common Stock or would be repaid to the lenders in cash. The probability weighted discounted cash flow analysis utilized assumptions related to the probability of the occurrence of each of the various events and appropriate discount rates for each of the scenarios.

ELEVEN BIOTHERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS (continued)

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Based upon the above, the Company determined that the valuation of the June 2013 Convertible Notes is based on Level 3 inputs. The following table provides a roll forward of the fair value of the June 2013 Convertible Notes, where fair value is determined by Level 3 inputs (in thousands):

Balance at January 1, 2013	\$ —
Issuance of convertible notes payable at fair value	3,213
Change in fair value, recorded as interest (income) expense	188
Balance at September 30, 2013	<u>\$3,401</u>

7. Commitments and Contingencies

Operating Lease

The Company leases its corporate headquarters under an operating lease that was executed in January 2010, and that was scheduled to expire on November 30, 2013. Effective November 30, 2013, the Company extended the operating lease through January 31, 2016 (Note 16). The Company recorded \$755,000 and \$753,000 in rent expense for the years ended December 31, 2011 and 2012, respectively, and \$566,000 and \$566,000 for the nine months ended September 30, 2012 and 2013, respectively. Rent expense is recorded on a straight-line basis. The lease agreement required the Company to issue an original letter of credit in the amount of \$134,000, which is included in restricted cash in the accompanying balance sheets. The letter of credit amount was reduced to \$93,687 in connection with the December 2013 lease amendment. The operating lease requires the Company to share in prorated operating expenses and property taxes based upon actual amounts incurred; those amounts are not fixed for future periods and, therefore, are not included in the future commitments listed below.

The minimum aggregate future lease commitment at December 31, 2012 is as follows (\$ in thousands):

2013	\$ 797
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The Schepens Eye Research Institute, Inc. / The Massachusetts Eye and Ear Infirmary

In July 2010, the Company entered into a license agreement with the Schepens Eye Research Institute, Inc. ("Schepens"), pursuant to which Schepens granted the Company an exclusive royalty-bearing license, with the right to grant sublicenses, to certain intellectual property rights for the development of IL-1 blocker for ophthalmic indications. The Company is obligated to pay Schepens up to \$4.8 million in milestone payments, contingent upon the issuance of certain patents. In addition, the Company is obligated to pay Schepens a tiered single-digit royalty based on net sales of the licensed product. As of September 30, 2013, there have been no milestones achieved or sales of products licensed.

Other License Agreements

The Company has entered into various cancellable license agreements for certain technology. In consideration for the licensed rights, the Company made up-front payments totaling \$240,000. The Company is obligated to pay annual maintenance payments totaling \$107,000 to certain of the licensors, which are recognized as research and development expense. The Company could be required to make clinical development, regulatory and sales-based milestones of up to \$1.0 million, \$1.0 million and \$36.0 million, respectively, to a licensor for technology not currently used by the Company. Total license expense incurred under these license agreements amounted to \$205,000, \$127,000, \$94,000 and \$90,000 for the years ended December 31, 2011 and 2012 and for the nine months ended September 30, 2012 and 2013, respectively.

ELEVEN BIOTHERAPEUTICS, INC.
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Information as of September 30, 2013 and for the nine months ended September 30, 2012 and 2013 is unaudited.

Legal Contingencies

The Company does not currently have any contingencies related to ongoing legal matters.

8. Series A Preferred Stock

In February 2011, the Company issued a total of 11,000,000 shares of Series A Preferred Stock at a price of \$1.00 per share for gross proceeds of \$11.0 million. In January and April 2012, the Company sold and issued 5,000,000 and 20,500,000 shares, respectively, of Series A Preferred Stock at \$1.00 per share for gross proceeds of \$5.0 million and \$20.5 million, respectively.

The Company assessed all terms and features of the Series A Preferred Stock in order to identify any potential embedded features that would require bifurcation or any beneficial conversion features. As part of this analysis, the Company assessed the economic characteristics and risks of its Preferred Stock, including conversion and liquidation features, as well as dividend and voting rights. Based on the Company's determination that its Preferred Stock is an "equity host," the Company determined that all features of the Preferred Stock are most clearly and closely associated with an equity host, and, although the Preferred Stock includes conversion features, such conversion features do not require bifurcation as a derivative liability.

The rights, preferences, and privileges of Series A Preferred Stock are listed below:

Conversion

Shares of Series A Preferred Stock are convertible without payment of any additional consideration into such number of fully paid and non-assessable shares of Common Stock determined by dividing the original issuance price by the conversion price in effect at the time. The original conversion price is the original price, or \$1.00, subject to adjustments to reflect the issuance of Common Stock, options, warrants, or other rights to subscribe for or to purchase Common Stock for a consideration per share, less than the conversion price then in effect and subsequent stock dividends, stock splits, combinations, or recapitalizations.

Conversion is at the option of the holders of Series A Preferred Stock, although conversion is automatic upon the earlier of the consummation of an initial public offering resulting in gross proceeds to the Company of at least \$30 million and at a price of at least \$5.00 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) of Common Stock or the vote or written consent of 80% of outstanding shares of Series A Preferred Stock.

Dividends

Holders of the Series A Preferred Stock are entitled to receive, before any cash is paid out or set aside for any Common Stock, dividends at the annual rate of 8% of the original purchase price per share, subject to adjustment for stock splits, dividends and similar events. The dividends are cumulative and are payable only when, and if, declared by the Board of Directors. No dividends have been declared since the Company's inception. Aggregate cumulative preferred dividends at December 31, 2012 and September 30, 2013 were \$5.0 million and \$7.7 million, respectively.

Liquidation Preference

Holders of the Series A Preferred Stock have preference to the assets of the Company in the event of a liquidation or dissolution or winding-up of the Company, including a change in control, equal to \$1.00 per share,

ELEVEN BIOTHERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS (continued)

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plus any accrued but unpaid dividends, whether or not declared, plus any dividends declared but unpaid thereon. After the payment of the preference amounts to the holders of the Series A Preferred Stock, the remaining assets of the Company are to be distributed among the holders of the Series A Preferred Stock and holders of Common Stock on a pro rata basis. However, if the aggregate amount which the holders of Series A Preferred Stock would be entitled to receive exceeds \$3.00 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), each holder of Series A Preferred Stock will receive the greater of \$3.00 per share of Series A Preferred Stock or the amount such holder would have received if all shares of Series A Preferred Stock had been converted into Common Stock immediately prior to such liquidation.

If the assets of the Company are insufficient to pay the full preferential amounts to the holders of the Series A Preferred Stock, the assets shall be distributed ratably among such holders in proportion to their aggregate liquidation preference amounts.

Voting Rights

Holders of the Series A Preferred Stock are entitled to vote as a single class with the holders of Common Stock and have one vote for each equivalent common share into which the Series A Preferred Stock is convertible. A vote of holders of 70% of the outstanding shares of Series A Preferred Stock is required in order to, among other things, amend the Company's Certificate of Incorporation or Bylaws; authorize, issue or reclassify any capital stock of the Company unless the same ranks junior to the Series A Preferred Stock with respect to liquidation, payment of dividends and redemption; increase the authorized shares of the Company's Preferred Stock; and subject to specified exceptions, repurchase or redeem any capital stock of the Company. A vote of holders of 80% of the outstanding shares of Series A Preferred Stock is required in order to effect a liquidation, dissolution, sale or merger of the Company; sell or grant an exclusive license with respect to EBI-005; or authorize or issue additional shares of Series A Preferred Stock.

9. Common Stock

The voting dividend and liquidation rights of holders of shares of Common Stock are subject to and qualified by the rights, powers and preferences of the holders of the shares of Preferred Stock. The Company's Common Stock has the following characteristics:

Voting

The holders Common Stock are entitled to one vote for each share held.

Dividends

The holders of Common Stock are not entitled to receive dividends.

Liquidation

After payment to the holders of shares of Preferred Stock of their liquidation preferences, the holders of shares of Common Stock, are entitled to share ratably in the Company's assets available for distribution to stockholders, in the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company or upon the occurrence of a Deemed Liquidation Event, as defined.

ELEVEN BIOTHERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS (continued)

Information as of September 30, 2013 and for the nine months ended September 30, 2012 and 2013 is unaudited.

Reserved for Future Issuance

In connection with the Bridge Financing, the Company increased the total number of shares of Common Stock that the Company has the authority to issue to 67,545,000 shares.

The Company has reserved the following shares of Common Stock:

	<u>As of December 31,</u>		<u>As of</u>
	<u>2011</u>	<u>2012</u>	<u>September 30,</u>
			<u>2013</u>
Series A Preferred Stock	19,750,000	45,250,000	45,250,000
Series A Preferred Stock warrants	45,000	195,000	195,000
Unvested restricted stock	4,537,357	2,305,105	1,336,669
Options to purchase Common Stock	4,923,959	7,462,285	6,971,241
Warrants to purchase Common Stock	—	—	1,750,000
	<u>29,256,316</u>	<u>55,212,390</u>	<u>55,502,910</u>

10. Warrants

In May 2010, the Company issued a warrant to purchase 45,000 shares of Series A Preferred Stock at an exercise price of \$1.00 per share (the “2010 Warrant”) to a third party in connection with the Loan and Security Agreement (Note 6). The 2010 Warrant was exercisable immediately and has a ten-year life. The 2010 Warrant was initially valued at \$38,000 using the Black-Scholes option-pricing model. The Company recorded a debt discount of \$38,000 upon issuance of the 2010 Warrant, which is being accreted as interest expense over the remaining term of the loan. The Company recorded interest expense of \$11,000, \$19,000, \$20,000, and \$0 for the years ended December 31, 2011 and 2012 and for the nine months ended September 30, 2012 and 2013, respectively. The offsetting credit to the debt discount was recorded as a warrant liability and is classified as a long-term liability in the accompanying balance sheets. The fair value of the 2010 Warrant is re-measured at each reporting date using then-current assumptions. As of December 31, 2011 and 2012 and as of September 30, 2013, the 2010 Warrant was valued using the Black-Scholes option-pricing model at \$26,000, \$32,000, and \$53,000, respectively. The following assumptions were used in valuing the 2010 Warrant:

	<u>May 10,</u>	<u>December 31,</u>	<u>December 31,</u>	<u>September 30,</u>
	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Risk-free interest rate	3.38%	1.78%	1.26%	2.19%
Expected dividend yield	0.00%	0.00%	0.00%	0.00%
Expected term (in years)	10	8.41	7.41	6.66
Expected volatility	85.50%	70.61%	76.60%	75.50%

The changes in fair value of \$(12,000), \$6,000 and \$21,000 were recorded as other income (expense) in the accompanying statement of operations for the years ended December 31, 2011 and 2012 and the nine months ended September 30, 2013, respectively. No portion of the 2010 Warrant has been exercised as of September 30, 2013.

On September 4, 2012, the Company issued a warrant to purchase 150,000 shares of Series A Preferred Stock at an exercise price of \$1.00 per share (the “2012 Warrant”) in connection with the modification to the Loan and Security Agreement (Note 6). The 2012 Warrant was exercisable immediately and has a ten-year life. The 2012 Warrant was initially valued at \$97,000 using the Black-Scholes option-pricing model. The Company

ELEVEN BIOTHERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS (continued)

Information as of September 30, 2013 and for the nine months ended September 30, 2012 and 2013 is unaudited.

recorded a debt discount of \$97,000 upon issuance of the 2012 Warrant, which is being accreted as interest expense over the remaining term of the loan. The Company recorded interest expense of \$8,000 and \$14,000 for the year ended December 31, 2012 and nine months ended September 30, 2013, respectively. The offsetting credit to the debt discount was recorded as a warrant liability and is classified as a long-term liability in the accompanying balance sheets. The fair value of the 2012 Warrant is re-measured at each reporting date using then-current assumptions. As of December 31, 2012 and September 30, 2013, the 2012 Warrant was valued using the Black-Scholes option-pricing model at \$115,000 and \$193,000, respectively. The following assumptions were used in valuing the 2012 Warrant:

	September 4, 2012	December 31, 2012	September 30, 2013
Risk-free interest rate	1.67%	1.74%	2.79%
Expected dividend yield	0.00%	0.00%	0.00%
Expected term (in years)	10	9.35	8.93
Expected volatility	76.92%	74.00%	77.90%

The change in fair value of \$18,000 and \$78,000 was recorded as other income (expense) in the accompanying statement of operations for the year ended December 31, 2012 and the nine months ended September 30, 2013. No portion of the 2012 Warrant had been exercised as of September 30, 2013.

The following table provides a rollforward of the fair value of the warrants determined by Level 3 inputs (in thousands):

	<u>Fair Value</u>
Balance at January 1, 2012	\$ 26
Issuance of warrants at fair value	97
Change in fair value	24
Balance at December 31, 2012	<u>\$ 147</u>
Change in fair value	99
Balance at September 30, 2013	<u>\$ 246</u>

11. Share-Based Payments

2009 Stock Incentive Plan

The Company maintains the Eleven Biotherapeutics, Inc. 2009 Stock Incentive Plan (the "2009 Plan"), as amended and restated, for employees, directors, consultants, and advisors to the Company. The 2009 Plan provides for the grant of incentive and non-qualified stock options and restricted stock grants as determined by the Board of Directors. As of September 30, 2013, the Company had reserved 6,971,241 shares of Common Stock under the 2009 Plan, of which 562,319 shares remained available for future issuance under the 2009 Plan. Under the 2009 Plan, stock options may not be granted at less than fair value on the date of the grant. Furthermore, the exercise price of ISOs granted to an employee, who, at the time of grant, is a 10% shareholder, may not be less than 110% of the fair value on the date of grant.

Terms of stock option agreements, including vesting requirements, are determined by the Board of Directors, subject to the provisions of the 2009 Plan. Options and restricted stock awards granted by the Company generally vest ratably over four years, with a one-year cliff for new employee awards, and are

ELEVEN BIOTHERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS (continued)

Information as of September 30, 2013 and for the nine months ended September 30, 2012 and 2013 is unaudited.

exercisable from the date of grant for a period of ten years. Restricted stock issuances and early exercises of stock options are subject to the Company's right of repurchase at the original issuance price, which right lapses over the vesting period of the stock. For options and restricted stock awards granted to date, the exercise price equaled the estimated fair value of the Common Stock as determined by the Board of Directors on the date of grant.

A summary of the Company's stock option activity and related information follows:

	Shares	Weighted-Average Exercise Price	Remaining Contractual Life (in years)
Outstanding at December 31, 2011	4,700,510	\$ 0.01	8.46
Granted	925,200	0.12	
Exercised	(291,674)	0.02	
Cancelled or forfeited	(83,188)	0.04	
Outstanding at December 31, 2012	<u>5,250,848</u>	\$ 0.03	7.77
Granted	2,962,500	0.30	
Exercised	(491,046)	0.04	
Cancelled or forfeited	(1,313,380)	0.03	
Outstanding at September 30, 2013	<u>6,408,922</u>	\$ 0.15	8.14
Exercisable at December 31, 2012	<u>1,214,730</u>	\$ 0.02	7.79
Vested and expected to vest at December 31, 2012(1)	<u>3,150,848</u>	\$ 0.04	8.22
Exercisable at September 30, 2013	<u>1,932,307</u>	\$ 0.06	7.78
Vested and expected to vest at September 30, 2013(1)	<u>4,658,922</u>	\$ 0.19	8.45

(1) Represents the number of vested options, plus the number of unvested options expected to vest.

The total intrinsic value of options vested and expected to vest for the year ended December 31, 2011 and 2012 and for the nine months ended September 30, 2013 was \$286,000, \$282,000 and \$4.5 million, respectively. The total intrinsic value of options exercised for the year ended December 31, 2011 and 2012 and for the nine months ended September 30, 2013 was \$0, \$29,000 and \$87,000, respectively. The total fair value of employee options vested for the year ended December 31, 2011 and 2012 and for the nine months ended September 30, 2013 was \$3,000, \$9,000 and \$27,000, respectively.

ELEVEN BIOTHERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS (continued)

Information as of September 30, 2013 and for the nine months ended September 30, 2012 and 2013 is unaudited.

Restricted Stock

From time to time, upon approval by the Board of Directors, certain employees and advisors have been granted restricted shares of Common Stock. These shares of restricted stock are subject to repurchase rights. Accordingly, the Company has recorded the proceeds from the issuance of restricted stock as a liability in the balance sheets. The restricted stock liability is reclassified into stockholders' (deficit) equity as the restricted stock vests. A summary of the status of unvested restricted stock as of December 31, 2012 and September 30, 2013, and changes during the year ended December 31, 2012 and the nine months ended September 30, 2013 is presented below:

	Restricted Stock	Weighted- Average Grant Date Fair Value
Unvested at January 1, 2012	4,537,357	\$ 0.01
Granted	17,500	0.13
Vested	(1,652,252)	0.01
Repurchased	(597,500)	0.01
Unvested at December 31, 2012	<u>2,305,105</u>	\$ 0.01
Vested	(968,436)	0.01
Unvested at September 30, 2013	<u>1,336,669</u>	\$ 0.01

The Company granted 17,500 shares of restricted stock to non-employees during the year ended December 31, 2012 at a purchase price of \$0.01 per share. No restricted stock was granted to non-employees during the year ended December 31, 2011 or in the nine months ended September 30, 2013. The total number of shares of non-employee unvested restricted stock outstanding was 677,085 at December 31, 2012. The non-employee restricted stock shares are revalued as they vest. The expense related to the restricted stock granted to non-employees for the years ended December 31, 2011 and 2012 and for the nine months ended September 30, 2012 and 2013 was \$11,000, \$71,000, \$54,000 and \$263,000, respectively.

Performance-Based Stock Options

The Company has granted stock options to the founders of the Company, which contain both performance-based and service-based vesting criteria. Milestone events are specific to the Company's corporate goals, including but not limited to certain preclinical and clinical development milestones related to the Company's product candidates. Stock-based compensation expense associated with these performance-based stock options is recognized if the performance condition is considered probable of achievement using management's best estimates. Management has concluded that the performance-based milestones, which were primarily related to preclinical and clinical development, were not probable of achievement at December 31, 2011 and 2012. Accordingly, no stock-based compensation expense was recorded as of December 31, 2011 and 2012 or as of September 30, 2012 related to these options. During the nine months ended September 30, 2013, management determined that a performance-based milestone was achieved and recorded stock-based compensation expense of \$106,000 during the nine months ended September 30, 2013, accordingly. The remaining milestones were not deemed to be probable of achievement as of September 30, 2013. As of September 30, 2013, unrecognized compensation expense related to performance based awards was \$1.4 million.

ELEVEN BIOTHERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS (continued)

Information as of September 30, 2013 and for the nine months ended September 30, 2012 and 2013 is unaudited.

Stock-Based Compensation Expense

The fair value of each stock option granted to employees was estimated on the date of grant using the Black-Scholes option-pricing model based on the assumptions noted in the following table:

	Year Ended December 31,		Nine Months Ended September 30,	
	2011	2012	2012	2013
Risk-free interest rate	1.16-2.69%	0.57-0.95%	0.57-0.95%	1.09-1.85%
Expected dividend yield	—	—	—	—
Expected term (in years)	6	6	6	6
Expected volatility	70.61%	70.48-70.80%	70.48-70.80%	76.58-77.80%

Volatility

Since the Company is privately held as of the date of these financial statements, it does not have relevant historical data to support its expected volatility. As such, the Company has used a weighted-average of expected volatility based on the volatilities of a representative group of publicly traded biopharmaceutical companies. For purposes of identifying representative companies, the Company considered characteristics such as stage of development and area of therapeutic focus. The expected volatility has been determined using a weighted-average of the historical volatilities of the representative group of companies for a period equal to the expected term of the option grant. The Company intends to continue to consistently apply this process using the same similar entities until a sufficient amount of historical information regarding the volatility of the Company's own share price becomes available or until circumstances change, such that the identified entities are no longer representative companies. In the latter case, more suitable, similar entities whose share prices are publicly available would be utilized in the calculation.

Risk-Free Rate

The risk-free rate is based on the yield curve of U.S. Treasury securities with periods commensurate with the expected term of the options being valued.

Expected Term

The Company uses the "simplified method" to estimate the expected term of stock option grants. Under this approach, the weighted-average expected life is presumed to be the average of the contractual term (ten years) and the vesting term (generally four years) of the Company's stock options, taking into consideration multiple vesting tranches. The Company utilizes this method due to lack of historical exercise data and the plain-vanilla nature of the Company's share-based awards.

Dividends

The Company has never paid, and does not anticipate paying, any cash dividends in the foreseeable future, and therefore uses an expected dividend yield of zero in the option-pricing model.

Forfeitures

The Company is also required to estimate forfeitures at the time of grant, and revise those estimates in subsequent periods if actual forfeitures differ from its estimates. The Company uses historical data to estimate

ELEVEN BIOTHERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS (continued)

Information as of September 30, 2013 and for the nine months ended September 30, 2012 and 2013 is unaudited.

pre-vesting option forfeitures and record stock-based compensation expense only for those awards that are expected to vest. To the extent that actual forfeitures differ from the Company's estimates, the difference is recorded as a cumulative adjustment in the period the estimates are revised. Stock-based compensation expense recognized in the financial statements is based on awards that are ultimately expected to vest.

Using the Black-Scholes option-pricing model, the weighted-average per share grant date fair values of options granted to employees in 2011 and 2012 and for the nine months ended September 30, 2012 and 2013 were \$0.01, \$0.07, \$0.07, and \$0.30, respectively. The expense related to the options granted to employees for the years ended December 31, 2011 and 2012 and for the nine months ended September 30, 2012 and 2013 were \$3,000, \$14,000, \$10,000 and \$91,000, respectively.

The Company granted 205,000 and 200,000 stock options to non-employees during the years ended December 31, 2011 and 2012, respectively, with exercise prices of \$0.01 and \$0.12 per share, respectively. The fair value of each non-employee stock option granted is estimated using the Black-Scholes option-pricing model based on assumptions noted in the following table:

	Year Ended December 31,		Nine Months Ended September 30,	
	2011	2012	2012	2013
Risk-free interest rate	2.25-2.81%	1.60-2.19%	1.51-1.60%	1.82-2.61%
Expected dividend yield	0.00%	0.00%	0.00%	0.00%
Expected option life (years)	10	10	10	10
Expected stock price volatility	70.62%	75.51-78.29%	75.91-76.41%	76.51-78.14%

The total number of non-employee stock options outstanding at December 31, 2012 was 2,986,667. The non-employee stock options are revalued as they vest. The Company calculated the value of the stock options using the Black-Scholes option-pricing model. The expense related to the options granted to non-employees for the years ended December 31, 2011 and 2012 and for the nine months ended September 30, 2012 and 2013 were \$24,000, \$45,000, \$36,000, and \$295,000, respectively.

At September 30, 2013, there was \$1.2 million of total unrecognized compensation cost related to non-vested stock options and unvested restricted stock with service-based vesting provisions, which is expected to be recognized over a weighted-average period of 2.32 years.

ELEVEN BIOTHERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS (continued)

Information as of September 30, 2013 and for the nine months ended September 30, 2012 and 2013 is unaudited.

12. Income Taxes

The provision (benefit) for income taxes was as follows for the years ended December 31, 2011 and 2012 (in thousands):

	<u>2011</u>	<u>2012</u>
Current:		
Federal	\$—	\$—
State	—	—
Total current	—	—
Deferred:		
Federal	—	—
State	—	—
Total deferred	—	—
Total	<u>\$—</u>	<u>\$—</u>

A reconciliation of the expected income tax benefit (expense) computed using the federal statutory income tax rate to the Company's effective income tax rate was as follows for the years ended December 31, 2011 and 2012:

	<u>2011</u>	<u>2012</u>
Income tax benefit computed at federal statutory tax rate	34.00%	34.00%
State taxes, net of federal benefit	5.17%	5.19%
Change in valuation allowance	(42.64)%	(39.88)%
General business credits and other credits	3.55%	0.86%
Permanent differences	(0.08)%	(0.17)%
Total	<u>— %</u>	<u>— %</u>

The Company had incurred net operating losses ("NOLs") from inception. At December 31, 2012, the Company has federal and state NOL carryforwards of \$37.9 million and \$37.4 million, respectively, available to reduce future taxable income, that expire beginning in 2014. The Company also had federal and state research and development tax credit carryforwards of \$384,000 and \$539,000, respectively, available to reduce future tax liabilities that expire beginning in 2025. The Company does not have any NOL carryforwards associated with deductible stock option exercises as of December 31, 2011 and 2012.

Under the provisions of the Internal Revenue Code, certain substantial changes in the Company's ownership may result in a limitation on the amount of NOL carryforwards and research and development credit carryforwards that may be utilized annually to reduce future taxable income and taxes payable. The Company has not determined if a limitation has occurred.

ELEVEN BIOTHERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS (continued)

Information as of September 30, 2013 and for the nine months ended September 30, 2012 and 2013 is unaudited.

The Company's deferred tax assets consist of the following (in thousands):

	December 31,	
	2011	2012
Deferred tax assets:		
Net operating loss carryforwards	\$ 7,235	\$ 14,877
Research and development credit carryforwards	571	739
Accruals and other	131	209
Capitalized license and organization costs	85	87
Capitalized start-up costs	400	369
Total gross deferred tax asset	8,422	16,281
Deferred tax liability	(95)	(118)
Valuation allowance	(8,327)	(16,163)
Net deferred tax asset	<u>\$ —</u>	<u>\$ —</u>

As required by ASC 740, *Income Taxes* ("ASC 740"), management of the Company has evaluated the positive and negative evidence bearing upon the realizability of its deferred tax assets, which are composed principally of NOL carryforwards, research and development credit carryforwards, and capitalized license and organization costs. Management has determined that it is more likely than not that the Company will not recognize the benefits of its federal and state deferred tax assets, and, as a result, a valuation allowance of \$8.3 million and \$16.2 million has been established at December 31, 2011 and 2012, respectively. The change in the valuation allowance was \$7.8 million for the year ended December 31, 2012. At December 31, 2012 and for prior periods, the Company had no unrecognized tax benefits. The Company has not, as yet, conducted a study of its research and development credit carryforwards. Such a study may result in an adjustment to the Company's research and development credit carryforwards; however, until a study is completed and any adjustment is known, no amount is being presented as an uncertain tax position. A full valuation allowance has been provided against the Company's research and development credits, and, if an adjustment is required, this adjustment would be offset by an adjustment to the valuation allowance. Thus, there would be no impact to the balance sheets or statements of operations and comprehensive loss if an adjustment were required.

The Company applies the accounting guidance in ASC 740 related to accounting for uncertainty in income taxes. The Company's reserves related to taxes are based on a determination of whether, and how much of, a tax benefit taken by the Company in its tax filings or positions is more likely than not to be realized following resolution of any potential contingencies present related to the tax benefit. As of December 31, 2011 and 2012, and as of September 30, 2013, the Company had no unrecognized tax benefits. The Company recognizes interest and penalties related to uncertain tax positions in income tax expense.

13. Related-Party Transaction

The Company had received consulting and management services from one of its investors. This amounted to \$174,000 during the year ended December 31, 2011. No such services were provided after September 30, 2011.

ELEVEN BIOTHERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS (continued)

Information as of September 30, 2013 and for the nine months ended September 30, 2012 and 2013 is unaudited.

The landlord from which the Company leases its corporate headquarters under an operating lease purchased 250,000 shares of Series A Preferred Stock at \$1.00 per share, the price paid by the other investors, after execution of the lease (Note 7).

14. Defined Contribution Benefit Plan

The Company sponsors a 401(k) retirement plan, in which substantially all of its full-time employees are eligible to participate. Participants may contribute a percentage of their annual compensation to this plan, subject to statutory limitations. The Company did not provide any contributions to this plan during the years ended December 31, 2011 and 2012 and for the nine months ended September 30, 2013.

15. Restructuring

In April 2013, the Company implemented a strategic restructuring designed to conserve resources and improve its financial position. As part of this strategic restructuring, the Company reduced spending on early stage research programs and implemented a reduction in force of approximately 15 positions, or 50% of its workforce, primarily in the research area. The restructuring charges recorded during the nine months ended September 30, 2013 and the related liability balance as of September 30, 2013 for the strategic restructuring are as follows (in thousands):

	<u>Restructuring Expense</u>	<u>Cash Payments</u>	<u>Non-cash Expense</u>	<u>Restructuring Liability at September 30, 2013</u>
Employee severance, benefits, and related costs	<u>\$ 279</u>	<u>\$ (241)</u>	<u>\$ (38)</u>	<u>\$ —</u>

In connection with the termination of the aforementioned employees during the nine months ended September 30, 2013, the Company accelerated the vesting of certain stock options. The Company revalued the stock options as of the date of termination using the Black-Scholes option-pricing model. The expense related to the accelerated stock options for the nine months ended September 30, 2013, included within the table above, was \$38,000. For the nine months ended September 30, 2013, \$279,000 of restructuring expense was recorded, of which \$17,000 was included within general and administrative expenses and \$262,000 was included within research and development expenses in the accompanying statement of operations and comprehensive loss.

16. Subsequent Events

(A) Effective October 31, 2013, the Company increased the aggregate number of shares of Common Stock issuable under the 2009 Plan from 11,050,000 to 12,700,000 shares and increased the number of authorized shares of Common Stock from 67,545,000 shares to 69,195,000 shares.

Effective November 30, 2013, the Company amended its operating lease for its facility to extend the lease term to January 31, 2016, with an option to further extend the lease term through April 30, 2018. Rental payments due under this lease from December 1, 2013 through January 31, 2016 will be \$0.9 million in total. In connection with the amendment, the letter of credit required under the lease was reduced from \$134,000 to \$94,000.

Effective December 4, 2013, the Company increased the number of authorized shares of Common Stock from 69,195,000 to 76,973,723, increased the number of authorized shares of the Company's preferred stock from 45,445,000 to 52,080,868 and designated 6,635,868 shares of preferred stock as Series B Preferred Stock.

ELEVEN BIOTHERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS (continued)

Information as of September 30, 2013 and for the nine months ended September 30, 2012 and 2013 is unaudited.

(B) In December 2013, the Company issued and sold an aggregate of 6,632,416 shares of its Series B Preferred Stock and accompanying warrants to purchase shares of its Common Stock to four of its stockholders, at a price per share of \$1.75, for an aggregate purchase price of \$11.6 million, consisting of \$8.0 million in cash and \$3.6 million for the conversion of the June 2013 Convertible Notes, including accrued interest. The warrants are initially exercisable at a price of \$0.01 per share for up to an aggregate of 1,142,855 shares of Common Stock. The Company is in the process of evaluating the accounting treatment of the warrants.

The Series B Preferred Stock has rights and preferences comparable to the Series A Preferred Stock and, in the event of a liquidation or dissolution or winding-up of the Company, including a change in control, the holders of the Series B Preferred Stock have preference to the assets of the Company, on a *pari passu* basis with the holders of the Series A Preferred Stock, equal to \$1.75 per share, plus any accrued but unpaid dividends, whether or not declared, plus any dividends declared but unpaid thereon. After the payment of the preference amounts to the holders of the Series B Preferred Stock, the remaining assets of the Company are to be distributed among the holders of the Series A Preferred Stock and Series A Preferred Stock, the Series B Preferred Stock and the Common Stock on a pro rata basis. However, if the aggregate amount which the holders of Series B Preferred Stock would be entitled to receive exceeds \$5.25 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), each holder of Series B Preferred Stock will receive the greater of \$5.25 per share of Series B Preferred Stock or the amount such holder would have received if all shares of Series B Preferred Stock had been converted into Common Stock immediately prior to such liquidation. In connection with the Company's December 2013 series B preferred stock financing, the liquidation preference of the Series A Preferred Stock was amended to provide that, in the event of a liquidation or dissolution or winding-up of the Company, including a change in control, the preference of the holders of the Series A Preferred Stock to the assets of the Company, would be on a *pari passu* basis with the holders of the Series B Preferred Stock.

Shares

Eleven Biotherapeutics, Inc.

Common Stock



PRELIMINARY PROSPECTUS

, 2014

Citigroup

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Through and including _____, 2014 (25 days after the commencement of this offering), all dealers that buy, sell or trade shares of our common stock, whether or not participating in this offering, may be required to deliver a prospectus. This delivery requirement is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

PART II**INFORMATION NOT REQUIRED IN PROSPECTUS****Item 13. Other Expenses of Issuance and Distribution.**

The following table sets forth the expenses to be incurred in connection with the offering described in this Registration Statement, other than underwriting discounts and commissions, all of which will be paid by the Registrant. All amounts are estimates except the Securities and Exchange Commission, or SEC, registration fee and the Financial Industry Regulatory Authority, Inc., filing fee.

	<u>Amount</u>
Securities and Exchange Commission registration fee	\$ *
Financial Industry Regulatory Authority, Inc. filing fee	*
NASDAQ Global Market initial listing fee	*
Accountant's fees and expenses	*
Legal fees and expenses	*
Blue sky fees and expenses	*
Transfer agent's fees and expenses	*
Printing and engraving expenses	*
Miscellaneous	*
Total expenses	<u>\$</u>

* To be filed by amendment.

Item 14. Indemnification of Directors and Officers.

Section 102 of the Delaware General Corporation Law, or the DGCL, permits a corporation to eliminate the personal liability of its directors or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his or her duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. Our certificate of incorporation that will be effective upon the closing of this offering provides that no director shall be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability, except to the extent that the DGCL prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145 of the DGCL provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlements actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he or she is or is threatened to be made a party by reason of such position, if such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnification for such expenses which the Court of Chancery or such other court shall deem proper.

Our certificate of incorporation that will be effective upon the closing of the offering provides that we will indemnify each person who was or is a party or threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of us), by reason of the fact that he or she is or was, or has agreed to become, our director or

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officer, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (all such persons being referred to as an Indemnitee), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding and any appeal therefrom if such Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, and, with respect to any criminal action or proceeding, he or she had no reasonable cause to believe his or her conduct was unlawful.

Our certificate of incorporation that will be effective upon the closing of the offering also provides that we will indemnify any Indemnitee who was or is a party to an action or suit by or in the right of us to procure a judgment in our favor by reason of the fact that the Indemnitee is or was, or has agreed to become, our director or officer, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee or, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise, or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees) and, to the extent permitted by law, amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding, and any appeal therefrom, if the Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, except that no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to us, unless a court determines that, despite such adjudication but in view of all of the circumstances, he or she is entitled to indemnification of such expenses. Notwithstanding the foregoing, to the extent that any Indemnitee has been successful, on the merits or otherwise, he or she will be indemnified by us against all expenses (including attorneys' fees) actually and reasonably incurred by him or her or on his or her behalf in connection therewith. If we do not assume the defense, expenses must be advanced to an Indemnitee under certain circumstances.

We have entered into indemnification agreements with our directors and intend to enter into indemnification agreements with our executive officers prior to the completion of this offering. In general, these agreements provide that we will indemnify the director or executive officer to the fullest extent permitted by law for claims arising in his or her capacity as a director or officer of our company or in connection with their service at our request for another corporation or entity. The indemnification agreements also provide for procedures that will apply in the event that a director or executive officer makes a claim for indemnification and establish certain presumptions that are favorable to the director or executive officer.

We maintain a general liability insurance policy that covers certain liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers.

The underwriting agreement we will enter into in connection with the offering of common stock being registered hereby provides that the underwriters will indemnify, under certain conditions, our directors and officers (as well as certain other persons) against certain liabilities arising in connection with such offering.

Insofar as the forgoing provisions permit indemnification of directors, executive officers, or persons controlling us for liability arising under the Securities Act of 1933, as amended, or the Securities Act, we have been informed that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Item 15. Recent Sales of Unregistered Securities.

Set forth below is information regarding shares of our common stock, shares of our preferred stock, warrants to purchase shares of our common stock, warrants to purchase shares of our preferred stock and convertible promissory notes issued, and stock options granted, by us within the past three years that were not registered under the Securities Act. Also included is the consideration, if any, received by us for such shares and options and information relating to the section of the Securities Act, or rule of the SEC, under which exemption from registration was claimed.

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(a) Issuances of Securities

Between December 2010 and December 2013, we issued and sold 45,250,000 shares of our series A preferred stock to four investors at a price per share of \$1.00 for an aggregate purchase price of \$45,250,000.

Between December 2010 and December 2013, we issued and sold 3,025,000 shares of our common stock to employees at a price of \$0.01 per share for an aggregate purchase price of \$30,250.

In June 2013, we issued and sold 7% convertible promissory notes in the aggregate principal amount of \$3,500,000 to four investors.

In December 2013, we issued and sold 6,632,416 shares of our series B preferred stock to four investors at a price per share of \$1.75 for an aggregate purchase price of \$11.6 million.

No underwriters were involved in the foregoing issuances of securities. The securities described in this section (a) of Item 15 were issued to investors in reliance upon the exemption from the registration requirements of the Securities Act, as set forth in Section 4(2) under the Securities Act relative to transactions by an issuer not involving any public offering, to the extent an exemption from such registration was required. All purchasers of shares of our preferred stock described above represented to us in connection with their purchase that they were accredited investors and were acquiring the securities for their own account for investment purposes only and not with a view to, or for sale in connection with, any distribution thereof and that they could bear the risks of the investment and could hold the securities for an indefinite period of time. 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.

(b) Stock Option Grants

Between December 2010 and December 2013, we granted options to purchase an aggregate of 6,660,710 shares of common stock, with exercise prices ranging from \$0.01 to \$1.16 per share, to our employees, directors, advisors and consultants pursuant to our 2009 Stock Incentive Plan. As of December 6, 2013, 1,087,780 options to purchase shares of our common stock had been exercised for aggregate consideration of \$29,485, options to purchase 1,587,820 shares had been forfeited and options to purchase 7,450,610 shares of our common stock remained outstanding at a weighted-average exercise price of \$0.30.

The stock options and the common stock issuable upon the exercise of such options as described in this section (b) of Item 15 were issued pursuant to written compensatory plans or arrangements with the Registrant's employees, directors and consultants, in reliance on the exemption provided by Rule 701 promulgated under the Securities Act. All recipients either received adequate information about the Registrant or had access, through employment or other relationships, to such information.

(c) Issuance of Warrants

In connection with a venture debt facility, we issued to the lender in September 2012, a warrant to purchase up to 150,000 shares of our series A preferred stock, at an exercise price of \$1.00 per share.

In connection with our June 2013 convertible note financing, we issued to four investors in June 2013, warrants to purchase up to 1,750,000 shares of our common stock, at an exercise price of \$0.01 per share.

In connection with our December 2013 series B preferred stock financing, in December 2013, we issued to four investors warrants to purchase up to 1,142,855 shares of our common stock, at an exercise price of \$0.01 per share.

The issuance of these warrants was made in reliance on the exemption from the registration requirements of the Securities Act, as set forth in Section 4(2) under the Securities Act relative to transactions by an issuer not involving any public offering, to the extent an exemption from such registration was required. The lender represented that it was an accredited investor and was acquiring the warrants for its own account for investment purposes only and not with a view to, or for sale in connection with, any distribution thereof and that they could bear the risks of the investment and could hold the warrants for an indefinite period of time and appropriate

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legends were affixed to the instruments representing such warrants issued in such transactions. Such recipients either received adequate information about us or had, through their relationships with us, access to such information.

All of the foregoing securities described in sections (a), (b) and (c) of Item 15 are deemed restricted securities for purposes of the Securities Act. All certificates representing the issued shares of capital stock described in this Item 15 included appropriate legends setting forth that the securities had not been registered and the applicable restrictions on transfer.

Item 16. Exhibits and Financial Statement Schedules.

The exhibits to the registration statement are listed in the Exhibit Index attached hereto and incorporated by reference herein.

Item 17. Undertakings.

(a) The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreements, certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

(b) Insofar as indemnification for liabilities arising under the Securities Act of 1933 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 SEC 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.

(c) The undersigned registrant hereby undertakes that:

- (1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
- (2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cambridge, Commonwealth of Massachusetts, on this _____ day of _____, 2013.

ELEVEN BIOTHERAPEUTICS, INC.

By: _____
Abbie C. Celniker, Ph.D.
President and Chief Executive Officer

SIGNATURES AND POWER OF ATTORNEY

We, the undersigned officers and directors of Eleven Biotherapeutics, Inc., hereby severally constitute and appoint Abbie C. Celniker, Ph.D., and John J. McCabe, C.P.A., and each of them singly (with full power to each of them to act alone), our true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them for her or him and in her or his name, place and stead, and in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and any other registration statement for the same offering pursuant to Rule 462(b) under the Securities Act of 1933, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as full to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities held on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
_____ Abbie C. Celniker, Ph.D.	Director, President and Chief Executive Officer (Principal Executive Officer)	, 2013
_____ John J. McCabe, C.P.A.	Vice President, Finance and Business Operations, Treasurer and Secretary (Principal Financial and Accounting Officer)	, 2013
_____ Noubar B. Afeyan, Ph.D.	Director	, 2013
_____ David A. Berry, M.D., Ph.D.	Director	, 2013
_____ Kenji Harada, Ph.D.	Director	, 2013

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<u>Signature</u>	<u>Title</u>	<u>Date</u>
_____ Mark J. Levin	Director	, 2013
_____ Cary G. Pfeffer, M.D.	Director	, 2013
_____ Jane V. Henderson	Director	, 2013

EXHIBIT INDEX

<u>Exhibit Number</u>	<u>Description of Exhibit</u>
1.1**	Form of Underwriting Agreement
3.1	Second Restated Certificate of Incorporation of the Registrant
3.2*	Bylaws of the Registrant
3.3**	Restated Certificate of Incorporation of the Registrant (to be effective upon the closing of this offering)
3.4**	Amended and Restated By-laws of the Registrant (to be effective upon the closing of this offering)
4.1**	Specimen Stock Certificate evidencing the shares of common stock
4.2	Amended and Restated Investors' Rights Agreement of the Registrant
5.1**	Opinion of Wilmer Cutler Pickering Hale and Dorr LLP
10.1	Amended and Restated 2009 Stock Incentive Plan
10.2*	Form of Incentive Stock Option Agreement under the Amended and Restated 2009 Stock Incentive Plan
10.3*	Form of Non-statutory Stock Option Agreement under the Amended and Restated 2009 Stock Incentive Plan
10.4*	Form of Restricted Stock Agreement under 2009 Stock Incentive Plan
10.5**	2014 Stock Incentive Plan
10.6**	Form of Incentive Stock Option Agreement under 2014 Stock Incentive Plan
10.7**	Form of Non-statutory Stock Option Agreement under 2014 Stock Incentive Plan
10.8†*	License Agreement dated July 13, 2010 by and between the Registrant and The Schepens Eye Research Institute, Inc.
10.9†*	Collaboration and License Agreement dated May 28, 2013 by and between the Registrant and ThromboGenics N.V.
10.10*	Loan and Security Agreement dated May 27, 2010 by and between the Registrant and Silicon Valley Bank, as modified
10.11	Lease Agreement dated January 14, 2010 by and between the Registrant and ARE-MA Region No. 38, LLC, as amended
10.12**	Form of Indemnification Agreement by and between the Registrant and each of its directors and executive officers
10.13**	2014 Employee Stock Purchase Plan
23.1**	Consent of Ernst & Young LLP
23.2**	Consent of Wilmer Cutler Pickering Hale and Dorr LLP (included in Exhibit 5.1)
24.1**	Power of Attorney (included on signature page)

* Previously filed.

** To be filed by amendment.

† Confidential treatment requested as to portions of the exhibit. Confidential materials omitted and filed separately with the Securities and Exchange Commission.

**RESTATED
CERTIFICATE OF INCORPORATION
OF
ELEVEN BIOTHERAPEUTICS, INC.**

(Pursuant to Sections 242 and 245 of the
General Corporation Law of the State of Delaware)

Eleven Biotherapeutics, Inc., a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the "**General Corporation Law**"),

DOES HEREBY CERTIFY:

1. That the name of this corporation is Eleven Biotherapeutics, Inc., and that this corporation was originally incorporated pursuant to the General Corporation Law on February 25, 2008 under the name Newco LS14, Inc.

2. That the Board of Directors duly adopted resolutions proposing to amend and restate the Restated Certificate of Incorporation of this corporation, declaring said amendment and restatement to be advisable and in the best interests of this corporation and its stockholders, and authorizing the appropriate officers of this corporation to solicit the consent of the stockholders therefor, which resolution setting forth the proposed amendment and restatement is as follows:

RESOLVED, that the Restated Certificate of Incorporation of this corporation be amended and restated in its entirety to read as follows (as so amended and restated, the "**Restated Certificate of Incorporation**"):

FIRST: The name of this corporation is Eleven Biotherapeutics, Inc. (the "**Corporation**").

SECOND: The address of the registered office of the Corporation in the State of Delaware is 1209 Orange Street, in the City of Wilmington, 19801, County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.

THIRD: The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law.

FOURTH: The total number of shares of all classes of stock which the Corporation shall have authority to issue is (i) 76,973,723 shares of Common Stock, \$.001 par value per share ("**Common Stock**"), and (ii) 52,080,868 shares of Preferred Stock, \$.001 par value per share ("**Preferred Stock**").

The following is a statement of the designations and the powers, privileges and rights, and the qualifications, limitations or restrictions thereof in respect of each class of capital stock of the Corporation.

A. COMMON STOCK

1. General. The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights, powers and preferences of the holders of the Preferred Stock set forth herein.

2. Voting. The holders of the Common Stock are entitled to one vote for each share of Common Stock held at all meetings of stockholders (and written actions in lieu of meetings) The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by (in addition to any vote of the holders of one or more series of Preferred Stock that may be required by the terms of the Certificate of Incorporation) the affirmative vote of the holders of shares of capital stock of the Corporation representing a majority of the votes represented by all outstanding shares of capital stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law.

B. PREFERRED STOCK

45,445,000 shares of authorized and unissued Preferred Stock of the Corporation are hereby designated “**Series A Preferred Stock**” and 6,635,868 shares of authorized and unissued Preferred Stock of the Corporation are hereby designated “**Series B Preferred Stock**,” each with the following rights, preferences, powers, privileges and restrictions, qualifications and limitations. The Series A Preferred Stock and Series B Preferred Stock are referred to herein as the “**Series Preferred Stock**.” Unless otherwise indicated, references to “Sections” or “Subsections” in this Part B of this Article Fourth refer to sections and subsections of Part B of this Article Fourth.

1. Dividends.

From and after the date of the issuance of a share of Series Preferred Stock, dividends at the applicable Dividend Rate (as defined below) per share shall accrue on such share of Series Preferred Stock (the “**Accruing Dividends**”). Accruing Dividends shall accrue from day to day, whether or not declared, and shall be cumulative; provided however, that except as set forth in the following sentence of this Section 1 or in Subsection 2.1, such Accruing Dividends shall be payable only when, as, and if declared by the Board of Directors and the Corporation shall be under no obligation to pay such Accruing Dividends. The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than dividends on shares of Common Stock payable in shares of Common Stock) unless (in addition to the obtaining of any consents required elsewhere in the Restated Certificate of Incorporation) the holders of the Series Preferred Stock then outstanding shall first receive, or simultaneously receive, a dividend on each outstanding share of Series Preferred Stock in an amount at least equal to (A) in the case of a dividend on Common Stock or any class or series that is convertible into Common Stock, that dividend per share of Series Preferred Stock as would equal the product of (i) the dividend payable on each share of such class or series determined, if applicable, as if all shares of such class or series had been converted into Common Stock and (ii) the number of shares of Common Stock issuable upon conversion of a share of Series Preferred Stock, in each case calculated on the record date for determination of holders

entitled to receive such dividend or (B) in the case of a dividend on any class or series that is not convertible into Common Stock, at a rate per share of Series Preferred Stock determined by (1) dividing the amount of the dividend payable on each share of such class or series of capital stock by the original issuance price of such class or series of capital stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization affecting such shares) and (2) multiplying such fraction by an amount equal to the Series Original Issue Price (as defined below); provided that, if the Corporation declares, pays or sets aside, on the same date, a dividend on shares of more than one class or series of capital stock of the Corporation, the dividend payable to the holders of Series Preferred Stock pursuant to this Section 1 shall be calculated based upon the dividend on the class or series of capital stock that would result in the highest Series Preferred Stock dividend. The “**Dividend Rate**” shall mean (a) \$0.08 per share of Series A Preferred Stock, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A Preferred Stock and (b) \$0.14 per share of Series B Preferred Stock, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series B Preferred Stock. The “**Series Original Issue Price**” shall mean the Series A Original Issue Price or Series B Original Issue Price (each as defined below), as applicable. The “**Series A Original Issue Price**” shall mean \$1.00 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A Preferred Stock. The “**Series B Original Issue Price**” shall mean \$1.75 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series B Preferred Stock.

2. Liquidation, Dissolution or Winding Up; Certain Mergers, Consolidations and Asset Sales.

2.1 Preferential Payments to Holders of Series Preferred Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the holders of shares of Series Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders, on a pari passu, before any payment shall be made to the holders of Common Stock by reason of their ownership thereof, an amount per share equal to (i) with respect to the Series A Preferred Stock, the Series A Original Issue Price, plus any Accruing Dividends accrued but unpaid thereon, whether or not declared, together with any dividends declared but unpaid thereon, and (ii) with respect to the Series B Preferred Stock, the Series B Original Issue Price, plus any Accruing Dividends accrued but unpaid thereon, whether or not declared, together with any dividends declared but unpaid thereon. If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series Preferred Stock the full amount to which they shall be entitled under this Subsection 2.1, the holders of shares of Series Preferred Stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

2.2 **Distribution of Remaining Assets.** In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, after the payment of all preferential amounts required to be paid to the holders of shares of Series Preferred Stock, the remaining assets of the Corporation available for distribution to its stockholders shall be distributed among the holders of the shares of Series Preferred Stock and Common Stock, pro rata based on the number of shares held by each such holder, treating for this purpose all such securities as if they had been converted to Common Stock pursuant to the terms of the Restated Certificate of Incorporation immediately prior to such dissolution, liquidation or winding up of the Corporation or Deemed Liquidation Event; provided, however, that (a) if the aggregate amount which the holders of Series A Preferred Stock would be entitled to receive under Subsection 2.1 and this Subsection 2.2 exceeds \$3.00 per share (subject to appropriate adjustment in the event of a stock split, stock dividend, combination, reclassification, or similar event affecting the Series A Preferred Stock) (the “**Series A Maximum Participation Amount**”), each holder of Series A Preferred Stock shall (in lieu of the amounts otherwise payable pursuant to Subsection 2.1 and this Subsection 2.2) be entitled to receive, with respect to each share of Series A Preferred Stock, upon such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event the greater of (1) the Series A Maximum Participation Amount and (2) the amount such holder would have received with respect to each share of Series A Preferred Stock if all shares of Series A Preferred Stock held by such holder had been converted into Common Stock immediately prior to such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event and (b) if the aggregate amount which the holders of Series B Preferred Stock would be entitled to receive under Subsection 2.1 and this Subsection 2.2 exceeds \$5.25 per share (subject to appropriate adjustment in the event of a stock split, stock dividend, combination, reclassification, or similar event affecting the Series B Preferred Stock) (the “**Series B Maximum Participation Amount**”), each holder of Series B Preferred Stock shall (in lieu of the amounts otherwise payable pursuant to Subsection 2.1 and this Subsection 2.2) be entitled to receive, with respect to each share of Series B Preferred Stock, upon such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event the greater of (1) the Series B Maximum Participation Amount and (2) the amount such holder would have received with respect to each share of Series B Preferred Stock if all shares of Series B Preferred Stock held by such holder had been converted into Common Stock immediately prior to such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event. The aggregate amount which a holder of a share of Series A Preferred Stock is entitled to receive under Subsection 2.1 and this Subsection 2.2 is hereinafter referred to as the “**Series A Liquidation Amount**” and the aggregate amount which a holder of a share of Series B Preferred Stock is entitled to receive under Subsection 2.1 and this Subsection 2.2 is hereinafter referred to as the “**Series B Liquidation Amount.**”

2.3 Deemed Liquidation Events.

2.3.1 **Definition.** Each of the following events shall be considered a “**Deemed Liquidation Event**” unless the holders of at least 80% of the shares of Common Stock issuable upon the conversion of the then outstanding shares of Series Preferred Stock elect otherwise by written notice sent to the Corporation at least five days prior to the effective date of any such event:

- (a) a merger or consolidation in which
 - (i) the Corporation is a constituent party or
 - (ii) a subsidiary of the Corporation is a constituent party and the Corporation issues shares of its capital stock pursuant to such merger or consolidation,

except any such merger or consolidation involving the Corporation or a subsidiary in which the shares of capital stock of the Corporation outstanding immediately prior to such merger or consolidation continue to represent, or are converted into or exchanged for shares of capital stock that represent, immediately following such merger or consolidation, at least a majority, by voting power, of the capital stock of (1) the surviving or resulting corporation or (2) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation (provided that, for the purpose of this Subsection 2.3.1, all shares of Common Stock issuable upon exercise of Options (as defined below) outstanding immediately prior to such merger or consolidation or upon conversion of Convertible Securities (as defined below) outstanding immediately prior to such merger or consolidation shall be deemed to be outstanding immediately prior to such merger or consolidation and, if applicable, converted or exchanged in such merger or consolidation on the same terms as the actual outstanding shares of Common Stock are converted or exchanged);

(b) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Corporation or any subsidiary of the Corporation of all or substantially all the assets of the Corporation and its subsidiaries taken as a whole, or the sale or disposition (whether by merger or otherwise) of one or more subsidiaries of the Corporation if substantially all of the assets of the Corporation and its subsidiaries taken as a whole are held by such subsidiary or subsidiaries, except where such sale, lease, transfer, exclusive license or other disposition is to a wholly owned subsidiary of the Corporation; or

(c) the sale, exchange or transfer by the stockholders of the Corporation, in a single transaction or series of related transactions, of capital stock of the Corporation, as a result of which the stockholders of the Corporation (together with any affiliates of such stockholders) as of immediately prior to such transaction or series of transactions hold capital stock representing less than 50% of the voting power of the Corporation as of immediately following such transaction or series of transactions.

2.3.2 Effecting a Deemed Liquidation Event.

(a) Unless otherwise approved in writing by the holders of at least 80% of the shares of Common Stock issuable upon the conversion of the then outstanding shares of Series Preferred Stock, the Corporation shall not have the power to effect a Deemed Liquidation Event referred to in Subsection 2.3.1(a)(i) unless the agreement or plan of merger or consolidation for such transaction (the "**Merger Agreement**") provides that the consideration payable to the holders of shares of Series Preferred Stock shall be allocated among the holders of capital stock of the Corporation in a manner no less favorable to such holders than as provided for in Subsections 2.1 and 2.2.

(b) In the event of a Deemed Liquidation Event referred to in Subsection 2.3.1(a)(ii) or 2.3.(b), if the Corporation does not effect a dissolution of the Corporation under the General Corporation Law within 90 days after such Deemed Liquidation Event, then (i) the Corporation shall send a written notice to each holder of Series Preferred Stock no later than the 90th day after the Deemed Liquidation Event advising such holders of their right (and the requirements to be met to secure such right) pursuant to the terms of the following clause (ii) to require the redemption of such shares of Series Preferred Stock, and (ii) if the Requisite Holders (as defined below) so request in a written instrument delivered to the Corporation not later than 120 days after such Deemed Liquidation Event, the Corporation shall use the consideration received by the Corporation for such Deemed Liquidation Event (net of any retained liabilities associated with the assets sold or technology licensed, as determined in good faith by the Board of Directors of the Corporation), together with any other assets of the Corporation available for distribution to its stockholders (the “**Available Proceeds**”), to the extent legally available therefor, on the 150th day after such Deemed Liquidation Event, to redeem all outstanding shares of Series Preferred Stock at a price per share equal to (i) in the case of the Series A Preferred Stock, the Series A Liquidation Amount or (ii) in the case of the Series B Preferred Stock, the Series B Liquidation Amount. Notwithstanding the foregoing, in the event of a redemption pursuant to the preceding sentence, if the Available Proceeds are not sufficient to redeem all outstanding shares of Series Preferred Stock, the Corporation shall redeem a pro rata portion of each holder’s shares of Series Preferred Stock to the fullest extent of such Available Proceeds, based on the respective amounts which would otherwise be payable in respect of the shares to be redeemed if the Available Proceeds were sufficient to redeem all such shares, and shall redeem the remaining shares to have been redeemed as soon as practicable after the Corporation has funds legally available therefor. The provisions of Subsection 5.2 below shall apply with such changes in the details thereof as are necessitated by the context to the redemption of the Series Preferred Stock pursuant to this Subsection 2.3.2(b). Prior to the distribution or redemption provided for in this Subsection 2.3.2(b), the Corporation shall not expend or dissipate the consideration received for such Deemed Liquidation Event, except to discharge expenses incurred in connection with such Deemed Liquidation Event or in the ordinary course of business.

2.3.3 Amount Deemed Paid or Distributed. The amount deemed paid or distributed to the holders of capital stock of the Corporation upon any such merger, consolidation, sale, transfer, exclusive license, other disposition or redemption shall be the cash or the value of the property, rights or securities paid or distributed to such holders by the Corporation or the acquiring person, firm or other entity. The value of such property, rights or securities shall be determined in good faith by the Board of Directors of the Corporation.

2.3.4 Allocation of Escrow. In the event of a Deemed Liquidation Event, if any portion of the consideration payable to the stockholders of the Corporation is placed into escrow and/or is payable to the stockholders of the Corporation subject to contingencies, the applicable transaction agreement shall provide that (a) the portion of such consideration that is not placed in escrow and not subject to any contingencies (the “**Initial Consideration**”) shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2 as if the Initial Consideration were the only consideration payable in connection with such Deemed Liquidation Event and (b) any additional consideration which becomes payable to the stockholders of the Corporation upon release from escrow or satisfaction of contingencies shall

be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2 after taking into account the previous payment of the Initial Consideration as part of the same transaction.

3. Voting.

3.1 General. On any matter presented to the stockholders of the Corporation for their action or consideration at any meeting of stockholders of the Corporation (or by written consent of stockholders in lieu of meeting), each holder of outstanding shares of Series Preferred Stock shall be entitled to cast the number of votes equal to the number of whole shares of Common Stock into which the shares of Series Preferred Stock held by such holder are convertible as of the record date for determining stockholders entitled to vote on such matter. Except as provided by law or by the other provisions of the Certificate of Incorporation, holders of Series Preferred Stock shall vote together with the holders of Common Stock as a single class.

3.2 Election of Directors. The holders of record of the shares of Series Preferred Stock, voting exclusively and as a separate class, shall be entitled to elect five directors of the Corporation (the "**Preferred Directors**"). Any director elected as provided in the preceding sentence may be removed without cause by, and only by, the affirmative vote of the holders of record of the shares of Series Preferred Stock, given either at a special meeting of such stockholders duly called for that purpose or pursuant to a written consent of stockholders. If the holders of record of the shares of Series Preferred Stock fail to elect a sufficient number of directors to fill all directorships for which they are entitled to elect directors, voting exclusively and as a separate class, pursuant to the first sentence of this Subsection 3.2, then any directorship not so filled shall remain vacant until such time as the holders of record of the Series Preferred Stock elect a person to fill such directorship by vote or written consent in lieu of a meeting; and no such directorship may be filled by stockholders of the Corporation other than the holders of record of the shares of Series Preferred Stock, voting exclusively and as a separate class. The holders of record of the shares of Common Stock and Series Preferred Stock, exclusively and voting together as a single class, shall be entitled to elect the balance of the total number of directors of the Corporation. At any meeting held for the purpose of electing a director, the presence in person or by proxy of the holders of a majority of the outstanding shares of the class or series entitled to elect such director shall constitute a quorum for the purpose of electing such director. Except as otherwise provided in this Subsection 3.2, a vacancy in any directorship filled by the holders of any class or series shall be filled only by vote or written consent in lieu of a meeting of the holders of such class or series or by any remaining director or directors elected by the holders of such class or series pursuant to this Subsection 3.2. The rights of the holders of the Series Preferred Stock under the first sentence of this Subsection 3.2 shall terminate on the first date following the Series B Original Issue Date (as defined below) on which there are issued and outstanding less than 1,000,000 shares of Series Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series Preferred Stock).

3.3 Series Preferred Stock Protective Provisions. At any time when at least 1,000,000 shares of Series Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series Preferred Stock) are outstanding, the Corporation shall not, either directly or indirectly by

amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or the Restated Certificate of Incorporation) the written consent or affirmative vote of the holders of at least 70% of the shares of Common Stock issuable upon the conversion of the then outstanding shares of Series Preferred Stock (the “**Requisite Holders**”), given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class:

(a) amend, alter or repeal any provision of the Certificate of Incorporation or Bylaws of the Corporation;

(b) (1) create, or authorize the creation of, or issue or obligate itself to issue shares of, any additional class or series of capital stock unless the same ranks junior to the Series Preferred Stock with respect to the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends and rights of redemption, or (2) increase or decrease the authorized number of shares of Series Preferred Stock, or any series thereof;

(c) (1) reclassify, alter or amend any existing security of the Corporation that is pari passu with the Series Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to the Series Preferred Stock in respect of any such right, preference or privilege, or (2) reclassify, alter or amend any existing security of the Corporation that is junior to the Series Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to or pari passu with the Series Preferred Stock in respect of any such right, preference or privilege;

(d) purchase, redeem or retire (or permit any subsidiary to purchase, redeem or retire) or pay or declare any dividend or make any distribution on, any shares of capital stock of the Corporation other than (1) redemptions of or dividends or distributions on the Series Preferred Stock as expressly authorized herein, (2) dividends or other distributions payable on the Common Stock solely in the form of additional shares of Common Stock, and (3) repurchases and retirements of stock from former employees, officers, directors, consultants or other persons who performed services for the Corporation or any subsidiary in connection with the cessation of such employment or service at the lower of the original purchase price or the then-current fair market value thereof;

(e) sell, abandon, transfer, lease, pledge, subject to a lien, encumber, grant a security interest in or otherwise dispose of all or any material portion of the properties or assets of the Corporation (including any exclusive license of intellectual property, but not including any non-exclusive license of intellectual property made in the ordinary course of business);

(f) create, or authorize the creation of, or issue, or authorize the issuance of any debt security, or permit any subsidiary to take any such action with respect to any debt security;

(g) create, or hold capital stock in, any subsidiary that is not wholly owned (either directly or through one or more other subsidiaries) by the Corporation, or sell, transfer or otherwise dispose of any capital stock of any direct or indirect subsidiary of the Corporation, or permit any direct or indirect subsidiary to sell, lease, transfer, exclusively license or otherwise dispose (in a single transaction or series of related transactions) of all or substantially all of the assets of such subsidiary;

(h) effect any change to the principal business of the Corporation, or enter or exit any line of business; or

(i) increase or decrease the authorized number of directors constituting the Board of Directors, except pursuant to Section 1.1 of that certain Second Amended and Restated Voting Agreement, dated as of on or about the filing date of this Restated Certificate of Incorporation, by and among the Company and certain of its stockholders.

3.4 At any time when at least 1,000,000 shares of Series Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series Preferred Stock) are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or the Certificate of Incorporation) the written consent or affirmative vote of the holders of at least 80% of the shares of Common Stock issuable upon the conversion of the then outstanding shares of Series Preferred Stock, given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class:

(a) liquidate, dissolve or wind-up the business and affairs of the Corporation, effect any reclassification or recapitalization of the Corporation's outstanding shares of capital stock or effect any Deemed Liquidation Event, or consent to any of the foregoing;

(b) sell the EBI-005 product candidate or grant an exclusive license that transfers all or substantially all of the rights related to the EBI-005 product candidate; or

(c) authorize or issue additional shares of Series Preferred Stock.

4. Optional Conversion.

The holders of the Series Preferred Stock shall have conversion rights as follows (the "**Conversion Rights**"):

4.1 Right to Convert.

4.1.1 **Conversion Ratio.** Each share of Series Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and nonassessable shares of Common Stock as is determined (i) in the case of Series A Preferred Stock, by dividing the Series A Original Issue Price by the Series A Conversion Price (as defined

below) in effect at the time of conversion and (ii) in the case of Series B Preferred Stock, by dividing the Series B Original Issue Price by the Series B Conversion Price (as defined below) in effect at the time of conversion. The “**Series A Conversion Price**” shall initially be equal to \$1.00 per share of Series A Preferred Stock. The “Series B Conversion Price” shall initially be equal \$1.75 per share of Series B Preferred Stock. Such initial Series A Conversion Price and Series B Conversion Price, and the rate at which shares of Series Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below.

4.1.2 Termination of Conversion Rights. In the event of a liquidation, dissolution or winding up of the Corporation or a Deemed Liquidation Event, the Conversion Rights shall terminate at the close of business on the last full day preceding the date fixed for the payment of any such amounts distributable on such event to the holders of Series Preferred Stock.

4.2 Fractional Shares. No fractional shares of Common Stock shall be issued upon conversion of the Series Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Common Stock as determined in good faith by the Board of Directors of the Corporation. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Series Preferred Stock the holder is at the time converting into Common Stock and the aggregate number of shares of Common Stock issuable upon such conversion.

4.3 Mechanics of Conversion.

4.3.1 Notice of Conversion. In order for a holder of Series Preferred Stock to voluntarily convert shares of Series Preferred Stock into shares of Common Stock, such holder shall surrender the certificate or certificates for such shares of Series Preferred Stock (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify (but without the requirement to post any bond) the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate), at the office of the transfer agent for the Series Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent), together with written notice that such holder elects to convert all or any number of the shares of the Series Preferred Stock represented by such certificate or certificates and, if applicable, any event on which such conversion is contingent. Such notice shall state such holder’s name or the names of the nominees in which such holder wishes the certificate or certificates for shares of Common Stock to be issued. If required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by a written instrument or instruments of transfer, in form reasonably satisfactory to the Corporation, duly executed by the registered holder or his, her or its attorney duly authorized in writing. The close of business on the date of receipt by the transfer agent (or by the Corporation if the Corporation serves as its own transfer agent) of such certificates (or lost certificate affidavit and agreement) and notice shall be the time of conversion (the “**Conversion Time**”), and the shares of Common Stock issuable upon conversion of the shares represented by such certificate shall be deemed to be outstanding of record as of such date. The Corporation shall, as soon as practicable after the Conversion Time, (i) issue and deliver to such holder of

Series Preferred Stock, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable upon such conversion in accordance with the provisions hereof and a certificate for the number (if any) of the shares of Series Preferred Stock represented by the surrendered certificate that were not converted into Common Stock, (ii) pay in cash such amount as provided in Subsection 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and (iii) pay all declared but unpaid dividends on the shares of Series Preferred Stock converted.

4.3.2 Reservation of Shares. The Corporation shall at all times when the Series Preferred Stock shall be outstanding, reserve and keep available out of its authorized but unissued capital stock, for the purpose of effecting the conversion of the Series Preferred Stock, such number of its duly authorized shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding Series Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series Preferred Stock, the Corporation shall take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to the Certificate of Incorporation. Before taking any action which would cause an adjustment reducing the Series A Conversion Price or Series B Conversion Price below the then par value of the shares of Common Stock issuable upon conversion of Series A Preferred Stock or Series B Preferred Stock, as the case may be, the Corporation will take any corporate action which may, in the opinion of its counsel, be necessary in order that the Corporation may validly and legally issue fully paid and nonassessable shares of Common Stock at such adjusted Series A Conversion Price or Series B Conversion Price, as the case may be.

4.3.3 Effect of Conversion. All shares of Series Preferred Stock which shall have been surrendered for conversion as herein provided shall no longer be deemed to be outstanding and all rights with respect to such shares shall immediately cease and terminate at the Conversion Time, except only the right of the holders thereof to receive shares of Common Stock in exchange therefor, to receive payment in lieu of any fraction of a share otherwise issuable upon such conversion as provided in Subsection 4.2 and to receive payment of any dividends declared but unpaid thereon. Any shares of Series Preferred Stock so converted shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Series Preferred Stock accordingly.

4.3.4 No Further Adjustment. Upon any such conversion, no adjustment to the Series A Conversion Price or Series B Conversion Price shall be made for any declared but unpaid dividends on the Series A Preferred Stock or Series B Preferred Stock, as the case may be, surrendered for conversion or on the Common Stock delivered upon conversion.

4.3.5 Taxes. The Corporation shall pay any and all issue and other similar taxes that may be payable in respect of any issuance or delivery of shares of Common Stock upon conversion of shares of Series Preferred Stock pursuant to this Section 4. The Corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of shares of Common Stock in a name other than that in

which the shares of Series Preferred Stock so converted were registered, and no such issuance or delivery shall be made unless and until the person or entity requesting such issuance has paid to the Corporation the amount of any such tax or has established, to the satisfaction of the Corporation, that such tax has been paid.

4.4 Adjustments to Conversion Price for Diluting Issues.

4.4.1 Special Definitions. For purposes of this Article Fourth, the following definitions shall apply:

(a) “**Option**” shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities.

(b) “**Series B Original Issue Date**” shall mean the date on which the first share of Series B Preferred Stock was issued.

(c) “**Convertible Securities**” shall mean any evidences of indebtedness, shares or other securities directly or indirectly convertible into or exchangeable for Common Stock, but excluding Options.

(d) “**Additional Shares of Common Stock**” shall mean all shares of Common Stock issued (or, pursuant to Subsection 4.4.3 below, deemed to be issued) by the Corporation after the Series B Original Issue Date, other than (1) the following shares of Common Stock and (2) shares of Common Stock deemed issued pursuant to the following Options and Convertible Securities (clauses (1) and (2), collectively, “**Exempted Securities**”):

(i) shares of Common Stock, Options or Convertible Securities issued as a dividend or distribution on Series Preferred Stock;

(ii) shares of Common Stock, Options or Convertible Securities issued by reason of a dividend, stock split, split-up or other distribution on shares of Common Stock that is covered by Subsection 4.5, 4.6, 4.7 or 4.8;

(iii) up to 12,700,000 shares (subject to appropriate adjustment in the event of a stock split, stock dividend, combination, reclassification, or similar event affecting such shares) of Common Stock or Options issued to employees or directors of, or consultants or advisors to, the Corporation or any of its subsidiaries pursuant to a plan, agreement or arrangement approved by the Board of Directors of the Corporation;

(iv) shares of Common Stock or Convertible Securities actually issued upon the exercise of Options or shares of Common Stock actually issued upon the conversion or exchange of Convertible Securities, in each case provided such issuance is pursuant to the terms of such Option or Convertible Security;

(v) shares of Common Stock, Options or Convertible Securities issued to banks, equipment lessors or other financial institutions, or to real property lessors, pursuant to a debt financing, equipment leasing or real property leasing transaction approved by the Board of Directors of the Corporation, including a majority of the Preferred Directors then in office;

(vi) shares of Common Stock, Options or Convertible Securities issued to suppliers or third party service providers in connection with the provision of goods or services pursuant to transactions approved by the Board of Directors of the Corporation, including a majority of the Preferred Directors then in office; or

(vii) shares of Series B Preferred Stock and warrants to purchase up to 1,142,855 shares of Common Stock, in each case issued pursuant to and in accordance with that certain Securities Purchase Agreement dated as of on or about the filing date of this Restated Certificate of Incorporation;

provided, however, that the number of shares of Common Stock included in the definition of Exempted Securities pursuant to the foregoing clauses (v) through (vi) shall not exceed 2,500,000 shares in the aggregate (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Common Stock).

4.4.2 No Adjustment of Conversion Price. No adjustment in the Series A Conversion Price or Series B Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the Requisite Holders agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock.

4.4.3 Deemed Issue of Additional Shares of Common Stock.

(a) If the Corporation at any time or from time to time after the Series B Original Issue Date shall issue any Options or Convertible Securities (excluding Options or Convertible Securities which are themselves Exempted Securities) or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares of Common Stock (as set forth in the instrument relating thereto, assuming the satisfaction of any conditions to exercisability, convertibility or exchangeability but without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, shall be deemed to be Additional Shares of Common Stock issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date.

(b) If the terms of any Option or Convertible Security, the issuance of which resulted in an adjustment to the Series A Conversion Price or Series B Conversion Price pursuant to the terms of Subsection 4.4.4 are revised as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase or decrease in the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any such Option or Convertible Security or (2) any increase or decrease in the consideration payable to the Corporation upon such exercise, conversion and/or exchange, then, effective upon such increase or decrease becoming effective, the Series A Conversion Price or Series B Conversion Price, as applicable, computed upon the original issue of such Option or Convertible Security (or upon the occurrence of a record date with respect thereto) shall be readjusted to such Series A Conversion Price or Series B Conversion Price as would have obtained had such revised terms been in effect upon the original date of issuance of such Option or Convertible Security. Notwithstanding the foregoing, no readjustment pursuant to this clause (b) shall have the effect of increasing the Series A Conversion Price or Series B Conversion Price to an amount which exceeds the lower of (i) the Series A Conversion Price or Series B Conversion Price, as applicable, in effect immediately prior to the original adjustment made as a result of the issuance of such Option or Convertible Security, or (ii) the Series A Conversion Price or Series B Conversion Price, as applicable, that would have resulted from any issuances of Additional Shares of Common Stock (other than deemed issuances of Additional Shares of Common Stock as a result of the issuance of such Option or Convertible Security) between the original adjustment date and such readjustment date.

(c) If the terms of any Option or Convertible Security (excluding Options or Convertible Securities which are themselves Exempted Securities), the issuance of which did not result in an adjustment to the Series A Conversion Price or Series B Conversion Price pursuant to the terms of Subsection 4.4.4 (either because the consideration per share (determined pursuant to Subsection 4.4.5) of the Additional Shares of Common Stock subject thereto was equal to or greater than the Series A Conversion Price or Series B Conversion Price, as applicable, then in effect, or because such Option or Convertible Security was issued before the Series B Original Issue Date), are revised after the Series B Original Issue Date as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to stock split, stock combination, anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase in the number of shares of Common Stock issuable upon the exercise, conversion or exchange of any such Option or Convertible Security or (2) any decrease in the consideration payable to the Corporation upon such exercise, conversion or exchange, then such Option or Convertible Security, as so amended or adjusted, and the Additional Shares of Common Stock subject thereto (determined in the manner provided in Subsection 4.4.3(a)) shall be deemed to have been issued effective upon such increase or decrease becoming effective.

(d) Upon the expiration or termination of any unexercised Option or unconverted or unexchanged Convertible Security (or portion thereof) which resulted (either upon its original issuance or upon a revision of its terms) in an adjustment to the Series A Conversion Price or Series B Conversion Price pursuant to the terms of Subsection 4.4.4, the

Series A Conversion Price or Series B Conversion Price, as applicable, shall be readjusted to such Series A Conversion Price or Series B Conversion Price as would have obtained had such Option or Convertible Security (or portion thereof) never been issued.

(e) If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, is calculable at the time such Option or Convertible Security is issued or amended but is subject to adjustment based upon subsequent events, any adjustment to the Series A Conversion Price or Series B Conversion Price provided for in this Subsection 4.4.3 shall be effected at the time of such issuance or amendment based on such number of shares or amount of consideration without regard to any provisions for subsequent adjustments (and any subsequent adjustments shall be treated as provided in clauses (b) and (c) of this Subsection 4.4.3). If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, cannot be calculated at all at the time such Option or Convertible Security is issued or amended, any adjustment to the Series A Conversion Price or Series B Conversion Price that would result under the terms of this Subsection 4.4.3 at the time of such issuance or amendment shall instead be effected at the time such number of shares and/or amount of consideration is first calculable (even if subject to subsequent adjustments), assuming for purposes of calculating such adjustment to the Series A Conversion Price or Series B Conversion Price, as applicable, that such issuance or amendment took place at the time such calculation can first be made.

4.4.4 Adjustment of Conversion Price Upon Issuance of Additional Shares of Common Stock. In the event the Corporation shall at any time after the Series B Original Issue Date issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to Subsection 4.4.3), without consideration or for a consideration per share less than the Series A Conversion Price or Series B Conversion Price, as applicable, in effect immediately prior to such issue, then the Series A Conversion Price or Series B Conversion Price, as applicable, shall be reduced, concurrently with such issue, to a price (calculated to the nearest one-hundredth of a cent) determined in accordance with the following formula:

$$CP_2 = CP_1 * (A + B) \div (A + C).$$

For purposes of the foregoing formula, the following definitions shall apply:

(a) "CP₂" shall mean the Series A Conversion Price or Series B Conversion Price, as applicable, in effect immediately after such issue of Additional Shares of Common Stock

(b) "CP₁" shall mean the Series A Conversion Price or Series B Conversion Price, as applicable, in effect immediately prior to such issue of Additional Shares of Common Stock;

(c) "A" shall mean the number of shares of Common Stock outstanding immediately prior to such issue of Additional Shares of Common Stock (treating for

this purpose as outstanding all shares of Common Stock issuable upon exercise of Options outstanding immediately prior to such issue or upon conversion or exchange of Convertible Securities (including the Series Preferred Stock) outstanding (assuming exercise of any outstanding Options therefor) immediately prior to such issue);

(d) "B" shall mean the number of shares of Common Stock that would have been issued if such Additional Shares of Common Stock had been issued at a price per share equal to CP₁ (determined by dividing the aggregate consideration received by the Corporation in respect of such issue by CP₁); and

(e) "C" shall mean the number of such Additional Shares of Common Stock issued in such transaction.

4.4.5 Determination of Consideration. For purposes of this Subsection 4.4, the consideration received by the Corporation for the issue of any Additional Shares of Common Stock shall be computed as follows:

(a) Cash and Property: Such consideration shall:

- (i) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Corporation, excluding amounts paid or payable for accrued interest;
- (ii) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board of Directors of the Corporation; and
- (iii) in the event Additional Shares of Common Stock are issued together with other shares or securities or other assets of the Corporation for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (i) and (ii) above, as determined in good faith by the Board of Directors of the Corporation.

(b) Options and Convertible Securities. The consideration per share received by the Corporation for Additional Shares of Common Stock deemed to have been issued pursuant to Subsection 4.4.3, relating to Options and Convertible Securities, shall be determined by dividing

- (i) the total amount, if any, received or receivable by the Corporation as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Corporation upon the exercise of such Options or the conversion or exchange of

such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities, by

- (ii) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities.

4.4.6 Multiple Closing Dates. In the event the Corporation shall issue on more than one date Additional Shares of Common Stock that are a part of one transaction or a series of related transactions and that would result in an adjustment to the Series A Conversion Price or Series B Conversion Price pursuant to the terms of Subsection 4.4.4, and such issuance dates occur within a period of no more than 90 days from the first such issuance to the final such issuance, then, upon the final such issuance, the Series A Conversion Price or Series B Conversion Price, as applicable, shall be readjusted to give effect to all such issuances as if they occurred on the date of the first such issuance (and without giving effect to any additional adjustments as a result of any such subsequent issuances within such period).

4.5 Adjustment for Stock Splits and Combinations. If the Corporation shall at any time or from time to time after the Series B Original Issue Date effect a subdivision of the outstanding Common Stock, the Series A Conversion Price and Series B Conversion Price in effect immediately before that subdivision shall be proportionately decreased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be increased in proportion to such increase in the aggregate number of shares of Common Stock outstanding. If the Corporation shall at any time or from time to time after the Series B Original Issue Date combine the outstanding shares of Common Stock, the Series A Conversion Price and Series B Conversion Price in effect immediately before the combination shall be proportionately increased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be decreased in proportion to such decrease in the aggregate number of shares of Common Stock outstanding. Any adjustment under this subsection shall become effective at the close of business on the date the subdivision or combination becomes effective.

4.6 Adjustment for Certain Dividends and Distributions. In the event the Corporation at any time or from time to time after the Series B Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable on the Common Stock in additional shares of Common Stock, then and in each such event the Series A Conversion Price and Series B Conversion Price in effect immediately before such event shall be decreased as of the time of such issuance or, in the event such a record date shall have been fixed, as of the close of business on such record date, by multiplying the Series A Conversion Price and Series B Conversion Price, as applicable, then in effect by a fraction:

- (1) the numerator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date, and
- (2) the denominator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock issuable in payment of such dividend or distribution.

Notwithstanding the foregoing, (a) if such record date shall have been fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, the Series A Conversion Price and Series B Conversion Price shall be recomputed accordingly as of the close of business on such record date and thereafter the Series A Conversion Price and Series B Conversion Price shall be adjusted pursuant to this subsection as of the time of actual payment of such dividends or distributions; and (b) that no such adjustment shall be made if the holders of Series A Preferred Stock or Series B Preferred Stock, as applicable, simultaneously receive a dividend or other distribution of shares of Common Stock in a number equal to the number of shares of Common Stock as they would have received if all outstanding shares of Series A Preferred Stock or Series B Preferred Stock, as applicable, had been converted into Common Stock on the date of such event.

4.7 Adjustments for Other Dividends and Distributions. In the event the Corporation at any time or from time to time after the Series B Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in securities of the Corporation (other than a distribution of shares of Common Stock in respect of outstanding shares of Common Stock) or in other property and the provisions of Section 1 do not apply to such dividend or distribution, then and in each such event the holders of Series Preferred Stock shall receive, simultaneously with the distribution to the holders of Common Stock, a dividend or other distribution of such securities or other property in an amount equal to the amount of such securities or other property as they would have received if all outstanding shares of Series Preferred Stock had been converted into Common Stock on the date of such event.

4.8 Adjustment for Merger or Reorganization, etc. Subject to the provisions of Subsection 2.3, if there shall occur any reorganization, recapitalization, reclassification, consolidation or merger involving the Corporation in which the Common Stock (but not the Series A Preferred Stock or Series B Preferred Stock or both) is converted into or exchanged for securities, cash or other property (other than a transaction covered by Subsections 4.4, 4.6 or 4.7), then, following any such reorganization, recapitalization, reclassification, consolidation or merger, each share of Series A Preferred Stock or Series B Preferred Stock, as applicable, shall thereafter be convertible in lieu of the Common Stock into which it was convertible prior to such event into the kind and amount of securities, cash or other property which a holder of the number

of shares of Common Stock of the Corporation issuable upon conversion of one share of Series A Preferred Stock or Series B Preferred Stock, as applicable, immediately prior to such reorganization, recapitalization, reclassification, consolidation or merger would have been entitled to receive pursuant to such transaction; and, in such case, appropriate adjustment (as determined in good faith by the Board of Directors of the Corporation) shall be made in the application of the provisions in this Section 4 with respect to the rights and interests thereafter of the holders of the Series Preferred Stock, to the end that the provisions set forth in this Section 4 (including provisions with respect to changes in and other adjustments of the Series A Conversion Price or Series B Conversion Price, as applicable) shall thereafter be applicable, as nearly as reasonably may be, in relation to any securities or other property thereafter deliverable upon the conversion of Series A Preferred Stock or Series B Preferred Stock, as applicable.

4.9 Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Series A Conversion Price or Series B Conversion Price pursuant to this Section 4, the Corporation at its expense shall, as promptly as reasonably practicable but in any event not later than 10 days thereafter, compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Series A Preferred Stock or Series B Preferred Stock, as applicable, a certificate setting forth such adjustment or readjustment (including the kind and amount of securities, cash or other property into which the Series A Preferred Stock or Series B Preferred Stock, as applicable, is convertible) and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, as promptly as reasonably practicable after the written request at any time of any holder of Series Preferred Stock (but in any event not later than 10 days thereafter), furnish or cause to be furnished to such holder a certificate setting forth (i) the Series A Conversion Price or Series B Conversion Price, as applicable, then in effect, and (ii) the number of shares of Common Stock and the amount, if any, of other securities, cash or property which then would be received upon the conversion of each share of Series A Preferred Stock or Series B Preferred Stock, as applicable.

4.10 Notice of Record Date. In the event:

(a) the Corporation shall take a record of the holders of its Common Stock (or other capital stock or securities at the time issuable upon conversion of the Series Preferred Stock) for the purpose of entitling or enabling them to receive any dividend or other distribution, or to receive any right to subscribe for or purchase any shares of capital stock of any class or any other securities, or to receive any other security; or

(b) of any capital reorganization of the Corporation, any reclassification of the Common Stock of the Corporation, or any Deemed Liquidation Event; or

(c) of the voluntary or involuntary dissolution, liquidation or winding-up of the Corporation,

then, and in each such case, the Corporation will send or cause to be sent to the holders of the Series Preferred Stock a notice specifying, as the case may be, (i) the record date for such dividend, distribution or right, and the amount and character of such dividend, distribution or right, or (ii) the effective date on which such reorganization, reclassification, consolidation,

merger, transfer, dissolution, liquidation or winding-up is proposed to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock (or such other capital stock or securities at the time issuable upon the conversion of the Series Preferred Stock) shall be entitled to exchange their shares of Common Stock (or such other capital stock or securities) for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up, and the amount per share and character of such exchange applicable to the Series Preferred Stock and the Common Stock. Such notice shall be sent at least 10 days prior to the record date or effective date for the event specified in such notice.

5. Mandatory Conversion.

5.1 Trigger Events. Upon either (a) the consummation of the first sale of shares of Common Stock to the public at a price of (i) at least \$5.00 per share (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Common Stock), in a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended (the “**Securities Act**”), resulting in at least \$30,000,000 of gross proceeds to the Corporation or (ii) in any other underwritten public offering pursuant to an effective registration statement under the Securities Act at a price less than \$5.00 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/or resulting in gross proceeds to the Corporation of less than \$30,000,000 approved by the vote or written consent of the Requisite Holders or (b) the date and time, or the occurrence of an event, specified by vote or written consent of the holders of at least 80% of the outstanding shares of Series Preferred Stock (the time of such closing or the date and time specified or the time of the event specified in such vote or written consent is referred to herein as the “**Mandatory Conversion Time**”), (i) all outstanding shares of Series A Preferred Stock shall automatically be converted into shares of Common Stock, at the then effective conversion rate of Series A Preferred Stock and all outstanding shares of Series B Preferred Stock shall automatically be converted into shares of Common Stock, at the then effective conversion rate of Series B Preferred Stock and (ii) such shares of Series Preferred Stock may not be reissued by the Corporation.

5.2 Procedural Requirements. All holders of record of shares of Series Preferred Stock shall be sent written notice of the Mandatory Conversion Time and the place designated for mandatory conversion of all such shares of Series Preferred Stock pursuant to this Section 5. Such notice need not be sent in advance of the occurrence of the Mandatory Conversion Time. Upon receipt of such notice, each holder of shares of Series Preferred Stock shall surrender his, her or its certificate or certificates for all such shares (or, if such holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify (but without the requirement to post any bond) the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation at the place designated in such notice. If so required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form reasonably satisfactory to the Corporation, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. All rights with respect to the Series Preferred

Stock converted pursuant to Section 5.1, including the rights, if any, to receive notices and vote (other than as a holder of Common Stock), will terminate at the Mandatory Conversion Time (notwithstanding the failure of the holder or holders thereof to surrender the certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of their certificate or certificates (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence of this Subsection 5.2. As soon as practicable after the Mandatory Conversion Time and the surrender of the certificate or certificates (or lost certificate affidavit and agreement) for Series Preferred Stock, the Corporation shall issue and deliver to such holder, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable on such conversion in accordance with the provisions hereof, together with cash as provided in Subsection 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and the payment of any declared but unpaid dividends on the shares of Series Preferred Stock converted. Such converted Series Preferred Stock shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Series Preferred Stock accordingly.

6. Redeemed or Otherwise Acquired Shares. Any shares of Series Preferred Stock that are redeemed or otherwise acquired by the Corporation or any of its subsidiaries shall be automatically and immediately cancelled and retired and shall not be reissued, sold or transferred. Neither the Corporation nor any of its subsidiaries may exercise any voting or other rights granted to the holders of Series Preferred Stock following redemption.

7. Waiver. Any of the rights, powers, preferences and other terms of the Series Preferred Stock set forth herein may be waived on behalf of all holders of Series Preferred Stock by the affirmative written consent or vote of the Requisite Holders, provided however that any waiver of the rights, powers, preferences and other terms set forth in Sections 2.3.1, 2.3.2(a), 3.4 and 5.1 herein shall require the affirmative written consent or vote of the holders of at least 80% of the shares of Common Stock issuable upon the conversion of the then outstanding shares of Series Preferred Stock.

8. Notices. Any notice required or permitted by the provisions of this Article Fourth to be given to a holder of shares of Series Preferred Stock shall be mailed, postage prepaid, to the post office address last shown on the records of the Corporation, or given by electronic communication in compliance with the provisions of the General Corporation Law, and shall be deemed sent upon such mailing or electronic transmission.

FIFTH: Subject to any additional vote required by the Certificate of Incorporation or Bylaws, in furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to make, repeal, alter, amend and rescind any or all of the Bylaws of the Corporation.

SIXTH: Subject to any additional vote required by the Certificate of Incorporation, the number of directors of the Corporation shall be determined in the manner set forth in the Bylaws of the Corporation.

SEVENTH: Elections of directors need not be by written ballot unless the Bylaws of the Corporation shall so provide.

EIGHTH: Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws of the Corporation may provide. The books of the Corporation may be kept outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation.

NINTH: To the fullest extent permitted by law, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. If the General Corporation Law or any other law of the State of Delaware is amended after approval by the stockholders of this Article Ninth to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law as so amended.

Any repeal or modification of the foregoing provisions of this Article Ninth by the stockholders of the Corporation shall not adversely affect any right or protection of a director of the Corporation existing at the time of, or increase the liability of any director of the Corporation with respect to any acts or omissions of such director occurring prior to, such repeal or modification.

TENTH: To the fullest extent permitted by applicable law, the Corporation is authorized to provide indemnification of (and advancement of expenses to) directors, officers and agents of the Corporation (and any other persons to which General Corporation Law permits the Corporation to provide indemnification) through Bylaw provisions, agreements with such agents or other persons, vote of stockholders or disinterested directors or otherwise, in excess of the indemnification and advancement otherwise permitted by Section 145 of the General Corporation Law.

Any amendment, repeal or modification of the foregoing provisions of this Article Tenth shall not adversely affect any right or protection of any director, officer or other agent of the Corporation existing at the time of such amendment, repeal or modification.

ELEVENTH: The Corporation renounces any interest or expectancy of the Corporation in, or in being offered an opportunity to participate in, any Excluded Opportunity. An “**Excluded Opportunity**” is any matter, transaction or interest that is presented to, or acquired, created or developed by, or which otherwise comes into the possession of, (i) any director of the Corporation who is not an employee of the Corporation or any of its subsidiaries, or (ii) any holder of Series Preferred Stock or any partner, member, director, stockholder, employee or agent of any such holder, other than someone who is an employee of the Corporation or any of its subsidiaries (collectively, “**Covered Persons**”), unless such matter, transaction or interest is presented to, or acquired, created or developed by, or otherwise comes into the possession of, a Covered Person primarily as a result of the capacity of such Covered Person (or the capacity of a director designated for election by such Covered Person) as a director of the Corporation.

3. That the foregoing amendment and restatement was approved by the holders of the requisite number of shares of this corporation in accordance with Section 228 of the General Corporation Law.

4. That this Restated Certificate of Incorporation, which restates and integrates and further amends the provisions of this corporation's Restated Certificate of Incorporation, has been duly adopted in accordance with Sections 242 and 245 of the General Corporation Law.

IN WITNESS WHEREOF, this Restated Certificate of Incorporation has been executed by a duly authorized officer of this corporation on this 4th day of December, 2013.

By: /s/ Abbie Celniker
Name: Abbie Celniker
Title: Chief Executive Officer

AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

THIS AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT is made as of the 4th day of December, 2013, by and among Eleven Biotherapeutics, Inc., a Delaware corporation (the "**Company**"), and each of the investors listed on Schedule A hereto, each of which is referred to in this Agreement as an "**Investor**," and any Additional Purchaser (as defined in the Purchase Agreement) that becomes a party to this Agreement in accordance with Section 6.9 hereof.

RECITALS

WHEREAS, certain of the Investors (the "**Existing Investors**") hold shares of the Company's Series A Preferred Stock and/or shares of Common Stock issued upon conversion thereof and possess registration rights, information rights, rights of first offer, and other rights pursuant to an Investors' Rights Agreement dated as of February 9, 2010, as amended by Amendment No. 1 dated April 23, 2012 and Amendment No. 2 dated June 28, 2013, between the Company and such Investors (the "**Prior Agreement**"); and

WHEREAS, the Existing Investors are holders of at least seventy percent (70%) of the Registrable Securities of the Company (as defined in the Prior Agreement), and desire to amend and restate the Prior Agreement in its entirety and to accept the rights created pursuant to this Agreement in lieu of the rights granted to them under the Prior Agreement; and

WHEREAS, certain of the Investors are parties to that certain Securities Purchase Agreement of even date herewith between the Company and certain of the Investors (the "**Purchase Agreement**"), under which certain of the Company's and such Investors' obligations are conditioned upon the execution and delivery of this Agreement by such Investors, Existing Investors holding at least seventy percent (70%) of the Registrable Securities, and the Company.

NOW, THEREFORE, the parties hereby agree as follows:

1. **Definitions.** For purposes of this Agreement:

1.1 "**Affiliate**" means, with respect to any specified Person, any other Person who, directly or indirectly, controls, is controlled by, or is under common control with such Person, including without limitation any general partner, managing member, officer or director of such Person or any venture capital fund now or hereafter existing that is controlled by or under common control with one or more general partners or managing members of, or shares the same management company with, such Person.

1.2 "**Common Stock**" means shares of the Company's common stock, par value \$.001 per share.

1.3 "**Common Stock Warrants**" has the meaning ascribed to such term in the Purchase Agreement.

1.4 "**Damages**" means any loss, damage, or liability (joint or several) to which a party hereto may become subject under the Securities Act, the Exchange Act, or other federal or

state law, insofar as such loss, damage, or liability (or any action in respect thereof) arises out of or is based upon (i) any untrue statement or alleged untrue statement of a material fact contained in any registration statement of the Company, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto; (ii) an omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading; or (iii) any violation or alleged violation by the indemnifying party (or any of its agents or Affiliates) of the Securities Act, the Exchange Act, any state securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act, or any state securities law.

1.5 “**Derivative Securities**” means any securities or rights convertible into, or exercisable or exchangeable for (in each case, directly or indirectly), Common Stock, including without limitation options, warrants and Preferred Stock.

1.6 “**Exchange Act**” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

1.7 “**Excluded Registration**” means (i) a registration relating to the sale of securities to employees of the Company or a subsidiary pursuant to a stock option, stock purchase, or similar plan; (ii) a registration relating to an SEC Rule 145 transaction; (iii) a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities; or (iv) a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities that are also being registered.

1.8 “**Form S-1**” means such form under the Securities Act as in effect on the date hereof or any successor registration form under the Securities Act subsequently adopted by the SEC.

1.9 “**Form S-3**” means such form under the Securities Act as in effect on the date hereof or any registration form under the Securities Act subsequently adopted by the SEC that permits incorporation of substantial information by reference to other documents filed by the Company with the SEC.

1.10 “**GAAP**” means generally accepted accounting principles in the United States.

1.11 “**Holder**” means any holder of Registrable Securities, or holder of Derivative Securities convertible into, or exercisable or exchangeable for, Registrable Securities, who is a party to this Agreement. For purposes hereof, a holder of Derivative Securities convertible into, or exercisable or exchangeable for, Registrable Securities, shall be deemed to hold such Registrable Securities.

1.12 “**Immediate Family Member**” means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, including adoptive relationships, of a natural person referred to herein.

1.13 “**Initiating Holders**” means, collectively, Holders who properly initiate a registration request under this Agreement.

1.14 “**IPO**” means the Company’s first underwritten public offering of its Common Stock under the Securities Act.

1.15 “**June Warrants**” means the warrants exercisable for shares of Common Stock issued in connection with the sale of 7% convertible promissory notes with an aggregate principal amount of up to \$3,500,000 by the Company to certain investors pursuant to subscription agreements dated as of June 28, 2013.

1.16 “**Key Employee**” means any executive-level employee (including division director and vice president-level positions) as well as any employee who, either alone or in concert with others, develops, invents, programs, or designs any Company Intellectual Property (as defined in the Purchase Agreement).

1.17 “**Major Investor**” means any Investor that, individually or together with such Investor’s Affiliates, holds at least 1,000,000 shares of Registrable Securities (as adjusted for any stock split, stock dividend, combination, or other recapitalization or reclassification effected after the date hereof).

1.18 “**New Securities**” means, collectively, equity securities of the Company, whether or not currently authorized, as well as rights, options, or warrants to purchase such equity securities, or securities of any type whatsoever that are, or may become, convertible or exchangeable into or exercisable for such equity securities.

1.19 “**Person**” means any individual, corporation, partnership, trust, limited liability company, association or other entity.

1.20 “**Preferred Director**” means any director of the Company that the holders of record of the Preferred Stock are entitled to elect pursuant to the Restated Certificate of Incorporation.

1.21 “**Preferred Stock**” means Series A Preferred Stock and Series B Preferred Stock.

1.22 “**Qualified Public Offering**” means the consummation of a the Company’s first sale of shares of Common Stock to the public at a price of (i) at least \$5.00 per share (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Common Stock) in a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act, resulting in at least \$30,000,000 of gross proceeds to the Company or (ii) in any other underwritten public offering pursuant to an effective registration statement under the Securities Act at a price less than \$5.00 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/or resulting in gross proceeds to the Company of less than \$30,000,000 approved by the vote or written consent of the Requisite Holders.

1.23 “**Registrable Securities**” means (i) the Common Stock issuable or issued upon conversion of the Preferred Stock or upon exercise of the June Warrants or the Common Stock Warrants; and (ii) any shares of Common Stock issued as (or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, the shares referenced in clause (i) above; excluding in all cases, however, any Registrable Securities sold by a Person in a transaction in which the applicable rights under this Agreement are not assigned pursuant to Section 6.1, and excluding for purposes of Section 2 any shares for which registration rights have terminated pursuant to Section 2.13 of this Agreement.

1.24 “**Registrable Securities then outstanding**” means the number of shares determined by adding the number of shares of outstanding Common Stock that are Registrable Securities and the number of shares of Common Stock issuable (directly or indirectly) pursuant to outstanding then convertible, exercisable and/or exchangeable Derivative Securities that are Registrable Securities.

1.25 “**Requisite Holders**” means the Holders of seventy percent (70%) of the Registrable Securities then outstanding.

1.26 “**Restated Certificate of Incorporation**” means the Restated Certificate of Incorporation of the Company, as the same may be further amended or restated from time to time.

1.27 “**Restricted Securities**” means the securities of the Company required to bear the legend set forth in Section 2.12(b) hereof.

1.28 “**SEC**” means the Securities and Exchange Commission.

1.29 “**SEC Rule 144**” means Rule 144 promulgated by the SEC under the Securities Act.

1.30 “**SEC Rule 145**” means Rule 145 promulgated by the SEC under the Securities Act.

1.31 “**Securities Act**” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

1.32 “**Selling Expenses**” means all underwriting discounts, selling commissions, and stock transfer taxes applicable to the sale of Registrable Securities, and fees and disbursements of counsel for any Holder, except for the fees and disbursements of the Selling Holder Counsel borne and paid by the Company as provided in Section 2.6.

1.33 “**Series A Preferred Stock**” means shares of the Company’s Series A Preferred Stock, par value \$.001 per share.

1.34 “**Series B Preferred Stock**” means shares of the Company’s Series B Preferred Stock, par value \$.001 per share.

2. Registration Rights. The Company covenants and agrees as follows:

2.1 Demand Registration.

(a) Form S-1 Demand. If at any time after the earlier of (i) five (5) after the date of this Agreement or (ii) one hundred eighty (180) days after the effective date of the registration statement for the IPO, the Company receives a request from Holders of at least twenty-five percent (25%) of the Registrable Securities then outstanding that the Company file a Form S-1 registration statement with respect to at least twenty-five (25%) of the Registrable Securities then outstanding, which Registrable Securities represent an anticipated aggregate offering price, net of Selling Expenses, of at least \$5 million), then the Company shall (i) within ten (10) days after the date such request is given, give notice thereof (the “**Demand Notice**”) to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within sixty (60) days after the date such request is given by the Initiating Holders, file a Form S-1 registration statement under the Securities Act covering all Registrable Securities that the Initiating Holders requested to be registered and any additional Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days of the date the Demand Notice is given, and in each case, subject to the limitations of Section 2.1(c) and Section 2.3.

(b) Form S-3 Demand. If at any time when it is eligible to use a Form S-3 registration statement, the Company receives a request from Holders of at least ten percent (10%) of the Registrable Securities then outstanding that the Company file a Form S-3 registration statement with respect to outstanding Registrable Securities of such Holders having an anticipated aggregate offering price, net of Selling Expenses, of at least \$1 million, then the Company shall (i) within ten (10) days after the date such request is given, give a Demand Notice to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within forty-five (45) days after the date such request is given by the Initiating Holders, file a Form S-3 registration statement under the Securities Act covering all Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days of the date the Demand Notice is given, and in each case, subject to the limitations of Section 2.1(c) and Section 2.3.

(c) Notwithstanding the foregoing obligations, if the Company furnishes to Holders requesting a registration pursuant to this Section 2.1 a certificate signed by the Company’s chief executive officer stating that in the good faith judgment of the Company’s Board of Directors it would be materially detrimental to the Company and its stockholders for such registration statement to either become effective or remain effective for as long as such registration statement otherwise would be required to remain effective, because such action would (i) materially interfere with a significant acquisition, corporate reorganization, or other similar transaction involving the Company; (ii) require premature disclosure of material information that the Company has a bona fide business purpose for preserving as confidential; or (iii) render the Company unable to comply with requirements under the Securities Act or Exchange Act, then the Company shall have the right to defer taking action with respect to such filing, and any time periods with respect to filing or effectiveness thereof shall be tolled correspondingly, for a period of not more than one hundred twenty (120) days after the request of the Initiating Holders is given; provided, however, that the Company may not invoke this right

more than once in any twelve (12) month period; and provided further that the Company shall not register any securities for its own account or that of any other stockholder during such one hundred twenty (120) day period other than an Excluded Registration.

(d) The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Section 2.1(a) (i) during the period that is sixty (60) days before the Company's good faith estimate of the date of filing of, and ending on a date that is one hundred eighty (180) days after the effective date of, a Company-initiated registration, provided, that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; (ii) after the Company has effected two registrations pursuant to Section 2.1(a); or (iii) if the Initiating Holders propose to dispose of shares of Registrable Securities that may be immediately registered on Form S-3 pursuant to a request made pursuant to Section 2.1(b). The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Section 2.1(b) (i) during the period that is thirty (30) days before the Company's good faith estimate of the date of filing of, and ending on a date that is ninety (90) days after the effective date of, a Company-initiated registration, provided, that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; or (ii) if the Company has effected two registrations pursuant to Section 2.1(b) within the twelve (12) month period immediately preceding the date of such request. A registration shall not be counted as "effected" for purposes of this Section 2.1(d) until such time as the applicable registration statement has been declared effective by the SEC, unless the Initiating Holders withdraw their request for such registration (other than as a result of a material adverse change to the Company), elect not to pay the registration expenses therefor, and forfeit their right to one demand registration statement pursuant to Section 2.6, in which case such withdrawn registration statement shall be counted as "effected" for purposes of this Section 2.1(d).

2.2 Company Registration. If the Company proposes to register (including, for this purpose, a registration effected by the Company for stockholders other than the Holders) any of its Common Stock under the Securities Act in connection with the public offering of such securities solely for cash (other than in an Excluded Registration), the Company shall, at such time, promptly give each Holder notice of such registration. Upon the request of each Holder given within twenty (20) days after such notice is given by the Company, the Company shall, subject to the provisions of Section 2.3, cause to be registered all of the Registrable Securities that each such Holder has requested to be included in such registration. The Company shall have the right to terminate or withdraw any registration initiated by it under this Section 2.2 before the effective date of such registration, whether or not any Holder, has elected to include Registrable Securities in such registration. The expenses (other than Selling Expenses) of such withdrawn registration shall be borne by the Company in accordance with Section 2.6.

2.3 Underwriting Requirements.

(a) If, pursuant to Section 2.1, the Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to Section 2.1, and the Company shall include such information in the Demand Notice. The underwriter(s) will be selected by the Company and shall be reasonably acceptable to a majority in interest of the Initiating Holders.

In such event, the right of any Holder to include such Holder's Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall (together with the Company as provided in Section 2.4(e)) enter into an underwriting agreement in customary form with the underwriter(s) selected for such underwriting. Notwithstanding any other provision of this Section 2.3, if the managing underwriter(s) advise(s) the Initiating Holders in writing that marketing factors require a limitation on the number of shares to be underwritten, then the Initiating Holders shall so advise all Holders of Registrable Securities that otherwise would be underwritten pursuant hereto, and the number of Registrable Securities that may be included in the underwriting shall be allocated among such Holders of Registrable Securities, including the Initiating Holders, in proportion (as nearly as practicable) to the number of Registrable Securities owned by each Holder or in such other proportion as shall mutually be agreed to by all such selling Holders; provided, however, that the number of Registrable Securities held by the Holders to be included in such underwriting shall not be reduced unless all other securities are first entirely excluded from the underwriting. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest 100 shares.

(b) In connection with any offering involving an underwriting of shares of the Company's capital stock pursuant to Section 2.2, the Company shall not be required to include any of the Holders' Registrable Securities in such underwriting unless the Holders accept the terms of the underwriting as agreed upon between the Company and its underwriters, and then only in such quantity as the underwriters in their sole discretion determine will not jeopardize the success of the offering by the Company. If the total number of securities, including Registrable Securities, requested by stockholders to be included in such offering exceeds the number of securities to be sold (other than by the Company) that the underwriters in their reasonable discretion determine is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities, which the underwriters and the Company in their sole discretion determine will not jeopardize the success of the offering. If the underwriters determine that less than all of the Registrable Securities requested to be registered can be included in such offering, then the Registrable Securities that are included in such offering shall be allocated among the selling Holders in proportion (as nearly as practicable to) the number of Registrable Securities owned by each selling Holder or in such other proportions as shall mutually be agreed to by all such selling Holders. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest 100 shares. Notwithstanding the foregoing, in no event shall (i) the number of Registrable Securities included in the offering be reduced unless all other securities (other than securities to be sold by the Company) are first entirely excluded from the offering, or (ii) the number of Registrable Securities included in the offering be reduced below twenty percent (20%) of the total number of securities included in such offering, unless such offering is the IPO, in which case the selling Holders may be excluded further if the underwriters make the determination described above and no other stockholder's securities are included in such offering. For purposes of the provision in this Section 2.3(b) concerning apportionment, for any selling Holder that is a partnership, limited liability company, or corporation, the partners, members, retired partners, retired members, stockholders, and Affiliates of such Holder, or the estates and

Immediate Family Members of any such partners, retired partners, members, and retired members and any trusts for the benefit of any of the foregoing Persons, shall be deemed to be a single “selling Holder,” and any pro rata reduction with respect to such “selling Holder” shall be based upon the aggregate number of Registrable Securities owned by all Persons included in such “selling Holder,” as defined in this sentence.

(c) For purposes of Section 2.1(a), a registration shall not be counted as “effected” if, as a result of an exercise of the underwriter’s cutback provisions in Section 2.3(a), fewer than all of the Registrable Securities that Holders have requested to be included in such registration statement are actually included.

2.4 Obligations of the Company. Whenever required under this Section 2 to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(a) prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its commercially reasonable efforts to cause such registration statement to become effective and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for a period of up to one hundred twenty (120) days or, if earlier, until the distribution contemplated in the registration statement has been completed; provided, however, that (i) such one hundred twenty (120) day period shall be extended for a period of time equal to the period the Holder refrains, at the request of an underwriter of Common Stock (or other securities) of the Company, from selling any securities included in such registration;

(b) prepare and file with the SEC such amendments and supplements to such registration statement, and the prospectus used in connection with such registration statement, as may be necessary to comply with the Securities Act in order to enable the disposition of all securities covered by such registration statement;

(c) furnish to the selling Holders such numbers of copies of a prospectus, including a preliminary prospectus, as required by the Securities Act, and such other documents as the Holders may reasonably request in order to facilitate their disposition of their Registrable Securities;

(d) use its commercially reasonable efforts to register and qualify the securities covered by such registration statement under such other securities or blue-sky laws of such jurisdictions as shall be reasonably requested by the selling Holders; provided that the Company shall not be required to qualify to do business or to file a general consent to service of process in any such states or jurisdictions, unless the Company is already subject to service in such jurisdiction and except as may be required by the Securities Act;

(e) in the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the underwriter(s) of such offering;

(f) use its commercially reasonable efforts to cause all such Registrable Securities covered by such registration statement to be listed on a national securities exchange or trading system and each securities exchange and trading system (if any) on which similar securities issued by the Company are then listed;

(g) provide a transfer agent and registrar for all Registrable Securities registered pursuant to this Agreement and provide a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration;

(h) promptly make available for inspection by the selling Holders, any managing underwriter(s) participating in any disposition pursuant to such registration statement, and any attorney or accountant or other agent retained by any such underwriter or selected by the selling Holders, all financial and other records, pertinent corporate documents, and properties of the Company, and cause the Company's officers, directors, employees, and independent accountants to supply all information reasonably requested by any such seller, underwriter, attorney, accountant, or agent, in each case, as necessary or advisable to verify the accuracy of the information in such registration statement and to conduct appropriate due diligence in connection therewith;

(i) notify each selling Holder, promptly after the Company receives notice thereof, of the time when such registration statement has been declared effective or a supplement to any prospectus forming a part of such registration statement has been filed; and

(j) after such registration statement becomes effective, notify each selling Holder of any request by the SEC that the Company amend or supplement such registration statement or prospectus.

2.5 Furnish Information. It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Section 2 with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as is reasonably required to effect the registration of such Holder's Registrable Securities.

2.6 Expenses of Registration. All expenses (other than Selling Expenses) incurred in connection with registrations, filings, or qualifications pursuant to Section 2, including all registration, filing, and qualification fees; printers' and accounting fees; fees and disbursements of counsel for the Company; and the reasonable fees and disbursements of one counsel for the selling Holders ("**Selling Holder Counsel**"), shall be borne and paid by the Company; provided, however, that the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to Section 2.1 if the registration request is subsequently withdrawn at the request of the Holders of a majority of the Registrable Securities to be registered (in which case all selling Holders shall bear such expenses pro rata based upon the number of Registrable Securities that were to be included in the withdrawn registration), unless the Holders of a majority of the Registrable Securities agree to forfeit their right to one registration pursuant to Section 2.1(a) or Section 2.1(b), as the case may be; provided further that if, at the time of such withdrawal, the Holders shall have learned of a material adverse change in the condition, business or prospects of the Company from that known to the Holders at the time of their request and have withdrawn the request with reasonable promptness after learning of

such information then the Holders shall not be required to pay any of such expenses and shall not forfeit their right to one registration pursuant to Section 2.1(a) or Section 2.1(b). All Selling Expenses relating to Registrable Securities registered pursuant to this Section 2 shall be borne and paid by the Holders pro rata on the basis of the number of Registrable Securities registered on their behalf.

2.7 Delay of Registration. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any registration pursuant to this Agreement as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 2.

2.8 Indemnification. If any Registrable Securities are included in a registration statement under this Section 2:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each selling Holder, and the partners, members, officers, directors, and stockholders of each such Holder; legal counsel and accountants for each such Holder; any underwriter (as defined in the Securities Act) for each such Holder; and each Person, if any, who controls such Holder or underwriter within the meaning of the Securities Act or the Exchange Act, against any Damages, and the Company will pay to each such Holder, underwriter, controlling Person, or other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Section 2.8(a) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Company, which consent shall not be unreasonably withheld, nor shall the Company be liable for any Damages to the extent that they arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of any such Holder, underwriter, controlling Person, or other aforementioned Person expressly for use in connection with such registration.

(b) To the extent permitted by law, each selling Holder, severally and not jointly, will indemnify and hold harmless the Company, and each of its directors, each of its officers who has signed the registration statement, each Person (if any), who controls the Company within the meaning of the Securities Act, legal counsel and accountants for the Company, any underwriter (as defined in the Securities Act), any other Holder selling securities in such registration statement, and any controlling Person of any such underwriter or other Holder, against any Damages, in each case only to the extent that such Damages arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of such selling Holder expressly for use in connection with such registration; and each such selling Holder will pay to the Company and each other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Section 2.8(b) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld; and provided further that in no event shall the aggregate amounts payable by any Holder by way

of indemnity or contribution under Sections 2.8(b) and 2.8(d) exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of fraud or willful misconduct by such Holder.

(c) Promptly after receipt by an indemnified party under this Section 2.8 of notice of the commencement of any action (including any governmental action) for which a party may be entitled to indemnification hereunder, such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Section 2.8, give the indemnifying party notice of the commencement thereof. The indemnifying party shall have the right to participate in such action and, to the extent the indemnifying party so desires, participate jointly with any other indemnifying party to which notice has been given, and to assume the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an indemnified party (together with all other indemnified parties that may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such action. The failure to give notice to the indemnifying party within a reasonable time of the commencement of any such action shall relieve such indemnifying party of any liability to the indemnified party under this Section 2.8, to the extent that such failure materially prejudices the indemnifying party's ability to defend such action. The failure to give notice to the indemnifying party will not relieve it of any liability that it may have to any indemnified party otherwise than under this Section 2.8.

(d) To provide for just and equitable contribution to joint liability under the Securities Act in any case in which either (i) any party otherwise entitled to indemnification hereunder makes a claim for indemnification pursuant to this Section 2.8 but it is judicially determined (by the entry of a final judgment or decree by a court of competent jurisdiction and the expiration of time to appeal or the denial of the last right of appeal) that such indemnification may not be enforced in such case, notwithstanding the fact that this Section 2.8 provides for indemnification in such case, or (ii) contribution under the Securities Act may be required on the part of any party hereto for which indemnification is provided under this Section 2.8, then, and in each such case, such parties will contribute to the aggregate losses, claims, damages, liabilities, or expenses to which they may be subject (after contribution from others) in such proportion as is appropriate to reflect the relative fault of each of the indemnifying party and the indemnified party in connection with the statements, omissions, or other actions that resulted in such loss, claim, damage, liability, or expense, as well as to reflect any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or allegedly untrue statement of a material fact, or the omission or alleged omission of a material fact, relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission; provided, however, that, in any such case, (x) no Holder will be required to contribute any amount in excess of the public offering price of all such Registrable Securities offered and sold by such Holder pursuant to such registration statement, and (y) no Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any Person who was not guilty of such fraudulent

misrepresentation; and provided further that in no event shall a Holder's liability pursuant to this Section 2.8(d), when combined with the amounts paid or payable by such Holder pursuant to Section 2.8(b), exceed the proceeds from the offering received by such Holder (net of any Selling Expenses) paid by such Holder), except in the case of willful misconduct or fraud by such Holder.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control.

(f) Unless otherwise superseded by an underwriting agreement entered into in connection with the underwritten public offering, the obligations of the Company and Holders under this Section 2.8 shall survive the completion of any offering of Registrable Securities in a registration under this Section 2, and otherwise shall survive the termination of this Agreement.

2.9 Reports Under Exchange Act. With a view to making available to the Holders the benefits of SEC Rule 144 and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company shall:

(a) make and keep available adequate current public information, as those terms are understood and defined in SEC Rule 144, at all times after the effective date of the registration statement filed by the Company for the IPO;

(b) use commercially reasonable efforts to file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after the Company has become subject to such reporting requirements); and

(c) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) to the extent accurate, a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144 (at any time after ninety (90) days after the effective date of the registration statement filed by the Company for the IPO), the Securities Act, and the Exchange Act (at any time after the Company has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after the Company so qualifies); (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company; and (iii) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC that permits the selling of any such securities without registration (at any time after the Company has become subject to the reporting requirements under the Exchange Act) or pursuant to Form S-3 (at any time after the Company so qualifies to use such form).

2.10 Limitations on Subsequent Registration Rights. From and after the date of this Agreement, the Company shall not, without the prior written consent of the Requisite Holders, enter into any agreement with any holder or prospective holder of any securities of the

Company that would (i) allow such holder or prospective holder to include such securities in any registration unless, under the terms of such agreement, such holder or prospective holder may include such securities in any such registration only to the extent that the inclusion of such securities will not reduce the number of the Registrable Securities of the Holders that are included or (ii) allow such holder or prospective holder to initiate a demand for registration of any securities held by such holder or prospective holder; provided that this limitation shall not apply to any additional Investor who becomes a party to this Agreement in accordance with Section 6.9.

2.11 “Market Stand-off” Agreement. Each Holder hereby agrees that, if required by the managing underwriter and the Company, it will not, without the prior written consent of the managing underwriter, during the period commencing on the date of the final prospectus relating to the IPO and ending on the date specified by the Company and the managing underwriter (such period not to exceed one hundred eighty (180) days, which period may be extended upon the request of the managing underwriter, to the extent required by any FINRA rules, for an additional period of up to fifteen (15) days if the Company issues or proposes to issue an earnings or other public release within fifteen (15) days of the expiration of the 180-day lockup period, (i) lend; offer; pledge; sell; contract to sell; sell any option or contract to purchase; purchase any option or contract to sell; grant any option, right, or warrant to purchase; or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any Derivative Securities (whether such shares or any such Derivative Securities are then owned by the Holder or are thereafter acquired) or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or other securities, in cash, or otherwise. The foregoing provisions of this Section 2.11 shall apply only to the IPO, shall not apply to the sale of any shares to an underwriter pursuant to an underwriting agreement, and shall be applicable to the Holders only if all officers and directors, and all stockholders individually owning more than one percent (1%) of the Company’s outstanding Common Stock (after giving effect to conversion into Common Stock of all outstanding Preferred Stock), are subject to similar restrictions. The underwriters in connection with such registration are intended third-party beneficiaries of this Section 2.11 and shall have the right, power, and authority to enforce the provisions hereof as though they were a party hereto. Each Holder further agrees to execute such agreements as may be reasonably requested by the underwriters in connection with such registration that are consistent with this Section 2.11 or that are necessary to give further effect thereto. Notwithstanding the foregoing, the Company shall use commercially reasonable efforts to obtain from the managing underwriter(s) an agreement, and the underwriters may, in their sole discretion agree, to waive these restrictions in order to provide for periodic early releases of portions of the aforesaid securities upon the occurrence of certain specified events, any such release to apply pro rata to all Holders subject to this Section 2.11, based on the number of securities (determined on an as-converted basis) subject to the restrictions set forth in this Section 2.11.

2.12 Restrictions on Transfer.

(a) The Preferred Stock and the Registrable Securities shall not be sold, pledged, or otherwise transferred, and the Company shall not recognize and shall issue stop-transfer

instructions to its transfer agent with respect to any such sale, pledge, or transfer, except upon the conditions specified in this Agreement, which conditions are intended to ensure compliance with the provisions of the Securities Act. A transferring Holder will cause any proposed purchaser, pledgee, or transferee of the Preferred Stock and the Registrable Securities held by such Holder to agree to take and hold such securities subject to the provisions and upon the conditions specified in this Agreement.

(b) Each certificate or instrument representing (i) the Preferred Stock, (ii) the Registrable Securities, and (iii) any other securities issued in respect of the securities referenced in clauses (i) and (ii), upon any stock split, stock dividend, recapitalization, merger, consolidation, or similar event, shall (unless otherwise permitted by the provisions of Section 2.12(c)) be stamped or otherwise imprinted with a legend substantially in the following form:

THE SECURITIES REPRESENTED HEREBY HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. SUCH SHARES MAY NOT BE SOLD, PLEDGED, OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR A VALID EXEMPTION FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF SAID ACT.

THE SECURITIES REPRESENTED HEREBY MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF AN AGREEMENT BETWEEN THE COMPANY AND THE STOCKHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

The Holders consent to the Company making a notation in its records and giving instructions to any transfer agent of the Restricted Securities in order to implement the restrictions on transfer set forth in this Section 2.12.

(c) The holder of each certificate representing Restricted Securities, by acceptance thereof, agrees to comply in all respects with the provisions of this Section 2. Before any proposed sale, pledge, or transfer of any Restricted Securities, unless there is in effect a registration statement under the Securities Act covering the proposed transaction, the Holder thereof shall give notice to the Company of such Holder's intention to effect such sale, pledge, or transfer. Each such notice shall describe the manner and circumstances of the proposed sale, pledge, or transfer in sufficient detail and, if reasonably requested by the Company, shall be accompanied at such Holder's expense by either (i) a written opinion of legal counsel who shall, and whose legal opinion shall, be reasonably satisfactory to the Company, addressed to the Company, to the effect that the proposed transaction may be effected without registration under the Securities Act; (ii) a "no action" letter from the SEC to the effect that the proposed sale, pledge, or transfer of such Restricted Securities without registration will not result in a recommendation by the staff of the SEC that action be taken with respect thereto; or (iii) any other evidence reasonably satisfactory to counsel to the Company to the effect that the proposed sale, pledge, or transfer of the Restricted Securities may be effected without registration under

the Securities Act, whereupon the Holder of such Restricted Securities shall be entitled to sell, pledge, or transfer such Restricted Securities in accordance with the terms of the notice given by the Holder to the Company. The Company will not require such a legal opinion or “no action” letter (x) in any transaction in compliance with SEC Rule 144 or (y) in any transaction in which such Holder distributes Restricted Securities to an Affiliate of such Holder for no consideration; provided that each transferee agrees in writing to be subject to the terms of this Section 2.12. Each certificate or instrument evidencing the Restricted Securities transferred as above provided shall bear, except if such transfer is made pursuant to SEC Rule 144, the appropriate restrictive legend set forth in Section 2.12(b), except that such certificate shall not bear such restrictive legend if, in the opinion of counsel for such Holder and the Company, such legend is not required in order to establish compliance with any provisions of the Securities Act.

2.13 Termination of Registration Rights. The right of any Holder to request registration or inclusion of Registrable Securities in any registration pursuant to Section 2.1 or Section 2.2 shall terminate upon the earliest to occur of:

- (a) the closing of a Deemed Liquidation Event, as such term is defined in the Restated Certificate of Incorporation;
- (b) the date on which all of such Holder’s Registrable Securities have been sold; or
- (c) the fifth anniversary of the Qualified Public Offering.

3. Information and Observer Rights.

3.1 Delivery of Financial Statements. The Company shall deliver to each Major Investor:

(a) as soon as practicable, but in any event within one hundred eighty (180) days after the end of each fiscal year of the Company, (i) a balance sheet as of the end of such year, (ii) statements of income and of cash flows for such year, and a comparison between (x) the actual amounts as of and for such fiscal year and (y) the comparable amounts for the prior year and as included in the Budget (as defined in Section 3.1(e)) for such year, with an explanation of any material differences between such amounts and a schedule as to the sources and applications of funds for such year, and (iii) a statement of stockholders’ equity as of the end of such year, all such financial statements audited and certified by independent public accountants of nationally recognized standing selected by the Company and approved by the Board of Directors, which approval shall include the approval of the Preferred Directors;

(b) as soon as practicable, but in any event within thirty (30) days after the end of each quarter of each fiscal year of the Company, unaudited statements of income and of cash flows for such fiscal quarter, and an unaudited balance sheet as of the end of such fiscal quarter, all prepared in accordance with GAAP (except that such financial statements may (i) be subject to normal year-end audit adjustments and (ii) not contain all notes thereto that may be required in accordance with GAAP);

(c) as soon as practicable, but in any event within thirty (30) days after the end of each quarter of each fiscal year of the Company, a statement showing the number of shares of each class and series of capital stock and securities convertible into or exercisable for shares of capital stock outstanding at the end of the period, the Common Stock issuable upon conversion or exercise of any outstanding securities convertible or exercisable for Common Stock and the exchange ratio or exercise price applicable thereto, and the number of shares of issued stock options and stock options not yet issued but reserved for issuance, if any, all in sufficient detail as to permit the Major Investors to calculate their respective percentage equity ownership in the Company, and certified by the chief financial officer or chief executive officer of the Company as being true, complete, and correct;

(d) as soon as practicable, but in any event within thirty (30) days of the end of each month, an unaudited income statement for such month, and an unaudited balance sheet as of the end of such month, all prepared in accordance with GAAP (except that such financial statements may (i) be subject to normal year-end audit adjustments and (ii) not contain all notes thereto that may be required in accordance with GAAP);

(e) as soon as practicable, but in any event thirty (30) days before the end of each fiscal year, a budget and business plan for the next fiscal year (collectively, the “**Budget**”), approved by the Board of Directors and prepared on a monthly basis, including balance sheets, income statements, and statements of cash flow for such months and, promptly after prepared, any other budgets or revised budgets prepared by the Company; and

(f) such other information relating to the financial condition, business, prospects, or corporate affairs of the Company as any Major Investor may from time to time reasonably request; provided, however, that the Company shall not be obligated under this Section 3.1 to provide information (i) that the Company reasonably determines in good faith to be a trade secret or confidential information (unless covered by an enforceable confidentiality agreement, in form acceptable to the Company) or (ii) the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

If, for any period, the Company has any subsidiary whose accounts are consolidated with those of the Company, then in respect of such period the financial statements delivered pursuant to the foregoing sections shall be the consolidated and consolidating financial statements of the Company and all such consolidated subsidiaries.

Notwithstanding anything else in this Section 3.1 to the contrary, the Company may cease providing the information set forth in this Section 3.1 at any time during the period starting with the date sixty (60) days before the Company’s good-faith estimate of the date of filing of a registration statement if it reasonably concludes it must do so to comply with the SEC rules applicable to such registration statement and related offering; provided that the Company’s covenants under this Section 3.1 shall be reinstated at such time as the Company is no longer actively employing its commercially reasonable efforts to cause such registration statement to become effective.

3.2 Inspection. The Company shall permit each Major Investor, at such Major Investor’s expense, to visit and inspect the Company’s properties; examine its books of account

and records; and discuss the Company's affairs, finances, and accounts with its officers, during normal business hours of the Company as may be reasonably requested by the Major Investor; provided, however, that the Company shall not be obligated pursuant to this Section 3.2 to provide access to any information that it reasonably and in good faith considers to be a trade secret or confidential information (unless covered by an enforceable confidentiality agreement, in form acceptable to the Company) or the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

3.3 Observer Rights. As long as JAFCO Super V3 Investment Limited Partnership and/or its Affiliates ("JAFCO") owns not less than fifteen percent (15%) of the shares of the Preferred Stock it purchased under that certain Series A Preferred Stock Purchase Agreement of the Company dated as of April 23, 2012 and the Purchase Agreement (or an equivalent amount of Common Stock issued upon conversion thereof), the Company shall invite a representative of JAFCO to attend all meetings of its Board of Directors in a nonvoting observer capacity and, in this respect, shall give such representative copies of all notices, minutes, consents, and other materials that it provides to its directors at the same time and in the same manner as provided to such directors; provided, however, that such representative shall agree to hold in confidence and trust and to act in a fiduciary manner with respect to all information so provided; and provided further, that the Company reserves the right to withhold any information and to exclude such representative from any meeting or portion thereof if access to such information or attendance at such meeting would reasonably be expected to adversely affect the attorney-client privilege between the Company and its counsel or result in disclosure of trade secrets or a conflict of interest, or if such Investor or its representative is a competitor of the Company.

3.4 Termination of Information. The covenants set forth in Sections 3.1, 3.2 and 3.3 shall terminate and be of no further force or effect (i) immediately before the consummation of the Qualified Public Offering, or (ii) upon a Deemed Liquidation Event, as such term is defined in the Restated Certificate of Incorporation, whichever event occurs first.

3.5 Confidentiality. Each Investor agrees that such Investor will keep confidential and will not disclose, divulge, or use for any purpose (other than to monitor its investment in the Company) any confidential information obtained from the Company pursuant to the terms of this Agreement (including notice of the Company's intention to file a registration statement), unless such confidential information (a) is known or becomes known to the public in general (other than as a result of a breach of this Section 3.5 by such Investor), (b) is or has been independently developed or conceived by the Investor without use of the Company's confidential information, or (c) is or has been made known or disclosed to the Investor by a third party without a breach of any obligation of confidentiality such third party may have to the Company; provided, however, that an Investor may disclose confidential information (i) to its attorneys, accountants, consultants, and other professionals to the extent necessary to obtain their services in connection with monitoring its investment in the Company; (ii) to any prospective purchaser of any Registrable Securities from such Investor, if such prospective purchaser agrees to be bound by the provisions of this Section 3.5; (iii) to any existing or prospective Affiliate, partner, member, stockholder, or wholly owned subsidiary of such Investor in the ordinary course of business, provided that such Investor informs such Person that such information is confidential and directs such Person to maintain the confidentiality of such information; or (iv) as may otherwise be required by law, provided that the Investor promptly notifies the Company of such disclosure and takes reasonable steps to minimize the extent of any such required disclosure.

4. Rights to Future Stock Issuances.

4.1 Right of First Offer. Subject to the terms and conditions of this Section 4.1 and applicable securities laws, if the Company proposes to offer or sell any New Securities, the Company shall first offer such New Securities to each Major Investor. A Major Investor shall be entitled to apportion the right of first offer hereby granted to it among itself and its Affiliates in such proportions as it deems appropriate.

(a) The Company shall give notice (the “**Offer Notice**”) to each Major Investor, stating (i) its bona fide intention to offer such New Securities, (ii) the number of such New Securities to be offered, and (iii) the price and terms, if any, upon which it proposes to offer such New Securities.

(b) By notification to the Company within twenty (20) days after the Offer Notice is given, each Major Investor may elect to purchase or otherwise acquire, at the price and on the terms specified in the Offer Notice, up to that portion of such New Securities which equals the proportion that the Common Stock issued and held, or issuable (directly or indirectly) upon conversion, exercise or exchange, as applicable, of Derivative Securities then held, by such Major Investor bears to the total Common Stock of the Company then outstanding (assuming full conversion, exercise or exchange, as applicable, of all Derivative Securities). At the expiration of such twenty (20) day period, the Company shall promptly notify each Major Investor that elects to purchase or acquire all the shares available to it (each, a “**Fully Exercising Investor**”) of any other Major Investor’s failure to do likewise. During the ten (10) day period commencing after the Company has given such notice, each Fully Exercising Investor may, by giving notice to the Company, elect to purchase or acquire, in addition to the number of shares specified above, up to that portion of the New Securities for which Major Investors were entitled to subscribe but that were not subscribed for by the Major Investors which is equal to the proportion that the Common Stock issued and held, or issuable (directly or indirectly) upon conversion, exercise or exchange, as applicable, of Derivative Securities then held, by such Fully Exercising Investor bears to the Common Stock issued and held, or issuable (directly or indirectly) upon conversion, exercise or exchange, as applicable, of Derivative Securities then held, by all Fully Exercising Investors who wish to purchase such unsubscribed shares. The closing of any sale pursuant to this Section 4.1(b) shall occur within the later of ninety (90) days of the date that the Offer Notice is given and the date of initial sale of New Securities pursuant to Section 4.1(c).

(c) If all New Securities referred to in the Offer Notice are not elected to be purchased or acquired as provided in Section 4.1(b), the Company may, during the ninety (90) day period following the expiration of the periods provided in Section 4.1(b), offer and sell the remaining unsubscribed portion of such New Securities to any Person or Persons at a price not less than, and upon terms no more favorable to the offeree than, those specified in the Offer Notice. If the Company does not enter into an agreement for the sale of the New Securities within such period, or if such agreement is not consummated within thirty (30) days of the execution thereof, the right provided hereunder shall be deemed to be revived and such New Securities shall not be offered unless first reoffered to the Major Investors in accordance with this Section 4.1.

(d) The right of first offer in this Section 4.1 shall not be applicable to (i) Exempted Securities (as defined in the Restated Certificate of Incorporation); and (ii) shares of Common Stock issued in the IPO.

4.2 Termination. The covenants set forth in Section 4.1 shall terminate and be of no further force or effect (i) immediately before the consummation of the Qualified Public Offering, or (ii) upon a Deemed Liquidation Event, as such term is defined in the Restated Certificate of Incorporation, whichever event occurs first.

5. Additional Covenants.

5.1 Insurance. The Company shall use its commercially reasonable efforts to obtain, within ninety (90) days of the date hereof, from financially sound and reputable insurers Directors and Officers liability insurance in an amount and on terms and conditions satisfactory to the Board of Directors, including the Preferred Directors, and will use commercially reasonable efforts to cause such insurance policy to be maintained until such time as the Board of Directors, including the Preferred Directors, determines that such insurance should be discontinued.

5.2 Employee Agreements. The Company will cause (i) each person now or hereafter employed by it or by any subsidiary (or engaged by the Company or any subsidiary as a consultant or independent contractor, including any member of the Company's scientific advisory board) with access to confidential information and/or trade secrets to enter into a nondisclosure and proprietary rights assignment agreement and, to the extent permitted by law, (ii) each Key Employee to enter into a one (1) year noncompetition and nonsolicitation agreement, substantially in the form approved by the Board of Directors, including the Preferred Directors, all subject to the policies of any academic or research institution with which any such person may be affiliated.

5.3 Employee Stock. Unless otherwise approved by the Board of Directors, including the Preferred Directors, all future employees and consultants of the Company who purchase, receive options to purchase, or receive awards of shares of the Company's capital stock after the date hereof shall be required to execute restricted stock or option agreements, as applicable, providing for (i) vesting of shares over a four (4) year period, with the first twenty-five percent (25%) of such shares vesting following twelve (12) months of continued employment or service, and the remaining shares vesting in equal quarterly installments over the following thirty-six (36) months, and (ii) a market stand-off provision substantially similar to that in Section 2.11. In addition, unless otherwise approved by the Board of Directors, including the Preferred Directors, the Company shall retain a "right of first refusal" on employee transfers until the Company's IPO and shall have the right to repurchase unvested shares at cost upon termination of employment of a holder of restricted stock.

5.4 Qualified Small Business Stock. The Company shall use its best commercial efforts to cause the shares of Preferred Stock, as well as any shares into which such shares are

converted, within the meaning of Section 1202(f) of the Internal Revenue Code (the “Code”), to constitute “qualified small business stock” as defined in Section 1202(c) of the Code; provided, however, that such requirement shall not be applicable if the Board of Directors of the Company determines, in its good-faith business judgment, that such qualification is inconsistent with the best interests of the Company. The Company shall submit to its stockholders (including the Investors) and to the Internal Revenue Service any reports that may be required under Section 1202(d)(1)(C) of the Code and the regulations promulgated thereunder. In addition, within twenty (20) business days after any Investor’s written request therefor, the Company shall, at its option, either (i) deliver to such Investor a written statement indicating whether (and what portion of) such Investor’s interest in the Company constitutes “qualified small business stock” as defined in Section 1202(c) of the Code or (ii) deliver to such Investor such factual information in the Company’s possession as is reasonably necessary to enable such Investor to determine whether (and what portion of) such Investor’s interest in the Company constitutes “qualified small business stock” as defined in Section 1202(c) of the Code.

5.5 Matters Requiring Investor Director Approval. So long as the holders of Preferred Stock are entitled to elect a Preferred Director, the Company hereby covenants and agrees with each of the Investors that it shall not, without approval of the Board of Directors, which approval must include the affirmative vote of a majority of the Preferred Directors:

(a) subject to Section 1.1 of that certain Second Amended and Restated Voting Agreement, dated as of the date hereof, by and among the Company and certain of its stockholders, increase the size of the Board of Directors above seven (7) members;

(b) make, or permit any subsidiary to make, any loan or advance to, or own any stock or other securities of, any subsidiary or other corporation, partnership, or other entity unless it is wholly owned by the Company;

(c) make, or permit any subsidiary to make, any loan or advance to any Person, including, without limitation, any employee or director of the Company or any subsidiary, except advances and similar expenditures in the ordinary course of business or under the terms of an employee stock or option plan approved by the Board of Directors;

(d) make any loan or advance to, or own any stock or other securities of, any subsidiary of any other corporation, partnership or other entity unless it is wholly owned by the Company;

(e) guarantee, directly or indirectly, or permit any subsidiary to guarantee, directly or indirectly, any indebtedness except for trade accounts of the Company or any subsidiary arising in the ordinary course of business;

(f) incur any aggregate indebtedness (excluding trade credit incurred in the ordinary course of business) in excess of \$100,000 that is not already included in a Budget for the fiscal year in which such indebtedness is incurred;

(g) make any investment other than investments in prime commercial paper, money market funds, certificates of deposit in any United States bank having a net worth in excess of \$100,000,000, or obligations issued or guaranteed by the United States of America, in each case having a maturity not in excess of one year;

(h) enter into any lines of business that is not primarily related to the business of the Company as conducted as of the Closing, exit the business of the Company as conducted as of the Closing, or change the principal business of the Company;

(i) grant any exclusive license to any of the Company's material intellectual property rights;

(j) acquire all or substantially all of the properties, assets or stock of any other company or entity;

(k) otherwise enter into or be a party to any transaction with any director, officer, or employee of the Company or any "associate" (as defined in Rule 12b-2 promulgated under the Exchange Act) of any such Person, except for transactions contemplated by the Purchase Agreement; or

(l) hire, terminate, or change the compensation of any senior executive officer, including approving the payment of bonuses to any senior executive officer, except in accordance with the Budget or such senior executive officer's employment agreement.

5.6 Board Matters. The Company shall reimburse its directors for all reasonable out-of-pocket travel expenses incurred (consistent with the Company's travel policy) in connection with attending meetings of, or in otherwise in relation to their service as members of, the Board of Directors provided, however, that travel expenses for any individual board member shall not exceed \$25,000 in any 12-month period. Each committee of the Board of Directors shall include at least one Preferred Director.

5.7 Successor Indemnification. If the Company or any of its successors or assignees consolidates with or merges into any other Person and is not the continuing or surviving corporation or entity of such consolidation or merger, then to the extent necessary, proper provision shall be made so that the successors and assignees of the Company assume the obligations of the Company with respect to indemnification of members of the Board of Directors as in effect immediately before such transaction, whether such obligations are contained in the Company's Bylaws, the Restated Certificate of Incorporation, or elsewhere, as the case may be.

5.8 Termination of Covenants. The covenants set forth in this Section 5, except for Section 5.7, shall terminate and be of no further force or effect (i) immediately before the consummation of the Qualified Public Offering or (ii) upon a Deemed Liquidation Event, as such term is defined in the Restated Certificate of Incorporation, whichever event occurs first.

6. Miscellaneous.

6.1 Successors and Assigns. The rights under this Agreement may be assigned (but only with all related obligations) by a Holder to a transferee of Registrable Securities that (i) is an Affiliate of a Holder; (ii) is a Holder's Immediate Family Member or trust for the benefit of

an individual Holder or one or more of such Holder's Immediate Family Members; or (iii) after such transfer, holds at least 50,000 shares of Registrable Securities (subject to appropriate adjustment for stock splits, stock dividends, combinations, and other recapitalizations); provided, however, that (x) the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee and the Registrable Securities with respect to which such rights are being transferred; and (y) such transferee agrees in a written instrument delivered to the Company to be bound by and subject to the terms and conditions of this Agreement, including the provisions of Section 2.11. For the purposes of determining the number of shares of Registrable Securities held by a transferee, the holdings of a transferee (1) that is an Affiliate or stockholder of a Holder; (2) who is a Holder's Immediate Family Member; or (3) that is a trust for the benefit of an individual Holder or such Holder's Immediate Family Member shall be aggregated together and with those of the transferring Holder; provided further that all transferees who would not qualify individually for assignment of rights shall have a single attorney-in-fact for the purpose of exercising any rights, receiving notices, or taking any action under this Agreement. The terms and conditions of this Agreement inure to the benefit of and are binding upon the respective successors and permitted assignees of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assignees any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided herein.

6.2 Governing Law. This Agreement and any controversy arising out of or relating to this Agreement shall be governed by and construed in accordance with the General Corporation Law of the State of Delaware as to matters within the scope thereof, and as to all other matters shall be governed by and construed in accordance with the internal laws of The Commonwealth of Massachusetts, without regard to conflict of law principles that would result in the application of any law other than the law of The Commonwealth of Massachusetts.

6.3 Counterparts; Facsimile. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. This Agreement may also be executed and delivered by facsimile signature and in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

6.4 Titles and Subtitles. The titles and subtitles used in this Agreement are for convenience only and are not to be considered in construing or interpreting this Agreement.

6.5 Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or: (i) personal delivery to the party to be notified; (ii) when sent, if sent by electronic mail or facsimile during the recipient's normal business hours, and if not sent during normal business hours, then on the recipient's next business day; (iii) for deliveries within the United States, five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (iv) one (1) business day after the business day of deposit with a nationally recognized overnight courier, specifying next business day delivery for United States deliveries or three (3) business days after such deposit with an internationally recognized express overnight courier for deliveries outside of the United States, in either case, freight prepaid, with written verification of receipt. All communications shall be sent to the respective parties at their

addresses as set forth on Schedule A hereto, or to the principal office of the Company and to the attention of the Chief Executive Officer, in the case of the Company, or to such email address, facsimile number, or address as subsequently modified by written notice given in accordance with this Section 6.5. If notice is given to the Company, a copy (which shall not constitute notice) shall also be sent to Wilmer Cutler Pickering Hale and Dorr LLP, 60 State Street, Boston, Massachusetts 02109, Attention: David E. Redlick. If notice is given to the Investors, a copy (which shall not constitute notice) shall also be given to Sheppard Mullin Richter & Hampton LLP, 12275 El Camino Real, Suite 200, San Diego, California 92130, Attention: Kirt W. Shuldberg and to Faber Daeufer Itrato & Cabot PC, Bay Colony Corporate Center, 950 Winter Street, Suite 4500, Waltham, MA 02451, Attention: Kurt Machemer.

6.6 Amendments and Waivers. Any term of this Agreement may be amended and the observance of any term of this Agreement may be waived (either generally or in a particular instance, and either retroactively or prospectively) only with the written consent of the Company and the Requisite Holders; provided that the Company may in its sole discretion waive compliance with Section 2.12(c) (and the Company's failure to object promptly in writing after notification of a proposed assignment allegedly in violation of Section 2.12(c) shall be deemed to be a waiver); and provided further that any provision hereof may be waived by any waiving party on such party's own behalf, without the consent of any other party. Notwithstanding the foregoing, this Agreement may not be amended or terminated and the observance of any term hereof may not be waived with respect to any Investor without the written consent of such Investor, unless such amendment, termination, or waiver applies to all Investors in the same fashion (it being agreed that a waiver of the provisions of Section 4 with respect to a particular transaction shall be deemed to apply to all Investors in the same fashion if such waiver does so by its terms, notwithstanding the fact that certain Investors may nonetheless, by agreement with the Company, purchase securities in such transaction). The Company shall give prompt notice of any amendment or termination hereof or waiver hereunder to any party hereto that did not consent in writing to such amendment, termination, or waiver. Any amendment, termination, or waiver effected in accordance with this Section 6.6 shall be binding on all parties hereto, regardless of whether any such party has consented thereto. No waivers of or exceptions to any term, condition, or provision of this Agreement, in any one or more instances, shall be deemed to be or construed as a further or continuing waiver of any such term, condition, or provision.

6.7 Severability. In case any one or more of the provisions contained in this Agreement is for any reason held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Agreement, and such invalid, illegal, or unenforceable provision shall be reformed and construed so that it will be valid, legal, and enforceable to the maximum extent permitted by law.

6.8 Aggregation of Stock. All shares of Registrable Securities held or acquired by Affiliates shall be aggregated together for the purpose of determining the availability of any rights under this Agreement and such Affiliated persons may apportion such rights as among themselves in any manner they deem appropriate.

6.9 Additional Investors. Notwithstanding anything to the contrary contained herein, if the Company issues additional shares of the Series B Preferred Stock after the date hereof, any purchaser of such shares of Series B Preferred Stock may become a party to this

Agreement by executing and delivering an additional counterpart signature page to this Agreement, and thereafter shall be deemed an "Investor" for all purposes hereunder. No action or consent by the Investors shall be required for such joinder to this Agreement by such additional Investor, so long as such additional Investor has agreed in writing to be bound by all of the obligations as an "Investor" hereunder.

6.10 Entire Agreement; Prior Agreement. This Agreement (including the Schedule and Exhibit hereto) constitutes the full and entire understanding and agreement among the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled. Upon the effectiveness of this Agreement, the Prior Agreement shall be deemed superseded and replaced in its entirety by this Agreement and shall be of no further force or effect.

6.11 Delays or Omissions. No delay or omission to exercise any right, power, or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power, or remedy of such nonbreaching or nondefaulting party, nor shall it be construed to be a waiver of or acquiescence to any such breach or default, or to any similar breach or default thereafter occurring, nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. All remedies, whether under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

6.12 Acknowledgment. The Company acknowledges that the Investors are in the business of venture capital investing and therefore review the business plans and related proprietary information of many enterprises, including enterprises which may have products or services which compete directly or indirectly with those of the Company. Nothing in this Agreement shall preclude or in any way restrict the Investors from investing or participating in any particular enterprise whether or not such enterprise has products or services which compete with those of the Company.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

COMPANY:

ELEVEN BIOTHERAPEUTICS, INC.

By: /s/ Abbie Celniker

Name: Abbie Celniker

Title: Chief Executive Officer

— *Signature Page to Series B Investors' Rights Agreement* —

INVESTORS:

FLAGSHIP VENTURES FUND 2007, L.P.

By: Flagship Ventures 2007 General Partner, L.L.C., its
general partner

By: /s/ Noubar Afeyan

Name: Noubar Afeyan

Title:

FLAGSHIP VENTURES FUND IV, L.P.

By: Flagship Ventures Fund IV General Partner LLC, its
General Partner

By: /s/ Noubar Afeyan

Manager

FLAGSHIP VENTURES FUND IV-RX, L.P.

By: Flagship Ventures Fund IV General Partner LLC, its
General Partner

By: /s/ Noubar Afeyan

Manager

— Signature Page to Series B Investors' Rights Agreement —

INVESTORS:

THIRD ROCK VENTURES, L.P.

By: Third Rock Ventures GP, L.P., its general partner

By: TRV GP, LLC, its general partner

By: /s/ Kevin Gillis

Name: Kevin Gillis

Title: Partner/CFO

**JAFCO SUPER V3 INVESTMENT LIMITED
PARTNERSHIP**

By: JAFCO Co., Ltd., its general partner

By: /s/ Shinichi Fuki

Name: Shinichi Fuki

Title: President and CEO

Address:

Otemachi First Square, West Tower 11F

1-5-1 Otemachi, Chiyoda-ku

Tokyo 100-0004 JAPAN

Attention: Dr. Kenji Harada, Ph.D.

Principal

Life Science Investment Group

Investment Division

— Signature Page to Series B Investors' Rights Agreement —

SCHEDULE A

Investors

Flagship Ventures Fund 2007, L.P.
Flagship Ventures Fund IV, L.P.
Flagship ventures Fund IV-Rx, L.P.
One Memorial Drive, 7th Floor
Cambridge, Massachusetts 02142
Attn: Edwin M. Kania, Jr.

Third Rock Ventures, L.P.
29 Newbury Street
Boston, MA 02116
Attn.: Kevin Starr

JAFCO Super V3 Investment Limited Partnership
Otemachi First Square
West Tower 11F
1-5-1 Otemachi, Chiyoda-ku
Tokyo 100-0004 Japan
Attn: Dr. Kenji Harada, Ph.D.
Principal
Life Science Investment Group
Investment Division
JAFCO Co., Ltd.

ELEVEN BIOTHERAPEUTICS, INC.

Amended and Restated 2009 Stock Incentive Plan1. Purpose.

The purpose of this plan (the “Plan”) is to secure for Eleven Biotherapeutics, Inc., a Delaware corporation (the “Company”) and its shareholders the benefits arising from capital stock ownership by employees, officers and directors of, and consultants or advisors to, the Company and its parent and subsidiary corporations who are expected to contribute to the Company’s future growth and success. Under the Plan recipients may be awarded both (i) Options (as defined in Section 2.1) to purchase the Company’s common stock, par value \$0.0001 (“Common Stock”) and (ii) shares of Common Stock (“Restricted Stock Awards”). Except where the context otherwise requires, the term “Company” shall include any parent and all present and future subsidiaries of the Company as defined in Sections 424(e) and 424(f) of the Internal Revenue Code of 1986, as amended or replaced from time to time (the “Code”). Those provisions of the Plan which make express reference to Section 422 of the Code shall apply only to Incentive Stock Options (as that term is defined below). Appendix A to this Plan shall apply only to participants in the Plan who are residents of the State of California.

2. Types of Awards and Administration.

Options. Options granted pursuant to the Plan (“Options”) shall be authorized by action of the board of directors of the Company (the “Board”) and may be either incentive stock options (“Incentive Stock Options”) meeting the requirements of Section 422 of the Code or nonstatutory Options which are not intended to meet the requirements of Section 422. All Options when granted are intended to be non-statutory Options, unless the applicable Option Agreement (as defined in Section 5) explicitly states that the Option is intended to be an Incentive Stock Option. The vesting of Options may be conditioned upon the completion of a specified period of employment with the Company and/or such other conditions or events as the Board may determine. The Board may also provide that Options are immediately exercisable subject to certain repurchase rights in the Company dependent upon the continued employment of the optionee and/or such other conditions or events as the Board may determine.

Incentive Stock Options. Incentive Stock Options may only be granted to employees of the Company. For so long as the Code shall so provide, Options granted to any employee under the Plan (and any other incentive stock option plans of the Company) which are intended to constitute Incentive Stock Options shall not constitute Incentive Stock Options to the extent that such Options, in the aggregate, become exercisable for the first time in any one calendar year for shares of Common Stock with an aggregate fair market value (determined as of the respective date or dates of grant) of more than \$100,000. If an Option is intended to be an Incentive Stock Option, and if for any reason such Option (or any portion thereof) shall not qualify as an Incentive Stock Option, then, to the extent of such nonqualification, such Option (or portion thereof) shall be regarded as a non-statutory Option appropriately granted under the Plan provided that such Option (or portion thereof) otherwise meets the Plan’s requirements relating to non-statutory Options.

Restricted Stock Awards. The Board in its discretion may grant Restricted Stock Awards, entitling the recipient to acquire, for a purchase price determined by the Board, shares of Common Stock subject to such restrictions and conditions as the Board may determine at the time of grant ("Restricted Stock"), including continued employment and/or achievement of pre-established performance goals and objectives.

Administration. The Plan shall be administered by the Board, whose construction and interpretation of the terms and provisions of the Plan shall be final and conclusive. The Board may in its sole discretion authorize issuance of Restricted Stock, the grant of Options and the issuance of shares upon exercise of such Options as provided in the Plan. The Board shall have authority, subject to the express provisions of the Plan, to construe Restricted Stock Agreements, Option Agreements and the Plan, to prescribe, amend and rescind rules and regulations relating to the Plan, to determine the terms and provisions of Restricted Stock Agreements and Option Agreements, and to make all other determinations in the judgment of the Board necessary or desirable for the administration of the Plan. The Board may correct any defect or supply any omission or reconcile any inconsistency in the Plan or in any Restricted Stock Agreement or Option Agreement in the manner and to the extent it shall deem expedient to carry the Plan into effect and it shall be the sole and final judge of such expediency. No director or person acting pursuant to authority delegated by the Board shall be liable for any action or determination under the Plan made in good faith. The Board may, to the full extent permitted by or consistent with applicable laws or regulations, delegate any or all of its powers under the Plan to a committee (the "Committee") appointed by the Board, and if the Committee is so appointed, to the extent of such delegation, all references to the Board in the Plan shall mean and relate to such Committee, other than references to the Board in this sentence and in Section 18 (as to amendment or termination of the Plan) and Section 22.

3. Eligibility.

Options may be granted, and Restricted Stock may be issued, to persons who are, at the time of such grant or issuance, employees, officers or directors of, or consultants or advisors to, the Company; provided, that the class of persons to whom Incentive Stock Options may be granted shall be limited to employees of the Company.

10% Shareholder. If any employee to whom an Incentive Stock Option is to be granted is, at the time of the grant of such Option, the owner of stock possessing more than 10% of the total combined voting power of all classes of stock of the Company (after taking into account the attribution of stock ownership rules of Section 424(d) of the Code) (a "Greater Than 10% Shareholder"), any Incentive Stock Option granted to such individual must: (i) have an exercise price per share of not less than 110% of the fair market value of one share of Common Stock at the time of grant; and (ii) expire by its terms not more than five years from the date of grant.

4. Stock Subject to Plan.

Subject to adjustment as provided in Section 14 below, the maximum number of shares of Common Stock which may be issued under the Plan is 8,800,000 shares. If an Option shall expire or terminate for any reason without having been exercised in full, the unpurchased shares subject

to such Option shall again be available for subsequent Option grants or Restricted Stock Awards under the Plan. If shares of Restricted Stock shall be forfeited to, or otherwise repurchased by, the Company pursuant to a Restricted Stock Agreement, such repurchased shares shall again be available for subsequent Option grants or Restricted Stock Awards under the Plan. If shares issued upon exercise of an Option are tendered to the Company in payment of the exercise price of an Option, such tendered shares shall again be available for subsequent Option grants or Restricted Stock Awards under the Plan.

5. Forms of Restricted Stock Agreements and Option Agreements.

Option Agreement. Each recipient of an Option shall execute an option agreement (“Option Agreement”) in such form not inconsistent with the Plan as may be approved by the Board. Such Option Agreements may differ among recipients.

Restricted Stock Agreement. Each recipient of a grant of Restricted Stock shall execute an agreement (“Restricted Stock Agreement”) in such form not inconsistent with the Plan as may be approved by the Board. Such Restricted Stock Agreements may differ among recipients.

“Lock-Up” Agreement. Unless the Board specifies otherwise, each Restricted Stock Agreement and Option Agreement shall provide that upon the request of the Company or the managing underwriter(s) of any offering of securities of the Company that is the subject of a registration statement filed under the United States Securities Act of 1933, as amended from time to time (the “Act”), the holder of any Option or the purchaser of any Restricted Stock shall, in connection therewith, agree in writing (in such form as the Company or such managing underwriter(s) shall request) to the general effect that for a period of time (not to exceed 180 days, plus such additional number of days (not to exceed 35) as may reasonably be requested to enable the underwriter(s) of such offering to comply with Rule 2711(f) of the Financial Industry Regulatory Authority or any amendment or successor thereto) from the effective date of the registration statement under the Act for such offering, the holder or purchaser will not sell, make any short sale of, loan, grant any option for the purchase of, or otherwise dispose of any shares of the common stock of the Company owned or controlled by him or her.

6. Purchase Price.

General. The purchase price per share of Restricted Stock and per share of stock deliverable upon the exercise of an Option shall be determined by the Board, provided, however, that in the case of any Option, the exercise price shall not be less than 100% of the fair market value of such stock, as determined by the Board, at the time of grant of such Option, or less than 110% of such fair market value in the case of any Incentive Stock Option granted to a Greater Than 10% Shareholder.

Payment of Purchase Price. Option Agreements may provide for the payment of the exercise price by delivery of cash or a check to the order of the Company in an amount equal to the exercise price of such Options, or, to the extent provided in the applicable Option Agreement, by one of the following methods:

- (i) with the consent of the Board, by delivery to the Company of shares of Common Stock; such surrendered shares shall have a fair market value equal in amount to the exercise price of the Options being exercised,

- (ii) with the consent of the Board, a personal recourse note issued by the optionee to the Company in a principal amount equal to such aggregate exercise price and with such other terms, including interest rate and maturity, as the Company may determine in its discretion; provided, however, that the interest rate borne by such note shall not be less than the lowest applicable federal rate, as defined in Section 1274(d) of the Code,
- (iii) with the consent of the Board, if the class of Common Stock is registered under the Securities Exchange Act of 1934 at such time, subject to rules as may be established by the Board, by delivery to the Company of a properly executed exercise notice along with irrevocable instructions to a broker to promptly deliver to the Company cash or a check payable and acceptable to the Company for the purchase price,
- (iv) with the consent of the Board, by reducing the number of Option shares otherwise issuable to the optionee upon exercise of the Option by a number of shares of Common Stock having a fair market value equal to such aggregate exercise price,
- (v) with the consent of the Board, by any combination of such methods of payment.

The fair market value of any shares of Common Stock or other non-cash consideration which may be delivered upon exercise of an Option shall be determined by the Board. Restricted Stock Agreements may provide for the payment of any purchase price in any manner approved by the Board at the time of authorizing the issuance thereof.

7. Option Period.

Notwithstanding any other provision of the Plan or any Option Agreement, each Option and all rights thereunder shall expire on the date specified in the applicable Option Agreement, provided that such date shall not be later than ten years after the date on which the Option is granted (or five years in the case of an Incentive Stock Option granted to a Greater Than 10% Shareholder), and in either case, shall be subject to earlier termination as provided in the Plan or Option Agreement.

8. Exercise of Options.

General. Each Option shall be exercisable either in full or in installments at such time or times and during such period as shall be set forth in the Option Agreement evidencing such Option, subject to the provisions of the Plan. To the extent not exercised, installments shall accumulate and be exercisable, in whole or in part, at any time after becoming exercisable, but not later than the date the Option expires.

Notice of Exercise. An Option may be exercised by the optionee by delivering to the Company on any business day a written notice specifying the number of shares of Common Stock the optionee then desires to purchase and specifying the address to which the certificates for such shares are to be mailed (the "Notice"), accompanied by payment for such shares. In addition, the Company may require any individual to whom an Option is granted, as a condition of exercising such Option, to give written assurances (the "Investment Letter") in a substance and form satisfactory to the Company to the effect that such individual is acquiring the Common Stock subject to the Option for his or her own account for investment and not with a view to the resale or distribution thereof, and to such other effects as the Company deems necessary or advisable in order to comply with any securities law(s).

Delivery. As promptly as practicable after receipt of the Notice, the Investment Letter (if required) and payment, the Company shall deliver or cause to be delivered to the optionee certificates for the number of shares with respect to which such Option has been so exercised, issued in the optionee's name; provided, however, that such delivery shall be deemed effected for all purposes when the Company or a stock transfer agent shall have deposited such certificates in the United States mail, addressed to the optionee, at the address specified in the Notice.

9. Nontransferability of Options.

No Option shall be assignable or transferable by the person to whom it is granted, either voluntarily or by operation of law, except by will or the laws of descent and distribution. During the life of an optionee, an Option shall be exercisable only by the optionee.

10. Termination of Employment; Disability; Death. Except as may be otherwise expressly provided in the terms and conditions of the Option Agreement, Options shall terminate on the earliest to occur of:

the date of expiration thereof;

immediately after termination of the optionee's employment with, or provision of services to, the Company by the Company for Cause (as hereinafter defined);

90 days after the date of voluntary termination of the optionee's employment with, or provision of services to, the Company by the optionee (other than for death or permanent disability as defined below); or

90 days after the date of termination of the optionee's employment with, or provision of services to, the Company by the Company without Cause (other than for death or permanent disability as defined below).

Until the date on which the Option so expires, the optionee may exercise that portion of his or her Option which is exercisable at the time of termination of the employment or service relationship.

An employment or service relationship between the Company and the optionee shall be deemed to exist during any period during which the optionee is employed by or providing services

to the Company. Whether an authorized leave of absence or an absence due to military or government service shall constitute termination of the employment relationship between the Company and the optionee shall be determined by the Board at the time thereof.

For purposes of this Section 10, the term "Cause" shall mean (a) any material breach by the optionee of any agreement to which the optionee and the Company are both parties, (b) any act (other than retirement) or omission to act by the optionee which may have a material and adverse effect on the Company's business or on the optionee's ability to perform services for the Company, including, without limitation, the commission of any crime (other than minor traffic violations), or (c) any material misconduct or material neglect of duties by the optionee in connection with the business or affairs of the Company. An optionee's employment shall be deemed to have been terminated for Cause if the Company determines within thirty (30) days of the termination of employment (whether such termination was voluntary or involuntary) that termination for Cause was warranted.

In the event of the permanent and total disability or death of an optionee while in an employment or other relationship with the Company, any Option held by such optionee shall terminate on the earlier of the date of expiration of the Option or 180 days following the date of such disability or death. After disability or death, the optionee (or in the case of death, his or her executor, administrator or any person or persons to whom this option may be transferred by will or by laws of descent and distribution) shall have the right, at any time prior to such termination of an Option, to exercise the Option to the extent the optionee was entitled to exercise such Option as of the date of his or her disability or death. An optionee is permanently and totally disabled if he or she is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to last for a continuous period of not less than 12 months; permanent and total disability shall be determined in accordance with Section 22(e)(3) of the Code and the regulations issued thereunder.

11. Rights as a Shareholder. The holder of an Option shall have no rights as a shareholder with respect to any shares covered by the Option (including, without limitation, any rights to receive dividends or non-cash distributions with respect to such shares) until the date of issue of a stock certificate to him or her for such shares. No adjustment shall be made for dividends or other rights for which the record date is prior to the date such stock certificate is issued.

12. Additional Provisions. The Board may, in its sole discretion, include additional provisions in Restricted Stock Agreements and Option Agreements, including, without limitation, restrictions on transfer, rights of the Company to repurchase shares of Restricted Stock or shares of Common Stock acquired upon exercise of Options, commitments to pay cash bonuses, to make, arrange for or guaranty loans or to transfer other property to optionees upon exercise of Options, or such other provisions as shall be determined by the Board; provided that such additional provisions shall not be inconsistent with any other term or condition of the Plan and such additional provisions shall not be such as to cause any Incentive Stock Option to fail to qualify as an Incentive Stock Option within the meaning of Section 422 of the Code.

13. Acceleration, Extension, Etc. The Board may, in its sole discretion, (i) accelerate the date or dates on which all or any particular Option or Options may be exercised or (ii) extend the period or periods of time during which all, or any particular, Option or Options may be exercised.

14. Adjustment Upon Changes in Capitalization.

No Effect of Options upon Certain Corporate Transactions. The existence of outstanding Options shall not affect in any way the right or power of the Company to make or authorize any or all adjustments, recapitalizations, reorganizations or other changes in the Company's capital structure or its business, or any merger or consolidation, or any issue of Common Stock, or any issue of bonds, debentures, preferred or prior preference stock ahead of or affecting the Common Stock or the rights thereof, or the dissolution or liquidation of the Company, or any sale or transfer of all or any part of its assets or business, or any other corporate act or proceeding, whether of a similar character or otherwise.

Adjustment Provisions. If, through or as a result of any merger, consolidation, sale of all or substantially all of the assets of the Company, reorganization, recapitalization, reclassification, stock dividend, stock split, reverse stock split or other similar transaction, (i) the outstanding shares of Common Stock are increased, decreased or exchanged for a different number or kind of shares or other securities of the Company, or (ii) additional shares or new or different shares or other securities of the Company or other non-cash assets are distributed with respect to such shares of Common Stock or other securities, an appropriate and proportionate adjustment shall be made in (a) the maximum number and kind of shares reserved for issuance under the Plan, (b) the number and kind of shares or other securities subject to any then outstanding Options, and (c) the price for each share or other security subject to any then outstanding Options, so that upon exercise of such Options, in lieu of the shares of Common Stock for which such Options were then exercisable, the relevant optionee shall be entitled to receive, for the same aggregate consideration, the same total number and kind of shares or other securities, cash or property that the owner of an equal number of outstanding shares of Common Stock immediately prior to the event requiring adjustment would own as a result of the event. If any such event shall occur, appropriate adjustment shall also be made in the application of the provisions of this Section 14 and Section 15 with respect to Options and the rights of optionees after the event so that the provisions of such Sections shall be applicable after the event and be as nearly equivalent as practicable in operation after the event as they were before the event.

No Adjustment in Certain Cases. Except as hereinbefore expressly provided, the issue by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, for cash or property or for labor or services, either upon direct sale or upon the exercise of rights or warrants to subscribe therefor, or upon conversion of shares or obligations of the Company convertible into such shares or other securities, shall not affect, and no adjustment by reason thereof shall be made with respect to, the number or price of shares of Common Stock then subject to outstanding options.

Board Authority to Make Adjustments. Any adjustments under this Section 14 will be made by the Board, whose determination as to what adjustments, if any, will be made and the extent thereof will be final, binding and conclusive. No fractional shares will be issued under the Plan on account of any such adjustments.

15. Effect of Certain Transactions.

General. Except as provided in any Option Agreement or Restricted Stock Agreement to the contrary, if the Company is merged with or into or consolidated with another corporation under circumstances where the stockholders of the Company immediately prior to such merger or consolidation do not own after such merger or consolidation shares representing at least fifty percent (50%) of the voting power of the Company or the surviving or resulting corporation, as the case may be, or if shares representing fifty percent (50%) or more of the voting power of the Company are transferred to an Unrelated Third Party, as hereinafter defined, or if the Company is liquidated, or sells or otherwise disposes of all or substantially all its assets (each such transaction is referred to herein as a “Change in Control Transaction”), the Board, or the board of directors of any corporation assuming the obligations of the Company, may, in its discretion, take any one or more of the following actions, as to some or all outstanding Options or Restricted Stock Awards (and need not take the same action as to each such Option or Restricted Stock Award): (i) provide that such Options shall be assumed, or equivalent Options shall be substituted, by the acquiring or succeeding corporation (or an affiliate thereof), provided that any such Options substituted for Incentive Stock Options shall meet the requirements of Section 424(a) of the Code, (ii) upon written notice to the optionees, provide that all unexercised Options will terminate immediately prior to the consummation of the Change in Control Transaction unless exercised by the optionee to the extent otherwise then exercisable within a specified period following the date of such notice, (iii) upon written notice to the grantees, provide that all unvested shares of Restricted Stock shall be repurchased at cost, (iv) make or provide for a cash payment to the optionees equal to the difference between (A) the fair market value of the per share consideration (whether cash, securities or other property or any combination of the above) the holder of a share of Common Stock will receive upon consummation of the Change in Control Transaction (the “Per Share Transaction Price”) times the number of shares of Common Stock subject to outstanding vested Options (to the extent then exercisable at prices not equal to or in excess of the Per Share Transaction Price) and (B) the aggregate exercise price of such outstanding vested Options, in exchange for the termination of such Options, or (v) provide that all or any outstanding Options shall become exercisable and all or any outstanding Restricted Stock Awards shall vest in part or in full immediately prior to such event. To the extent that any Options are exercisable at a price equal to or in excess of the Per Share Transaction Price, the Board may provide that such Options shall terminate immediately upon the consummation of the Change in Control Transaction without any payment being made to the holders of such Options. “Unrelated Third Party” shall mean any person who is not, on the date of adoption of this Plan by the Board, a holder of stock of any class or preference or any stock option of the Company.

Substitute Options. The Company may grant Options in substitution for options held by employees, officers or directors of, or consultants or advisors to, another corporation who become employees, officers or directors of, or consultants or advisors to, the Company, as the result of a merger or consolidation of the employing corporation with the Company or as a result of the acquisition by the Company, of property or stock of the employing corporation. The Company may direct that substitute Options be granted on such terms and conditions as the Board considers appropriate in the circumstances.

Restricted Stock. In the event of a business combination or other transaction of the type detailed in Section 15.1, any securities, cash or other property received in

exchange for shares of Restricted Stock shall continue to be governed by the provisions of any Restricted Stock Agreement pursuant to which they were issued, including any provision regarding vesting, and such securities, cash, or other property may be held in escrow on such terms as the Board may direct, to insure compliance with the terms of any such Restricted Stock Agreement.

16. No Special Employment Rights. Nothing contained in the Plan or in any Option Agreement or Restricted Stock Agreement shall confer upon any optionee or holder of Restricted Stock any right with respect to the continuation of his or her employment by the Company or interfere in any way with the right of the Company at any time to terminate such employment or to increase or decrease his or her compensation.

17. Other Employee Benefits. The amount of any compensation deemed to be received by an employee as a result of the issuance of shares of Restricted Stock or the grant or exercise of an Option or the sale of shares received upon issuance of a Restricted Stock Award or exercise of an Option will not constitute compensation with respect to which any other employee benefits of such employee are determined, including, without limitation, benefits under any bonus, pension, profit-sharing, life insurance or salary continuation plan, except as otherwise specifically determined by the Board.

18. Amendment of the Plan.

The Board may at any time, and from time to time, modify or amend in any respect or terminate the Plan. If shareholder approval is not obtained within twelve months after any amendment increasing the number of shares authorized under the Plan or changing the class of persons eligible to receive Options under the Plan, no Options granted pursuant to such amendments shall be deemed to be Incentive Stock Options and no Incentive Stock Options shall be issued pursuant to such amendments thereafter.

The termination or any modification or amendment of the Plan shall not, without the consent of an optionee or the holder of Restricted Stock, adversely affect his or her rights under an Option or Restricted Stock Award previously granted to him or her. With the consent of the recipient of Restricted Stock or optionee affected, the Board may amend outstanding Restricted Stock Agreements or Option Agreements in a manner not inconsistent with the Plan.

19. Withholding. The Company shall have the right to deduct from payments of any kind otherwise due to the optionee or recipient of Restricted Stock, any federal, state or local taxes of any kind required by law to be withheld with respect to issuance of any shares of Restricted Stock or shares issued upon exercise of Options. Prior to delivery of any Common Stock pursuant to the terms of this Plan, the Board has the right to require that the optionee or recipient of Restricted Stock remit to the Company an amount sufficient to satisfy any minimum tax withholding obligation. Subject to the prior approval of the Company, which may be withheld by the Company in its sole discretion, the obligor may elect to satisfy any minimum withholding obligations, in whole or in part, (i) by causing the Company to withhold shares of Common Stock otherwise issuable, or (ii) by delivering to the Company a sufficient number of shares of Common Stock. The shares so withheld shall have a fair market value equal to such minimum withholding obligation. The fair market value of the shares used to satisfy such minimum withholding

obligation shall be determined by the Company as of the date that the amount of tax to be withheld is to be determined. A person who has made an election pursuant to this Section 19 may only satisfy his or her withholding obligation with shares of Common Stock which are not subject to any repurchase, forfeiture, unfulfilled vesting or other similar restrictions.

20. Effective Date and Duration of the Plan.

Effective Date. The Plan shall become effective when adopted by the Board. If shareholder approval is not obtained within twelve months after the date of the Board's adoption of the Plan, no Options previously granted under the Plan shall be deemed to be Incentive Stock Options and no Incentive Stock Options shall be granted thereafter. Amendments to the Plan not requiring shareholder approval shall become effective when adopted by the Board. Amendments requiring shareholder approval shall become effective when adopted by the Board, but if shareholder approval is not obtained within twelve months of the Board's adoption of such amendment, any Incentive Stock Options granted pursuant to such amendment shall be deemed to be non-statutory Options provided that such Options are authorized by the Plan. Subject to this limitation, Options may be granted under the Plan at any time after the effective date and before the date fixed for termination of the Plan.

Termination. Unless sooner terminated by action of the Board, the Plan shall terminate upon the close of business on the day next preceding the tenth anniversary of the date of its adoption by the Board.

21. Provision for Foreign Participants. The Board may, without amending the Plan, modify the terms of Option Agreements or Restricted Stock Agreements to differ from those specified in the Plan with respect to participants who are foreign nationals or employed outside the United States to recognize differences in laws, rules, regulations or customs of such foreign jurisdictions with respect to tax, securities, currency, employee benefit or other matters.

22. Requirements of Law. The Company shall not be required to sell or issue any shares under any Option or Restricted Stock Award if the issuance of such shares shall constitute a violation by the optionee, the Restricted Stock Award recipient, or by the Company of any provision of any law or regulation of any governmental authority. In addition, in connection with the Act, the Company shall not be required to issue any shares upon exercise of any Option unless the Company has received evidence satisfactory to it to the effect that the holder of such Option will not transfer such shares except pursuant to a registration statement in effect under the Act or unless an opinion of counsel satisfactory to the Company has been received by the Company to the effect that such registration is not required in connection with any such transfer. Any determination in this connection by the Board shall be final, binding and conclusive. In the event the shares issuable on exercise of an Option are not registered under the Act or under the securities laws of each relevant state or other jurisdiction, the Company may imprint on the certificate(s) appropriate legends that counsel for the Company considers necessary or advisable to comply with the Act or any such state or other securities law. The Company may register, but in no event shall be obligated to register, any securities covered by the Plan pursuant to the Act; and in the event any shares are so registered the Company may remove any legend on certificates representing such shares. The Company shall not be obligated to take any affirmative action in order to cause the exercise of an Option, the grant of any Restricted Stock Award or the issuance of shares pursuant thereto to comply with any law or regulation of any governmental authority.

23. Conversion of Incentive Stock Options into Non-Qualified Options; Termination. The Board, with the consent of any optionee, may in its discretion take such actions as may be necessary to convert such optionee's Incentive Stock Options (or any installments or portions of installments thereof) that have not been exercised on the date of conversion into non-statutory Options at any time prior to the expiration of such Incentive Stock Options, regardless of whether the optionee is an employee of the Company or a parent or subsidiary of the Company at the time of such conversion. At the time of such conversion, the Board (with the consent of the optionee) may impose such conditions on the exercise of the resulting non-statutory Options as the Board in its discretion may determine, provided that such conditions shall not be inconsistent with this Plan. Nothing in this Plan shall be deemed to give any optionee the right to have such optionee's Incentive Stock Options converted into non-statutory Options, and no such conversion shall occur until and unless the Board takes appropriate action. The Board, with the consent of the optionee, may also terminate any portion of any Incentive Stock Option that has not been exercised at the time of such termination.

24. Non-Exclusivity of this Plan; Non-Uniform Determinations. Neither the adoption of this Plan by the Board nor the approval of this Plan by the stockholders of the Company shall be construed as creating any limitations on the power of the Board to adopt such other incentive arrangements as it may deem desirable, including, without limitation, the granting of stock options otherwise than under this Plan, and such arrangements may be either applicable generally or only in specific cases.

The determinations of the Board under this Plan need not be uniform and may be made by it selectively among persons who receive or are eligible to receive Options or Restricted Stock Awards under this Plan (whether or not such persons are similarly situated). Without limiting the generality of the foregoing, the Board shall be entitled, among other things, to make non-uniform and selective determinations, and to enter into non-uniform and selective Option Agreements and Restricted Stock Agreements, as to (a) the persons to receive Options or Restricted Stock Awards under this Plan, (b) the terms and provisions of Options or Restricted Stock Awards, (c) the exercise by the Board of its discretion in respect of the exercise of Options pursuant to the terms of this Plan, and (d) the treatment of leaves of absence pursuant to Section 10 hereof.

25. Governing Law. This Plan and each Option or Restricted Stock Award shall be governed by the laws of The Commonwealth of Massachusetts, without regard to its principles of conflicts of law.

Originally Adopted: August 27, 2009

APPENDIX A
TO ELEVEN BIOTHERAPEUTICS, INC. 2009 STOCK INCENTIVE PLAN
FOR CALIFORNIA RESIDENTS ONLY

This Appendix to the Eleven Biotherapeutics, Inc. 2009 Stock Incentive Plan (the "Plan") shall have application only to participants in the Plan who are residents of the State of California. Capitalized terms contained herein shall have the same meanings given to them in the Plan, unless otherwise provided in this Appendix. **Notwithstanding any provision contained in the Plan to the contrary and to the extent required by applicable law, the following terms and conditions shall apply to all Options and Restricted Stock Awards (collectively "Awards") granted to residents of the State of California, until such time as the Common Stock becomes subject to registration under the Securities Act of 1933:**

1. Awards shall be nontransferable other than by will or the laws of descent and distribution. Notwithstanding the foregoing, and to the extent permitted by Section 422 of the Code, the Board, in its discretion, may permit distribution of an Award to an inter vivos or testamentary trust in which the Award is to be passed to beneficiaries upon the death of the trustor (settlor), or by gift to "immediate family" as that term is defined in Rule 16a-1(e) of the United States Exchange Act of 1934.

2. Unless employment is terminated for Cause, the right to exercise an Option in the event of termination of employment, to the extent that the optionee is otherwise entitled to exercise an Option on the date employment terminates, shall be

- (a) at least six months from the date of termination of employment if termination was caused by death or permanent disability; and
- (b) at least 30 days from the date of termination if termination of employment was caused by other than death or permanent disability;
- (c) but in no event later than the remaining term of the Option.

3. Any Award exercised before shareholder approval is obtained shall be rescinded if shareholder approval is not obtained within 12 months of the Board's adoption of the Plan.

LEASE AGREEMENT

THIS LEASE AGREEMENT is dated as of January 14, 2010, between **ARE-MA REGION NO. 38, LLC**, a Delaware limited liability company (“**Landlord**”) and **DENOVO THERAPEUTICS, INC.**, a Delaware corporation (“**Tenant**”).

BASIC LEASE PROVISIONS

Address:	215 First Street, Cambridge, MA 02142
Premises:	That portion of the Building (as defined below), located on the 4 th floor of the Building and containing approximately 17,484 rentable square feet, as determined by Landlord, as shown on Exhibit A .
Shared Science Facility:	That portion of the Building depicted as the “Shared Science Facility” on Exhibit B attached hereto, subject to adjustment and relocation by Landlord from time to time.
Shared Conference Facility:	That portion of the Building depicted as the “Shared Conference Facility” on Exhibit C attached hereto, subject to adjustment and relocation by Landlord from time to time.
Project:	The real property on which the Building is located, together with all improvements thereon and appurtenances thereto as described on Exhibit D .
Building:	That building located on the Project and commonly known and numbered as 215 First Street, Cambridge, Massachusetts.
Base Rent:	\$67,022.00 per month, subject to adjustments as set forth in <u>Section 3</u> below.
Rent Commencement Date:	Commencement Date.
Rent Adjustment Percentage:	3.0%.
Rentable Area of Premises:	Approximately 17,484 rentable square feet.
Rentable Area of Project:	Approximately 366,509 rentable square feet.
Tenant’s Share:	4.77%.
Tenant’s Percentage Share (Science Facility):	20.1%

Security Deposit: \$134,044.00.

Target Commencement Date: May 1, 2010.

Term: Subject to the terms and conditions of Section 2, beginning on the Commencement Date and ending three (3) years and six (6) months from the first day of the first full month commencing on or after the Commencement Date.

Permitted Use: Research and development laboratory, related office and other related uses consistent with the character of the Project and otherwise in compliance with the provisions of Section 6 hereof.

Address for Rent Payment:

P.O. Box 975383
Dallas, TX 75397-5383

Landlord's Notice Address:

385 East Colorado Boulevard,
Suite 299
Pasadena, CA 91101
Attention: Corporate Secretary
Facsimile: 626-578-0770

Tenant's Notice Address:

Prior to the Commencement Date:

790 Memorial Drive
Cambridge, MA 02142
Attention: Chief Executive Officer
Facsimile: _____

From and after the
Commencement Date:

215 First Street
Cambridge, MA 02142
Attention: Chief Executive Officer
Facsimile: _____

With a copy to:

Foley Hoag LLP
155 Seaport Boulevard
Boston, MA 02210
Attention: Jeffrey L. Quillen, Esq.
Facsimile: 617-832-7000

1. Lease of Premises; Right to Use Common Areas; License to Shared Areas.

(a) **Lease of Premises; Common Areas.** Upon and subject to all of the terms and conditions hereof, Landlord hereby leases the Premises to Tenant and Tenant hereby leases the Premises from Landlord. The portions of the Project that are for the non-exclusive use of tenants of the Project (including but not limited to the restrooms, elevators, stairways, lobbies, corridors, walkways and Building entrances) are collectively referred to herein as the “**Common Areas**.” Tenant shall have the non-exclusive right to use the Common Areas of the Project, excluding the Shared Science Facility and Shared Conference Facility to which Tenant’s rights are as set forth in Section 1(b) below. Landlord reserves the right to modify, reconfigure and relocate the Common Areas, provided that such modifications, reconfigurations or relocations do not materially adversely affect Tenant’s use of the Premises for the Permitted Use. Notwithstanding the foregoing, no interruption in Building Systems, services or Utilities, from any cause whatsoever, in connection with any work to effect any such modification, reconfiguration or relocation shall result in eviction or constructive eviction of Tenant, termination of this Lease or the abatement of Rent. Landlord reserves the right to change the form of ownership of the Project or any part thereof.

(b) **Shared Science Facility; Shared Conference Facility.** Concurrently with the execution and delivery of this Lease by Tenant, Tenant shall execute and deliver to Landlord a license agreement in the form attached as **Exhibit E** attached hereto (the “**License Agreement**”). Tenant shall have the non-exclusive right to use the Shared Science Facility and Shared Conference Facility pursuant to the terms and conditions of the License Agreement. Tenant shall have no right to use or access the Shared Science Facility or Shared Conference Facility, except as provided in the License Agreement.

2. Delivery; Acceptance of Premises; Commencement Date.

(a) Landlord and Tenant acknowledge that (i) Tenant is in the process of raising its Series A round of equity financing, (ii) in order for Landlord to commence Landlord’s Work under the Work Letter attached hereto as **Exhibit F** (the “**Work Letter**”) as soon as possible, Landlord and Tenant are executing this Lease prior to the Tenant’s receipt of such financing, and (iii) following execution of this Lease Landlord will expend its funds in performing Landlord’s Work. If Tenant does not close on equity financing in an amount at least equal to \$4,000,000 (the “**Equity Financing**”) on or before March 1, 2010, Landlord shall have the right to suspend Landlord’s Work under the Work Letter. For purposes of this paragraph, Tenant shall be deemed to have closed on the date that the net proceeds of such Equity Financing are received by Tenant. Any such suspension of Landlord’s Work shall constitute a Tenant Delay under the Work Letter. If the Equity Financing has not closed on or before June 1, 2010, Landlord shall have the right, whether or not Landlord has exercised its right to suspend Landlord’s Work, to terminate this Lease on 60 days’ notice to Tenant, and notwithstanding anything to the contrary contained in this Lease, upon the delivery of such notice of termination Landlord shall have an indefeasible right to the “**Termination Fee**” (as defined below) as liquidated damages on account of such termination. If Landlord does not elect to so terminate this Lease under this Section 2(a), this Lease shall remain in full force and effect. Upon such termination by Landlord, neither Landlord nor Tenant shall have any further rights, duties or obligations under this Lease, except with

respect to provisions which expressly survive termination of this Lease. The “**Termination Fee**” shall be equal to the first month’s Base Rent paid by Tenant upon execution of this Lease and the full amount of the Security Deposit. Tenant hereby authorizes and consents to the draw by Landlord under the Letter of Credit in the full amount of the Security Deposit in the event of such termination, and the provisions of this paragraph shall survive such termination. Tenant acknowledges and agrees that in the event of such termination, (x) Landlord is entitled to draw under the Letter of Credit in the full amount of the Security Deposit, and (y) Landlord may certify to the issuing bank that Landlord is entitled to draw under the Letter of Credit. Tenant shall cooperate with Landlord in connection with such draw request(s) to such issuing bank or banks, including without limitation providing such certificates, affidavits and other documents as may be requested by such issuing bank or banks.

(b) Subject to the provisions of Section 2(a), Landlord shall use reasonable efforts to deliver the Premises to Tenant on or before the Target Commencement Date, with the Tenant Improvements Substantially Completed (“**Delivery**” or “**Deliver**”). If Landlord fails to so Deliver the Premises on or before the Target Commencement Date, Landlord shall not be liable to Tenant for any loss or damage resulting therefrom, and this Lease shall not be void or voidable except as provided herein (provided that nothing in this Section 2(b) shall limit or derogate from the right of the Landlord to terminate this Lease under Section 2(a) above). If Landlord does not Deliver the Premises within 60 days of the Target Commencement Date for any reason other than delays due to Force Majeure or Tenant Delays, this Lease may be terminated by Landlord or Tenant by written notice to the other (except that Landlord shall not have the right to terminate this Lease under this Section 2(b) other than in the event of Force Majeure or Tenant Delays), and if so terminated by either under this Section 2(b): (a) any Rent paid prior to the date of such termination (except for any Rent paid for any time period that Tenant occupied the Premises and conducted its business therein) and the Security Deposit, or any balance thereof (i.e., after deducting therefrom all amounts to which Landlord is entitled under the provisions of this Lease), shall be returned to Tenant, and (b) neither Landlord nor Tenant shall have any further rights, duties or obligations under this Lease, except with respect to provisions which expressly survive termination of this Lease (it being understood that the clause (a) of this sentence shall not apply to any termination under Section 2(a) above). As used herein, the terms “**Tenant Improvements**,” “**Tenants’ Work**,” “**Tenant Delays**” and “**Substantially Completed**” shall have the meanings set forth for such terms in the Work Letter. The term “**Force Majeure**” shall have the meaning set forth for such term in Section 37 below.

If neither Landlord nor Tenant elects to void this Lease within 5 business days of the lapse of such 60 day period under this Section 2(b), such right to void this Lease shall be waived and this Lease shall remain in full force and effect. However, if neither Landlord nor Tenant elects to void this Lease within 5 business days of the lapse of such 60-day period under this Section 2(b), and except to the extent that Landlord’s failure to Deliver the Premises is due to Force Majeure or Tenant Delays, then Tenant shall receive a credit equal to one day of Base Rent for every day after the lapse of such 60-day period until Delivery of the Premises, up to 60 days in the aggregate (the “**Rent Credit Period**”). Such credit shall be reduced for each day of any Force Majeure delay and for each day of any Tenant Delays. Such credit, net of reduction for Force Majeure delay and Tenant Delays as aforesaid, shall be applied to Base Rent first payable by Tenant from and after the Rent Commencement Date.

If Landlord does not Deliver the Premises on or before the 60th day of the Rent Credit Period, for any reason other than delays due to Force Majeure or Tenant Delays, this Lease may be terminated by Landlord or Tenant under this Section 2(b) by written notice to the other (except that Landlord shall have no right to so terminate this Lease under this Section 2(b) other than in the event of Force Majeure or Tenant Delays), and if so terminated by either under this Section 2(b): (a) any Rent paid prior to the date of such termination (except for any Rent paid for any time period that Tenant occupied the Premises and conducted its business therein) and the Security Deposit, or any balance thereof (i.e., after deducting therefrom all amounts to which Landlord is entitled under the provisions of this Lease), shall be returned to Tenant, and (b) neither Landlord nor Tenant shall have any further rights, duties or obligations under this Lease, except with respect to provisions which expressly survive termination of this Lease (it being understood that the clause (a) of this sentence shall not apply to any termination under Section 2(a) above). If neither Landlord nor Tenant elects to void this Lease within 5 business days of the 60th day of the Rent Credit Period under this Section 2(b), such right to void this Lease shall be waived and this Lease shall remain in full force and effect.

(c) The “**Commencement Date**” shall be the earliest of: (i) the date Landlord Delivers the Premises to Tenant (which shall be no earlier than the Target Commencement Date); (ii) the date Landlord could have Delivered the Premises but for Tenant Delays (which shall be no earlier than the Target Commencement Date); and (iii) the date Tenant conducts any business in the Premises or any part thereof. The “**Rent Commencement Date**” shall be the Commencement Date. Upon request of Landlord, Tenant shall execute and deliver a written acknowledgment of the Commencement Date, the Rent Commencement Date and the expiration date of the Term when such are established in the form of the “Acknowledgement of Commencement Date” attached to this Lease as **Exhibit G**; provided, however, Tenant’s failure to execute and deliver such acknowledgment shall not affect Landlord’s rights hereunder. The “**Term**” of this Lease shall be as defined above in the Basic Lease Provisions and any Extension Term which Tenant may elect pursuant to Section 35 hereof.

Except as set forth in the Work Letter: (i) Tenant shall accept the Premises in their condition as of the Commencement Date, subject to all applicable Legal Requirements (as defined in Section 6 hereof); (ii) Landlord shall have no obligation for any defects in the Premises; and (iii) Tenant’s taking possession of the Premises shall be conclusive evidence that Tenant accepts the Premises and that the Premises were in good condition at the time possession was taken. Any occupancy of the Premises by Tenant before the Commencement Date shall be subject to all of the terms and conditions of this Lease, including the obligation to pay Rent at such time as Tenant conducts any business in the Premises or any part thereof.

Tenant agrees and acknowledges that neither Landlord nor any agent of Landlord has made any representation or warranty with respect to the condition of all or any portion of the Premises or the Project, and/or the suitability of the Premises or the Project for the conduct of Tenant’s business, and Tenant waives any implied warranty that the Premises or the Project are suitable for the Permitted Use. This Lease constitutes the complete agreement of Landlord and

Tenant with respect to the subject matter hereof and supersedes any and all prior representations, inducements, promises, agreements, understandings and negotiations which are not contained herein.

3. Base Rent.

(a) The first month's Base Rent and Security Deposit shall be due and payable on delivery of an executed copy of this Lease to Landlord. Tenant shall pay to Landlord in advance, monthly installments of Base Rent on or before the first day of each calendar month during the Term hereof, in lawful money of the United States of America, at the office or address of Landlord for payment of Rent set forth above. Notwithstanding the foregoing, Base Rent for the 6-month period commencing on the Commencement Date shall be adjusted to be \$18,390.67 per month for such 6-month period, provided that Tenant is not in Default hereunder, and after such 6-month period Base Rent shall be at the rate stated above in the Basic Lease Provisions, subject to adjustment each year on the Adjustment Date as provided below. Payments of Base Rent for any fractional calendar month shall be prorated. If the Rent Commencement Date is other than the first day of a calendar month, the difference between the first full calendar month's Base Rent paid pursuant to the first sentence of this Section 3(a), and the prorated Base Rent for the fractional month in which the Rent Commencement Date occurs, shall be applied by Landlord to the first full calendar month after the Rent Commencement Date. Except as expressly provided in Section 2 above or Section 15 below, Tenant shall have no right at any time to abate, reduce, or set-off any Rent due hereunder. Base Rent shall be increased on each anniversary of the first day of the first full month during the Term of this Lease (each an "**Adjustment Date**") by multiplying the Base Rent payable immediately before such Adjustment Date by the Rent Adjustment Percentage and adding the resulting amount to the Base Rent payable immediately before such Adjustment Date. Base Rent, as so adjusted, shall thereafter be due as otherwise provided herein. Base Rent adjustments for any fractional calendar month shall be prorated.

(b) In addition to Base Rent, Tenant agrees to pay to Landlord as additional rent ("**Additional Rent**"): (i) Tenant's Share of Project Operating Expenses and Tenant's Percentage Share (Science Facility) of Science Facility Operating Expenses (each as defined in Section 4), and (ii) any and all other amounts Tenant assumes or agrees to pay under the provisions of this Lease, including, without limitation, any and all other sums that may become due by reason of any default of Tenant or failure to comply with the agreements, terms, covenants and conditions of this Lease to be performed by Tenant, after any applicable notice and cure period. Tenant's obligation to pay Base Rent and Additional Rent hereunder are collectively referred to herein as "**Rent**".

4. Operating Expense Payments. Landlord shall deliver to Tenant a written estimate of Project Operating Expenses and Science Facility Operating Expenses for each calendar year during the Term (together, the "**Annual Estimate**"), which may be revised by Landlord from time to time during such calendar year. During each month of the Term, on the same date that Base Rent is due, Tenant shall pay Landlord an amount equal to 1/12th of Tenant's Share of Project Operating Expenses and 1/12th of Tenant's Percentage Share (Science Facility) of Science Facility Operating Expenses, each as shown on the Annual Estimate. Payments for any fractional calendar month shall be prorated. As used herein the term

“**Operating Expenses**” shall mean collectively the Project Operating Expenses and the Science Facility Operating Expenses (as such terms are hereinafter defined); and the term “**Tenant’s Share of Operating Expenses**” shall mean collectively Tenant’s Share of Project Operating Expenses and Tenant’s Percentage Share (Science Facility) of Science Facility Operating Expenses.

The term “**Project Operating Expenses**” means all costs and expenses of any kind or description whatsoever incurred or accrued each calendar year by Landlord with respect to the Project (including, without duplication, Taxes (as defined below in this [Section 4](#)), transportation services (including costs associated with Landlord’s participation in the EZ-Ride shuttle or a successor shuttle service), reasonable reserves consistent with good business practice for future repairs and replacements, capital repairs and replacements, and those capital improvements the purpose of which is to reduce Project Operating Expenses and/or to comply with Legal Requirements first made effective after the date of this Lease, which capital repairs, replacements and capital improvements are in each case amortized over the lesser of 7 years and the useful life of such capital items, and the costs of Landlord’s third party property manager or, if there is no third party property manager, administration rent in the amount of 4.0% of Base Rent (including Base Rent that would have been due if Base Rent were not reduced in the first 6 months after the Commencement Date)), excluding only:

- (a) the original construction costs of the Project and renovation prior to the date of the Lease and costs of correcting defects in such original construction or renovation;
- (b) capital expenditures for expansion of the Project or capital improvements that are not for the purpose of reducing Project Operating Expenses and/or complying with Legal Requirements first made effective after the date of this Lease;
- (c) interest, principal payments of Mortgage (as defined in [Section 23](#)) debts of Landlord, financing costs and amortization of funds borrowed by Landlord, whether secured or unsecured and all payments of base rent (but not taxes or operating expenses) under any ground lease or other underlying lease of all or any portion of the Project;
- (d) depreciation of the Project (except for those capital improvements, the cost of which are includable in Project Operating Expenses as provided above in this [Section 4](#));
- (e) advertising, legal and space planning expenses and leasing commissions and other costs and expenses incurred in procuring and leasing space to tenants for the Project, including any leasing office maintained in the Project, free rent and construction allowances for tenants;
- (f) legal and other expenses incurred in the negotiation or enforcement of leases;
- (g) completing, fixturing, improving, renovating, painting, redecorating or other work, which Landlord pays for or performs for other tenants within their premises, and costs of correcting defects in such work;
- (h) costs of utilities outside normal business hours sold to tenants of the Project;

- (i) (costs to be reimbursed by other tenants of the Project or Taxes to be paid directly by Tenant or other tenants of the Project, whether or not actually paid;
- (j) salaries, wages, benefits and other compensation paid to officers and employees of Landlord who are not assigned in whole or in part to the operation, management, maintenance or repair of the Project;
- (k) general organizational, administrative and overhead costs relating to maintaining Landlord's existence, either as a corporation, partnership, or other entity, including general corporate, legal and accounting expenses;
- (l) costs (including attorneys' fees and costs of settlement, judgments and payments in lieu thereof) incurred in connection with disputes with tenants, other occupants, or prospective tenants, and costs and expenses, including legal fees, incurred in connection with negotiations or disputes with employees, consultants, management agents, leasing agents, purchasers or mortgagees of the Building;
- (m) costs incurred by Landlord due to the violation by Landlord, its employees, agents or contractors or any tenant of the terms and conditions of any lease of space in the Project or any Legal Requirement (as defined in Section 6);
- (n) penalties, fines or interest incurred as a result of Landlord's inability or failure to make payment of Taxes and/or to file any tax or informational returns when due, or from Landlord's failure to make any payment of Taxes required to be made by Landlord hereunder before delinquency;
- (o) overhead and profit increment paid to Landlord or to subsidiaries or affiliates of Landlord for goods and/or services in or to the Project to the extent the same exceeds the costs of such goods and/or services rendered by unaffiliated third parties on a competitive basis;
- (p) costs of Landlord's charitable or political contributions, or of fine art maintained at the Project;
- (q) costs in connection with services (including electricity), items or other benefits of a type which are not standard for the Project and which are not available to Tenant without specific charges therefor, but which are provided to another tenant or occupant of the Project, whether or not such other tenant or occupant is specifically charged therefor by Landlord;
- (r) costs incurred in the sale or refinancing of the Project;
- (s) net income taxes of Landlord or the owner of any interest in the Project, franchise, capital stock, gift, estate or inheritance taxes or any federal, state or local documentary taxes imposed against the Project or any portion thereof or interest therein;
- (t) any expenses otherwise includable within Project Operating Expenses to the extent actually reimbursed by persons other than tenants of the Project under leases for space in the Project; and

(u) costs incurred in connection with the clean-up, response action or remediation of Hazardous Materials on the Project or in the Premises that Tenant demonstrates to Landlord's reasonable satisfaction were present on the Project or in the Premises prior to the date of this Lease, except to the extent Tenant and/or any of the Tenant Parties have exacerbated or contributed to such contamination.

Within 90 days after the end of each calendar year (or such longer period as may be reasonably required), Landlord shall furnish to Tenant a statement (an "**Annual Statement**") showing in reasonable detail: (a) the actual totals of Project Operating Expenses, Science Facility Operating Expenses, Tenant's Share of Project Operating Expenses and Tenant's Percentage Share (Science Facility) of Science Facility Operating Expenses, in each case for the previous calendar year, and (b) the total of Tenant's payments in respect of Project Operating Expenses and Science Facility Operating Expenses for such year. If Tenant's Share of actual Project Operating Expenses for such year exceeds Tenant's payments of Project Operating Expenses for such year, or if Tenant's Percentage Share (Science Facility) of actual Science Facility Operating Expenses for such year exceeds Tenant's payments of Science Facility Operating Expenses for such year, the excess shall be due and payable by Tenant as Rent within 30 days after delivery of such Annual Statement to Tenant. If Tenant's payments of Project Operating Expenses for such year exceed Tenant's Share of actual Project Operating Expenses for such year, or if Tenant's payments of Science Facility Operating Expenses for such year exceed Tenant's Percentage Share (Science Facility) of actual Science Facility Operating Expenses for such year, Landlord shall pay the excess to Tenant within 30 days after delivery of such Annual Statement, except that after the expiration, or earlier termination of the Term or if Tenant is delinquent in its obligation to pay Rent, Landlord shall pay the excess to Tenant after deducting all other amounts due Landlord.

The Annual Statement shall be final and binding upon Tenant unless Tenant, within 60 days after Tenant's receipt thereof, shall contest any item therein by giving written notice to Landlord, specifying each item contested and the reason therefor. If, during such 60 day period, Tenant reasonably and in good faith questions or contests the accuracy of Landlord's statement of Tenant's Share of Project Operating Expenses or Tenant's Percentage Share (Science Facility) of Science Facility Operating Expenses, Landlord will provide Tenant with access to Landlord's books and records relating to the operation of the Project and such information as Landlord reasonably determines to be responsive to Tenant's questions (the "**Expense Information**"). If after Tenant's review of such Expense Information, Landlord and Tenant cannot agree upon the amount of Tenant's Share of Project Operating Expenses or Tenant's Percentage Share (Science Facility) of Science Facility Operating Expenses, then Tenant shall have the right to have an independent public accounting firm selected by Tenant, working pursuant to a fee arrangement other than a contingent fee (at Tenant's sole cost and expense) and approved by Landlord (which approval shall not be unreasonably withheld or delayed), audit and/or review the Expense Information for the year in question (the "**Independent Review**"). The results of any such Independent Review shall be binding on Landlord and Tenant. If the Independent Review shows that the payments actually made by Tenant with respect to Project Operating Expenses for the calendar year in question exceeded Tenant's Share of Project Operating Expenses for such calendar year, or that the payments actually made by Tenant with respect to Science Facility

Operating Expenses for the calendar year in question exceeded Tenant's Percentage Share (Science Facility) of Science Facility Operating Expenses, Landlord shall at Landlord's option either (i) credit the excess amount to the next succeeding installments of estimated Operating Expenses or (ii) pay the excess to Tenant within 30 days after delivery of such statement, except that after the expiration or earlier termination of this Lease or if Tenant is delinquent in its obligation to pay Rent, Landlord shall pay the excess to Tenant after deducting all other amounts due Landlord. If the Independent Review shows that Tenant's payments with respect to Project Operating Expenses for such calendar year were less than Tenant's Share of Project Operating Expenses for the calendar year, or that Tenant's payments with respect to Science Facility Operating Expenses for such calendar year were less than Tenant's Percentage Share (Science Facility) of Science Facility Operating Expenses, Tenant shall pay the deficiency to Landlord within 30 days after delivery of such statement. If the Independent Review shows that Tenant has overpaid with respect to Project Operating Expenses and Science Facility Operating Expenses by more than 5% then Landlord shall reimburse Tenant for all costs incurred by Tenant for the Independent Review.

Operating Expenses for the calendar years in which Tenant's obligation to share therein begins and ends shall include Operating Expenses for whole calendar months in such calendar years and any partial calendar months shall be prorated. Notwithstanding anything set forth herein to the contrary, if the Project is not at least 95% occupied on average during any year of the Term, for such year those expenses included in Tenant's Share of Project Operating Expenses that vary with the level of occupancy of the Building shall be computed as though the Project had been 95% occupied on average during such year.

"Tenant's Share" shall be the percentage set forth in the Basic Lease Provisions as Tenant's Share as reasonably adjusted by Landlord following a measurement of the rentable square footage of the Project and the Premises to be done by Landlord within 90 days of the Commencement Date, or as soon as reasonably possible thereafter, and shall be subject to further adjustment for changes in the physical size of the Premises or the Project occurring thereafter. Landlord may equitably increase Tenant's Share for any item of expense or cost reimbursable by Tenant that relates to a repair, replacement, or service that benefits only the Premises or only a portion of the Project that includes the Premises or that varies with occupancy or use. **"Tenant's Percentage Share (Science Facility)"** means the percentage set forth in the Basic Lease Provisions, which Tenant's Percentage Share (Science Facility) shall be subject to further adjustment for changes in the physical size of the Shared Science Facility or the Premises occurring after the date of this Lease, and may be equitably increased for any item of expense or cost reimbursable that is specific to Tenant or that varies with occupancy or use or to address variations in occupancy or use of the Shared Science Facility among Tenant and other tenants. In the event that Tenant's Share is adjusted based on a remeasurement of the Premises as set forth above, Tenant's Percentage Share (Science Facility) shall be subject to a corresponding adjustment. **"Science Facility Operating Expenses"** means Landlord's determination of all costs and expenses of any kind or description whatsoever incurred or accrued each calendar year by Landlord with respect to the Shared Science Facility at the Project (including, without duplication, water, sewer, electricity, gas and any other utilities serving such facilities, maintenance and repairs (including without limitation maintenance contracts) for such facilities

and equipment therein, reasonable reserves consistent with good business practice for future repairs and replacements, capital repairs and replacements, and those capital improvements the purpose of which is to reduce Science Facility Operating Expenses and/or to comply with Legal Requirements first made effective after the date of this Lease, which capital repairs, replacements and capital improvements are in each case amortized over the lesser of 7 years and the useful life of such capital items, the contractor fees and expenses and/or salaries, wages, benefits and other compensation paid to any personnel as may be assigned in whole or in part to such facilities, and any Taxes assessed by a Governmental Authority (as defined below) with a valuation allocated to the Shared Science Facility in the Project, but excluding the same kinds of exclusions enumerating in clauses (a) through (u) above with respect to Project Operating Expenses. For purposes of clarification, the parties agree that those specific expense items actually included in Science Facility Operating Expenses in a year shall not also be included as Project Operating Expenses in the same year.

Landlord shall pay, as part of Operating Expenses, all taxes, levies, fees, assessments and governmental charges of any kind, existing as of the Commencement Date or thereafter enacted (collectively referred to as "**Taxes**"), imposed by any federal, state, regional, municipal, local or other governmental authority or agency, including, without limitation, quasi-public agencies (collectively, "**Governmental Authority**") during the Term, including, without limitation, all Taxes: (i) imposed on or measured by or based, in whole or in part, on rent payable to (or gross receipts received by) Landlord under this Lease and/or from the rental by Landlord of the Project or any portion thereof, or (ii) based on the square footage, assessed value or other measure or evaluation of any kind of the Premises, the Shared Science Facility, or the Project, or (iii) assessed or imposed by or on the operation or maintenance of any portion of the Premises, the Shared Science Facility, or the Project, including parking, or (iv) assessed or imposed by, or at the direction of, or resulting from Legal Requirements, or interpretations thereof, promulgated by, any Governmental Authority, or (v) imposed as a license or other fee, charge, tax or assessment on Landlord's business or occupation of leasing space in the Project. Landlord may contest by appropriate legal proceedings the amount, validity, or application of any Taxes or liens securing Taxes. Taxes shall not include any net income taxes imposed on Landlord except to the extent such net income taxes are in substitution for any Taxes payable hereunder, nor franchise, conveyance or excise taxes. Project Operating Expenses hereunder shall also include the cost of tax monitoring services provided to Landlord with respect to the Project. Tenant shall pay, prior to delinquency, any and all Taxes levied or assessed against any personal property or trade fixtures placed by Tenant in the Premises, whether levied or assessed against Landlord or Tenant. If any Taxes on Tenant's personal property or trade fixtures are levied against Landlord or Landlord's property, or if the assessed valuation of the Project is increased by a value attributable to improvements in or alterations to the Premises, whether owned by Landlord or Tenant and whether or not affixed to the real property so as to become a part thereof, higher than the base valuation on which Landlord from time-to-time allocates Taxes to all tenants in the Project, Landlord shall have the right, but not the obligation, to pay such Taxes. Landlord's determination of any excess assessed valuation shall be binding and conclusive, absent manifest error. The amount of any such payment by Landlord shall constitute Additional Rent due from Tenant to Landlord immediately upon demand. If Landlord shall receive any abatement or refund of Taxes that does not derive from any vacancy in the Building or rent losses and such abatement

or refund is for a time period for which Tenant has made payments during the Term, then out of any balance remaining after deducting Landlord's expenses incurred in obtaining such refund or abatement, Landlord shall, at Landlord's option, either (i) credit the excess amount determined by Landlord to be attributable to the Premises to the next succeeding installments of estimated Taxes or (ii) pay the excess amount determined by Landlord to be attributable to the Premises to Tenant within 30 days after delivery of the Annual Statement, except that after the expiration or earlier termination of this Lease or if Tenant is delinquent in its obligation to pay Rent, Landlord shall pay such excess amount determined by Landlord to be attributable to the Premises to Tenant after deducting all other amounts due Landlord. Nothing contained in this Lease shall obligate Landlord to seek a refund or abatement of Taxes.

5. Security Deposit. Tenant shall deposit with Landlord, upon delivery of an executed copy of this Lease to Landlord, a security deposit (the "**Security Deposit**") for the performance of all of Tenant's obligations hereunder in the amount set forth in the Basic Lease Provisions, which Security Deposit shall be in the form of an unconditional and irrevocable letter of credit (the "**Letter of Credit**"): (i) in form and substance reasonably satisfactory to Landlord, (ii) naming Landlord as beneficiary, (iii) expressly allowing Landlord to draw upon it at any time from time to time by delivering to the issuer notice that Landlord is entitled to draw thereunder, (iv) issued by Silicon Valley Bank, N.A. or another FDIC-insured financial institution satisfactory to Landlord, and (v) redeemable by presentation of a sight draft (which may be presented by delivery by overnight courier) at the financial institution's offices in the United States. With respect to any Letter of Credit given as a Security Deposit or Additional Security Deposit (as defined below) hereunder, if Tenant does not provide Landlord with a substitute Letter of Credit complying with all of the requirements hereof at least 10 days before the stated expiration date of any then current Letter of Credit, Landlord shall have the right to draw the full amount of the current Letter of Credit and hold the funds drawn in cash without obligation for interest thereon as the Security Deposit and, if applicable, the Additional Security Deposit. The Security Deposit and Additional Security Deposit, if any, shall be held by Landlord as security for the performance of Tenant's obligations under this Lease. The Security Deposit and, if any, Additional Security Deposit do not constitute an advance rental deposit or a measure of Landlord's damages in case of Tenant's default. Upon each occurrence of a Default (as defined in Section 16). Landlord may use all or any part of the Security Deposit and, if any, the Additional Security Deposit to pay delinquent payments due under this Lease, and the cost of any damage, injury, expense or liability caused by such Default, without prejudice to any other remedy provided herein or provided by law. Tenant hereby waives the provisions of any law, now or hereafter in force, which provide that Landlord may claim from a security deposit only those sums reasonably necessary to remedy defaults in the payment of Rent, to repair damage caused by Tenant or to clean the Premises, it being agreed that Landlord may, in addition, claim those sums reasonably necessary to compensate Landlord for any other loss or damage, foreseeable or unforeseeable, caused by the act or omission of Tenant or any officer, employee, agent or invitee of Tenant. Upon any such use of all or any portion of the Security Deposit and/or Additional Security Deposit, Tenant shall, within 5 days after demand from Landlord, restore the Security Deposit to its original amount. If Tenant shall fully perform every provision of this Lease to be performed by Tenant, the Security Deposit, or any balance thereof (i.e., after deducting therefrom all amounts to which Landlord is entitled under the provisions of this Lease), shall be returned to Tenant (or, at Landlord's option, to the last assignee of Tenant's interest hereunder) within 90 days after the expiration or earlier termination of this Lease.

6. Use. The Premises shall be used solely for the Permitted Use set forth in the Basic Lease Provisions, in compliance with all laws, orders, judgments, ordinances, regulations, codes, directives, permits, licenses, covenants and restrictions now or hereafter applicable to the Premises, and the use and occupancy thereof (collectively, “**Legal Requirements**”). Tenant will use the Premises in a careful, safe and proper manner and will not commit waste, overload the floor or structure of the Premises, subject the Premises to use that would damage the Premises or obstruct or interfere with the rights of Landlord or other tenants or occupants of the Project, including conducting or giving notice of any auction, liquidation, or going out of business sale on the Premises, or using or allowing the Premises to be used for any unlawful purpose.

7. Holding Over. If Tenant remains in possession of the Premises after the expiration or earlier termination of the Term without the express written consent of Landlord, (A) Tenant shall become a tenant at sufferance upon the terms of this Lease except that the monthly rental shall be equal to 150% of the Rent in effect during the last 30 days of the Term, and (B) Tenant shall be responsible for all damages suffered by Landlord resulting from or occasioned by Tenant’s holding over, including consequential damages. Acceptance by Landlord of Rent after the expiration of the Term or earlier termination of this Lease shall not result in a renewal or reinstatement of this Lease.

8. Parking. Subject to all matters of record, Force Majeure (as defined in Section 37 below), a casualty or Taking (as defined in Section 15 below) and the exercise by Landlord of its rights hereunder, Landlord shall make available to Tenant at then-current market rates from time to time a license for 17 parking spaces in the surface parking lots at the Project or at the “Brown Lot” at 100 Binney Street, Cambridge, Massachusetts, all of such parking spaces to be on a non-reserved basis. During the first 12 months of the Term, Tenant shall have the right but not the obligation to license such 17 parking spaces, but for the remainder of the Term (as the same may be extended) Tenant shall be obligated to license the 17 parking spaces at then-current market rates from time to time. With respect to such initial 12-month period, Tenant shall notify Landlord prior to the Commencement Date as to how many of the 17 parking spaces that Tenant will license hereunder and Tenant shall give Landlord 30 days’ notice if it wishes to license additional spaces, up to 17 spaces in the aggregate hereunder. Landlord shall not be responsible for enforcing Tenant’s parking rights against any third parties, including without limitation other tenants of the Project. Landlord shall have the right, exercisable by notice to Tenant given at any time during the Term, to relocate all or a portion of the parking spaces made available to Tenant hereunder to another location within a 7-minute walk of the Building.

9. Utilities, Services.

(a) Landlord shall provide, subject to the terms of this Section 9, water, electricity, heat, air conditioning, light, power, passenger elevator service, telephone (to the central demarcation room only), sewer, and other utilities (including gas and fire sprinklers to the extent the Project is plumbed for such services), and, for the office portion of the Premises only, refuse and trash collection and janitorial services (collectively, “**Utilities**”). Landlord shall pay, as

Operating Expenses or subject to Tenant's reimbursement obligation, for all Utilities used on the Premises, all maintenance charges for Utilities, and any storm sewer charges or other similar charges for Utilities imposed by any Governmental Authority or Utility provider, and any taxes, penalties, surcharges or similar charges thereon. Electricity serving the Premises will be separately submetered. Landlord may cause, at Landlord's expense, any Utilities to be separately metered or charged directly to Tenant by the provider. Tenant shall pay directly to the Utility provider, prior to delinquency, any separately metered Utilities and services which may be furnished to Tenant or the Premises during the Term. Tenant shall pay, as part of Operating Expenses, its share of all charges for jointly metered Utilities based upon consumption, as reasonably determined by Landlord. No interruption or failure of Utilities, from any cause whatsoever, shall result in eviction or constructive eviction of Tenant, termination of this Lease or the abatement of Rent. Tenant agrees to limit use of water and sewer with respect to Common Areas to normal restroom use.

(b) Tenant shall provide janitorial services and trash collection for the laboratory portion of the Premises, and Landlord shall provide as an Operating Expense a dumpster and/or compactor at the loading dock for use by Tenant in common with others entitled thereto for the disposal of non-hazardous and non-controlled substances and material.

(c) Tenant may use the freight elevator and loading dock in common with others entitled thereto at no additional charge. The regular hours of operation of the freight elevator and loading dock are 24 hours per day, 7 days per week, subject to downtime for maintenance and repairs.

(d) Landlord's sole obligation for providing standby generators or any other standby power equipment, systems, furnishings or personal property, whether or not affixed to the Building (collectively, the "**Equipment**") shall be (i) to provide such Equipment as is determined by Landlord in its sole and absolute discretion, and (ii) to contract with a third party (determined by Landlord to be qualified) to maintain the Equipment that is deemed by Landlord (in its reasonable professional discretion) to need periodic maintenance per the manufacturer's standard maintenance guidelines. Landlord shall have no obligation to provide Tenant with operational Equipment, back-up Equipment or back-up utilities or to supervise, oversee or confirm that the third party maintaining the Equipment is maintaining the Equipment as per the manufacturer's standard guidelines or otherwise. During any period of replacement, repair or maintenance of the Equipment when such Equipment is not operational, including any delays thereto due to the inability to obtain parts or replacements, Landlord shall have no obligation to provide Tenant with alternative or back-up Equipment or alternative sources of utilities. Tenant expressly acknowledges and agrees that Landlord does not guaranty that the Equipment will be operational at all times, will function or perform adequately, or that emergency power will be available to the Premises when needed, and Landlord shall not be liable for any damages resulting from the failure of such Equipment. Tenant hereby releases Landlord from and against any and all claims arising directly or indirectly out of or relating to the Equipment, or the existence, use of failure thereof, unless caused solely by the willful misconduct or gross negligence of Landlord. The terms of this Section 9(d) shall survive the expiration or earlier termination of this Lease.

10. Alterations; Tenant's Property. Any alterations, additions, or improvements made to the Premises by or on behalf of Tenant, including additional locks or bolts of any kind or nature upon any doors or windows in the Premises, but excluding installation, removal or realignment of furniture systems (other than removal of furniture systems owned or paid for by Landlord) not involving any modifications to the structure or connections (other than by ordinary plugs or jacks) to Building Systems (as defined in Section 11(a) below) ("**Alterations**") shall be subject to Landlord's prior written consent, which may be given or withheld in Landlord's sole discretion if any such Alteration affects the structure or Building Systems, but which shall otherwise not be unreasonably withheld or delayed. If Landlord approves any Alterations, Landlord may impose such conditions on Tenant in connection with the commencement, performance and completion of such Alterations as Landlord may deem appropriate in Landlord's reasonable discretion. Tenant agrees to take such steps as may be required, or as otherwise directed by Landlord, with respect to contractors and subcontractors performing any Alterations to ensure that no labor disruption, strikes, pickets, protests or other similar labor actions occur on or about the Premises in connection with the performance of work on any Alterations. Any request for approval of Alterations shall be in writing, delivered not less than 15 business days in advance of any proposed construction, and accompanied by plans, specifications, bid proposals, work contracts and such other information concerning the nature and cost of the Alterations as may be reasonably requested by Landlord, including the identities and mailing addresses of all persons performing work or supplying materials. Landlord's right to review plans and specifications and to monitor construction shall be solely for its own benefit, and Landlord shall have no duty to ensure that such plans and specifications or construction comply with applicable Legal Requirements. Tenant shall cause, at its sole cost and expense, all Alterations to comply with insurance requirements and with Legal Requirements and shall implement at its sole cost and expense any alteration or modification required by Legal Requirements as a result of any Alterations. Tenant shall pay to Landlord, as Additional Rent, within 10 days after demand Landlord's out-of-pocket expenses for plan review, coordination, scheduling and supervision in connection with any Alterations. Before Tenant begins any Alteration, Landlord may post on and about the Premises notices of non-responsibility pursuant to applicable law. Tenant shall reimburse Landlord for, and indemnify and hold Landlord harmless from, any expense incurred by Landlord by reason of faulty work done by Tenant or its contractors, delays caused by such work, or inadequate cleanup.

Tenant shall furnish security or make other arrangements satisfactory to Landlord to assure payment for the completion of all Alterations work free and clear of liens, and shall provide (and cause each contractor or subcontractor to provide) certificates of insurance for workers' compensation and other coverage in amounts and from an insurance company satisfactory to Landlord protecting Landlord against liability for personal injury or property damage during construction. Upon completion of any Alterations, Tenant shall deliver to Landlord: (i) sworn statements setting forth the names of all contractors and subcontractors who did the work and final lien waivers from all such contractors and subcontractors; and (ii) "as built" plans for any such Alteration.

Other than (i) the items, if any, listed on **Exhibit H** attached hereto, (ii) any items agreed by Landlord in writing to be included on **Exhibit H** in the future, and (iii) any trade fixtures,

machinery, equipment and other personal property not installed by Landlord or its contractor as part of the Tenant Improvements (as defined in the Work Letter) which may be removed without material damage to the Premises, which damage shall be repaired (including capping or terminating utility hook-ups behind walls) by Tenant during the Term (collectively, "**Tenant's Property**"), all property of any kind paid installed by Landlord or its contractor as part of the Tenant Improvements, Alterations, real property fixtures, built-in machinery and equipment, built-in casework and cabinets and other similar additions and improvements built into the Premises so as to become an integral part of the Premises, such as fume hoods which penetrate the roof or plenum area, built-in cold rooms, built-in warm rooms, walk-in cold rooms, walk-in warm rooms, deionized water systems, glass washing equipment, autoclaves, chillers, built-in plumbing, electrical and mechanical equipment and systems, and any power generator and transfer switch (collectively, "**Installations**") shall be and shall remain the property of Landlord during the Term and following the expiration or earlier termination of the Term, shall not be removed by Tenant at any time during the Term and shall remain upon and be surrendered with the Premises as a part thereof in accordance with Section 24 following the expiration or earlier termination of this Lease; provided, however, that Landlord shall, at the time its approval of such Installation is requested notify Tenant if it has elected to cause Tenant to remove such Installation upon the expiration or earlier termination of this Lease. If Landlord so elects, Tenant shall remove such Installation upon the expiration or earlier termination of this Lease and restore any damage caused by or occasioned as a result of such removal, including, when removing any of Tenant's Property which was plumbed, wired or otherwise connected to any of the Building's plumbing, electrical or other Building Systems, capping off all such connections behind the walls of the Premises and repairing any holes. During any such restoration period, Tenant shall pay Rent to Landlord as provided herein as if said space were otherwise occupied by Tenant.

11. Repairs.

(a) **Landlord's Repairs.** Landlord, as an Operating Expense, shall maintain all of the structural, exterior, parking and other Common Areas of the Project, including HVAC, plumbing, fire sprinklers, elevators and all other building systems serving the Premises and other portions of the Project ("**Building Systems**"), in good repair, reasonable wear and tear and uninsured losses and damages caused by Tenant, or by any of Tenant's agents, servants, employees, invitees and contractors (individually, a "Tenant Party" and collectively, "**Tenant Parties**") excluded. Landlord shall repair losses and damages caused by Tenant or any Tenant Party at Tenant's sole cost and expense. Such maintenance and repairs by Landlord under this Section shall include Landlord's making such replacements as Landlord may deem necessary in its sole discretion. Landlord reserves the right to stop building system services when necessary. Landlord shall have no responsibility or liability for failure to supply building system services during any such period of interruption; provided, however, that Landlord shall give Tenant 24 hours advance notice of any planned stoppage of building system services for routine maintenance, repairs, alterations or improvements. Landlord shall not be liable for any failure to make any repairs or to perform any maintenance unless such failure shall persist for an unreasonable time after Tenant's written notice of the need for such repairs or maintenance. Tenant waives its rights under any state or local law to terminate this Lease or to make such repairs at Landlord's expense and agrees that the parties' respective rights with respect to such

matters shall be solely as set forth herein. Repairs required as the result of fire, earthquake, flood, vandalism, war, or similar cause of damage or destruction shall be controlled by Section 15.

(b) **Tenant's Repairs.** Subject to Section 11(a) and Section 15 hereof, Tenant, at its expense, shall repair, replace and maintain in good condition, damage covered by Section 15 excepted, all portions of the Premises, including, without limitation, entries, doors, ceilings, interior windows, interior walls, and the interior side of demising walls. Such repair and replacement may include capital expenditures and repairs whose benefit may extend beyond the Term. Should Tenant fail to make any such repair or replacement or fail to maintain the Premises, Landlord shall give Tenant notice of such failure. If Tenant fails to commence cure of such failure within 10 days of Landlord's notice, and thereafter diligently prosecute such cure to completion, Landlord may perform such work and shall be reimbursed by Tenant within 10 days after demand therefor; provided, however, that if such failure by Tenant creates or could create an emergency, Landlord may immediately commence cure of such failure and shall thereafter be entitled to recover the costs of such cure from Tenant. Subject to Section 15, Tenant shall bear the full uninsured cost of any repair or replacement to any part of the Project that results from damage caused by Tenant or any Tenant Party and any repair that benefits only the Premises.

12. Liens. Tenant shall discharge, by bond or otherwise, any liens filed against the Premises or against the Project arising out of work performed or claimed to have been performed, materials furnished or claimed to have been or obligations incurred or claimed to have been incurred by Tenant within 10 days after the filing thereof, at Tenant's sole cost.

13. Indemnification. Tenant hereby indemnifies and agrees to defend, save and hold Landlord harmless from and against any and all claims for injury or death to persons or damage to property (i) occurring within the Premises and arising directly or indirectly out of use or occupancy of the Premises, unless caused solely by the willful misconduct or negligence of Landlord, (ii) occurring outside of the Premises (including without limitation in the Shared Science Facility or Shared Conference Facility) and arising directly or indirectly out of an act or omission of Tenant, or (iii) arising directly or indirectly out of or a breach or default by Tenant in the performance of any of its obligations hereunder or under the License Agreement. Landlord shall not be liable to Tenant for, and Tenant assumes all risk of damage to, personal property (including, without limitation, loss of records kept within the Premises or any part of the Project). Tenant further waives any and all claims for injury to Tenant's business or loss of income relating to any such damage or destruction of personal property (including, without limitation, any loss of records). Landlord shall not be liable for any damages arising from any act, omission or neglect of any tenant in the Project or of any other third party.

14. Insurance. Landlord shall, as an Operating Expense, maintain such insurance covering the Project as Landlord shall reasonably determine. Tenant, at its sole cost and expense, shall maintain during the Term: all risk property insurance with business interruption and extra expense coverage, covering the full replacement cost of all property and improvements installed or placed in the Premises by Tenant at Tenant's expense; workers' compensation insurance with no less than the minimum limits required by law; employer's liability insurance with such limits as required by law; and commercial general liability insurance, with a minimum

limit of not less than \$2,000,000 per occurrence for bodily injury and property damage with respect to the Premises, Shared Science Facility and Shared Conference Facility. The commercial general liability insurance policy shall name Landlord, its officers, directors, employees, managers, members, agents, invitees and contractors (individually, a **"Landlord Party"** and collectively, **"Landlord Parties"**) and Alexandria Real Estate Equities, Inc., as additional insureds; insure on an occurrence and not a claims-made basis; be issued by insurance companies which have a rating of not less than policyholder rating of A and financial category rating of at least Class X in "Best's Insurance Guide"; shall not be cancelable for nonpayment of premium unless 30 days prior written notice shall have been given to Landlord from the insurer; contain a hostile fire endorsement and a contractual liability endorsement; and provide primary coverage to Landlord (any policy issued to Landlord providing duplicate or similar coverage shall be deemed excess over Tenant's policies). Copies of such policies (if requested by Landlord), or certificates of insurance showing the limits of coverage required hereunder and showing Landlord as an additional insured, along with reasonable evidence of the payment of premiums for the applicable period, shall be delivered to Landlord by Tenant upon commencement of the Term and upon each renewal of said insurance. Tenant's policy may be a "blanket policy" with an aggregate per location endorsement which specifically provides that the amount of insurance shall not be prejudiced by other losses covered by the policy. Tenant shall, at least 5 days prior to the expiration of such policies, furnish Landlord with renewal certificates.

In each instance where insurance is to name Landlord as an additional insured, Tenant shall upon written request of Landlord also designate and furnish certificates so evidencing Landlord as additional insured to: (i) any lender of Landlord holding a security interest in the Project or any portion thereof and any servicer in connection therewith, (ii) the landlord under any lease wherein Landlord is tenant of the real property on which the Project is located, if the interest of Landlord is or shall become that of a tenant under a ground or other underlying lease rather than that of a fee owner, and/or (iii) any management company retained by Landlord to manage the Project.

The property insurance obtained by Landlord and Tenant shall include a waiver of subrogation by the insurers and all rights based upon an assignment from its insured, against Landlord or Tenant, and their respective officers, directors, employees, managers, members, agents, invitees and contractors (**"Related Parties"**), in connection with any loss or damage thereby insured against. Neither party nor its respective Related Parties shall be liable to the other for loss or damage caused by any risk insured against under property insurance required to be maintained hereunder, and each party waives any claims against the other party, and its respective Related Parties, for such loss or damage. The failure of a party to insure its property shall not void this waiver. Landlord and its respective Related Parties shall not be liable for, and Tenant hereby waives all claims against such parties for, business interruption and losses occasioned thereby sustained by Tenant or any person claiming through Tenant resulting from any accident or occurrence in or upon the Premises or the Project from any cause whatsoever. If the foregoing waivers shall contravene any law with respect to exculpatory agreements, the liability of Landlord or Tenant shall be deemed not released but shall be secondary to the other's insurer.

15. Condemnation and Casualty. If at any time during the Term the Premises, Common Areas or Project is in whole or in part (i) materially damaged or destroyed by a fire or other casualty, or (ii) taken for any public or quasi-public use under governmental law, ordinance, or regulation, or by right of eminent domain, or by private purchase in lieu thereof (a “**Taking**”), then this Lease shall, at the written election of Landlord delivered to Tenant within sixty (60) days following such casualty or taking, terminate as of the date of such damage, destruction or Taking. If at any time during the Term the Premises or Common Areas are in whole or in part (i) materially damaged or destroyed by a fire or other casualty, or (ii) subject to a Taking, then this Lease shall, at the written election of Tenant delivered to Landlord within sixty (60) days following such casualty or taking, terminate as of the date of such damage, destruction or Taking. Unless either Landlord or Tenant so elects to terminate this Lease, Landlord shall, subject to receipt of sufficient insurance proceeds (with any deductible to be treated as a current Operating Expense), promptly restore the Premises and Common Areas (excluding the improvements installed by Tenant or by Landlord and paid for by Tenant), subject to delays arising from the collection of insurance proceeds, from Force Majeure events or as needed to obtain any license, clearance or other authorization of any kind required to enter into and restore the Premises issued by any Governmental Authority having jurisdiction over the use, storage, handling, treatment, generation, release, disposal, removal or remediation of Hazardous Materials (as defined in Section 26) in, on or about the Premises or Common Areas (collectively referred to herein as “**Hazardous Materials Clearances**”).

If neither Tenant nor Landlord elect to terminate this Lease pursuant to the immediately preceding paragraph, Rent shall be abated from the date all required Hazardous Material Clearances are obtained until the Premises or Common Areas are repaired and restored, in the proportion which the area of the Premises, if any, which is not usable by Tenant bears to the total area of the Premises, unless Landlord provides Tenant with other space during the period of repair that is suitable for the temporary conduct of Tenant’s business. Such abatement shall be the sole remedy of Tenant, and except as provided in this Section 15. Tenant waives any right to terminate the Lease by reason of damage or casualty loss, provided that, if Landlord shall fail to restore the Premises or Common Areas within 12 months after the receipt of any Hazardous Materials Clearances determined by Landlord to be required (or if Landlord determines that no Hazardous Materials Clearances are required, within 12 months of the end of the 60-day period referred to in the first and second sentences of the immediately preceding paragraph), Tenant shall have a further right to terminate this Lease by written notice to Landlord delivered within 60 days after the expiration of such 12-month period, provided further, that if Landlord completes such restoration within 30 days after receipt of Tenant’s termination notice, such termination notice shall be void and this Lease shall continue in full force and effect.

The provisions of this Lease, including this Section 15, constitute an express agreement between Landlord and Tenant with respect to any and all damage to, or destruction of, all or any part of the Premises, or any other portion of the Project, and any statute or regulation which is now or may hereafter be in effect shall have no application to this Lease or any damage or destruction to all or any part of the Premises or any other portion of the Project, the parties hereto expressly agreeing that this Section 15 sets forth their entire understanding and agreement with respect to such matters. Upon any fire or other casualty or Taking, Landlord shall be entitled to

receive the entire proceeds of the insurance maintained by Landlord and the entire price or award from any such Taking without, in either case, any payment to Tenant, and Tenant hereby assigns to Landlord Tenant's interest, if any, in such proceeds or award, except that Tenant shall have the right, to the extent that same shall not diminish Landlord's award, to make a separate claim against the condemning authority (but not Landlord) for such compensation as may be separately awarded or recoverable by Tenant for moving expenses and damage to Tenant's trade fixtures, if a separate award for such items is made to Tenant.

16. Events of Default. Each of the following events shall be a default ("**Default**") by Tenant under this Lease:

(a) **Payment Defaults.** Tenant shall fail to pay any installment of Rent or any other payment hereunder when due; provided, however, that Landlord will give Tenant notice and an opportunity to cure any failure to pay Rent within 3 business days of any such notice not more than once in any 12 month period and Tenant agrees that such notice shall be in lieu of and not in addition to, or shall be deemed to be, any notice required by law; provided, further, however, that no such notice or opportunity to cure shall be required for any failure by Tenant to pay the first month's Base Rent and deliver the Security Deposit to Landlord at such time as required pursuant to Section 3(a) above.

(b) **Insurance.** Any insurance required to be maintained by Tenant pursuant to this Lease shall be canceled or terminated or shall expire or shall be reduced or materially changed, or Landlord shall receive a notice of nonrenewal of any such insurance and Tenant shall fail to obtain replacement insurance at least 20 days before the expiration of the current coverage.

(c) **Improper Transfer.** Tenant shall assign, sublease or otherwise transfer or attempt to transfer all or any portion of Tenant's interest in this Lease or the Premises except as may be expressly permitted herein, or Tenant's interest in this Lease shall be attached, executed upon, or otherwise judicially seized and such action is not released within 90 days of the action.

(d) **Liens.** Tenant shall fail to discharge or otherwise obtain the release of any lien upon the Premises in violation of this Lease within 10 days after any such lien is filed against the Premises.

(e) **Insolvency Events.** Tenant or any guarantor or surety of Tenant's obligations hereunder shall: (A) make a general assignment for the benefit of creditors; (B) commence any case, proceeding or other action seeking to have an order for relief entered on its behalf as a debtor or to adjudicate it a bankrupt or insolvent, or seeking reorganization, arrangement, adjustment, liquidation, dissolution or composition of it or its debts or seeking appointment of a receiver, trustee, custodian or other similar official for it or for all or of any substantial part of its property (collectively a "**Proceeding for Relief**"); (C) become the subject of any Proceeding for Relief which is not dismissed within 90 days of its filing or entry; or (D) die or suffer a legal disability (if Tenant, guarantor, or surety is an individual) or be dissolved or otherwise fail to maintain its legal existence (if Tenant, guarantor or surety is a corporation, partnership or other entity).

(f) **Estoppel Certificate or Subordination Agreement.** Tenant fails to execute any document required from Tenant under Sections 19 or 23 within 5 days after a second notice requesting such document.

(g) **Default under License.** Tenant shall be in default or breach of any of its obligations under the License beyond any cure period as may be expressly set forth in the License.

(h) **Other Defaults.** Tenant shall fail to comply with any provision of this Lease other than those specifically referred to in this Section 16, and, except as otherwise expressly provided herein, such failure shall continue for a period of 30 days after written notice thereof from Landlord to Tenant, provided that if the nature of such default is such that it cannot be cured by the payment of money and reasonably requires more than 30 days to cure, then Tenant shall not be deemed to be in Default if Tenant commences such cure within 30 days of the aforesaid notice from Landlord and thereafter diligently prosecutes such cure to completion within 90 days of the aforesaid notice from Landlord. Any notice given under this Section 16(h) shall: (i) specify the alleged default, (ii) demand that Tenant cure such default, (iii) be in lieu of, and not in addition to, or shall be deemed to be, any notice required under any provision of applicable law, and (iv) not be deemed a forfeiture or a termination of this Lease unless Landlord elects otherwise in such notice.

17. Landlord's Remedies.

(a) **Payment By Landlord; Interest.** Upon a Default by Tenant hereunder, Landlord may, without waiving or releasing any obligation of Tenant hereunder, make such payment or perform such act that is the subject of the Default. All sums so paid or incurred by Landlord, together with interest thereon, from the date such sums were paid or incurred, at the annual rate equal to 12% per annum or the highest rate permitted by law (the "**Default Rate**"), whichever is less, shall be payable to Landlord on demand as Additional Rent. Nothing herein shall be construed to create or impose a duty on Landlord to mitigate any damages resulting from Tenant's Default hereunder.

(b) **Late Payment Rent.** Late payment by Tenant to Landlord of Rent and other sums due will cause Landlord to incur costs not contemplated by this Lease, the exact amount of which will be extremely difficult and impracticable to ascertain. Such costs include, but are not limited to, processing and accounting charges and late charges which may be imposed on Landlord under any Mortgage covering the Premises. Therefore, if any installment of Rent due from Tenant is not received by Landlord within 5 days after the date such payment is due, Tenant shall pay to Landlord an additional sum equal to 6% of the overdue Rent as a late charge. The parties agree that this late charge represents a fair and reasonable estimate of the costs Landlord will incur by reason of late payment by Tenant. In addition to the late charge, Rent not paid when due shall bear interest at the Default Rate from the 5th day after the date due until paid.

(c) **Other Remedies.** Upon and during the continuance of a Default, Landlord, at its option, without further notice or demand to Tenant, shall have in addition to all other rights and remedies provided in this Lease, at law or in equity, the option to pursue any one or more of the

following remedies, each and all of which shall be cumulative and nonexclusive, without any notice or demand whatsoever. No cure in whole or in part of such Default by Tenant after Landlord has taken any action beyond giving Tenant notice of such Default to pursue any remedy provided for herein (including retaining counsel to file an action or otherwise pursue any remedies) shall in any way affect Landlord's right to pursue such remedy or any other remedy provided Landlord herein or under law or in equity, unless Landlord, in its sole discretion, elects to waive such Default.

(i) This Lease and the Term and estate hereby granted are subject to the limitation that whenever a Default shall have happened and be continuing, Landlord shall have the right, at its election, then or thereafter while any such Default shall continue and notwithstanding the fact that Landlord may have some other remedy hereunder or at law or in equity, to give Tenant written notice of Landlord's intention to terminate this Lease on a date specified in such notice, which date shall be not less than 5 days after the giving of such notice, and upon the date so specified, this Lease and the estate hereby granted shall expire and terminate with the same force and effect as if the date specified in such notice were the date hereinbefore fixed for the expiration of this Lease, and all rights of Tenant hereunder shall expire and terminate, and Tenant shall be liable as hereinafter in this Section 17(c) provided. If any such notice is given, Landlord shall have, on such date so specified, the right of re-entry and possession of the Premises and the right to remove all persons and property therefrom and to store such property in a warehouse or elsewhere at the risk and expense, and for the account, of Tenant. Should Landlord elect to re-enter as herein provided or should Landlord take possession pursuant to legal proceedings or pursuant to any notice provided for by law, Landlord may from time to time re-let the Premises or any part thereof for such term or terms and at such rental or rentals and upon such terms and conditions as Landlord may deem advisable, with the right to make commercially reasonable alterations in and repairs to the Premises.

(ii) In the event of any termination of this Lease as in this Section 17 provided or as required or permitted by law or in equity, Tenant shall forthwith quit and surrender the Premises to Landlord, and Landlord may, without further notice, enter upon, re-enter, possess and repossess the same by summary proceedings, ejection or otherwise, and again have, repossess and enjoy the same as if this Lease had not been made, and in any such event Tenant and no person claiming through or under Tenant by virtue of any law or an order of any court shall be entitled to possession or to remain in possession of the Premises. Landlord, at its option, notwithstanding any other provision of this Lease, shall be entitled to recover from Tenant, as and for liquidated damages, the sum of;

(A) all Base Rent, Additional Rent and other amounts payable by Tenant hereunder then due or accrued and unpaid; and

(B) the amount equal to the aggregate of all unpaid Base Rent and Additional Rent which would have been payable if this Lease had not

been terminated prior to the end of the Term then in effect, discounted to its then present value in accordance with accepted financial practice using a rate of 5% per annum, for loss of the bargain; and

(C) all other damages and expenses (including attorneys' fees and expenses), if any, which Landlord shall have sustained by reason of the breach of any provision of this Lease; less

(D) the net proceeds of any re-letting actually received by Landlord and (ii) the amount of damages which Tenant proves could have been avoided had Landlord taken reasonable steps to mitigate its damages.

(iii) Nothing herein contained shall limit or prejudice the right of Landlord, in any bankruptcy or insolvency proceeding, to prove for and obtain as liquidated damages by reason of such termination an amount equal to the maximum allowed by any bankruptcy or insolvency proceedings, or to prove for and obtain as liquidated damages by reason of such termination, an amount equal to the maximum allowed by any statute or rule of law whether such amount shall be greater or less than the excess referred to above.

(iv) Nothing in this Section 17 shall be deemed to affect the right of either party to indemnifications pursuant to this Lease.

(v) If Landlord terminates this Lease upon the occurrence of a Default, Tenant will quit and surrender the Premises to Landlord or its agents, and Landlord may, without further notice, enter upon, re-enter and repossess the Premises by summary proceedings, ejectment or otherwise. The words "enter", "re-enter", and "re-entry" are not restricted to their technical legal meanings.

(vi) If either party shall be in default in the observance or performance of any provision of this Lease, and an action shall be brought for the enforcement thereof in which it shall be determined that such party was in default, the party in default shall pay to the other all fees, costs and other expenses which may become payable as a result thereof or in connection therewith, including attorneys' fees and expenses.

(vii) (vii) If Tenant shall default in the keeping, observance or performance of any covenant, agreement, term, provision or condition herein contained, Landlord, without thereby waiving such default, may perform the same for the account and at the expense of Tenant (a) immediately or at any time thereafter and without notice in the case of emergency or in case such default will result in a violation of any legal or insurance requirements, or in the imposition of any lien against all or any portion of the Premises, and (b) in any other case if such default continues after any applicable cure period provided in Section 16. All reasonable costs and expenses incurred by Landlord in connection with any such performance by it for the account of Tenant and also all reasonable costs and

expenses, including attorneys' fees and disbursements incurred by Landlord in any action or proceeding (including any summary dispossess proceeding) brought by Landlord to enforce any obligation of Tenant under this Lease and/or right of Landlord in or to the Premises, shall be paid by Tenant to Landlord within 10 days after demand.

(viii) Independent of the exercise of any other remedy of Landlord hereunder or under applicable law, Landlord may conduct an environmental test of the Premises as generally described in Section 26(c), at Tenant's expense.

(ix) In the event that Tenant is in breach or Default under this Lease, whether or not Landlord exercises its right to terminate or any other remedy, Tenant shall reimburse Landlord upon demand for any costs and expenses that Landlord may incur in connection with any such breach or Default, as provided in this Section 17(c). Such costs shall include legal fees and costs incurred for the negotiation of a settlement, enforcement of rights or otherwise. Tenant shall also indemnify Landlord against and hold Landlord harmless from all costs, expenses, demands and liability, including without limitation, legal fees and costs Landlord shall incur if Landlord shall become or be made a party to any claim or action instituted by Tenant against any third party, or by or against any person holding any interest under or using the Premises by license of or agreement with Tenant.

(d) Except as otherwise provided in this Section 17, no right or remedy herein conferred upon or reserved to Landlord is intended to be exclusive of any other right or remedy, and every right and remedy shall be cumulative and in addition to any other legal or equitable right or remedy given hereunder, or now or hereafter existing. No waiver of any provision of this Lease shall be deemed to have been made unless expressly so made in writing. Landlord shall be entitled, to the extent permitted by law, to seek injunctive relief in case of the violation, or attempted or threatened violation, of any provision of this Lease, or to seek a decree compelling observance or performance of any provision of this Lease, or to seek any other legal or equitable remedy.

18. Assignment and Subletting.

(a) **General Prohibition.** Without Landlord's prior written consent subject to and on the conditions described in this Section 18, Tenant shall not, directly or indirectly, voluntarily or by operation of law, assign this Lease or sublease the Premises or any part thereof or mortgage, pledge, or hypothecate its leasehold interest or grant any concession or license within the Premises, and any attempt to do any of the foregoing shall be void and of no effect. If Tenant is a corporation, partnership or limited liability company, the shares or other ownership interests thereof which are not actively traded upon a stock exchange or in the over-the-counter market, a transfer or series of transfers whereby 25% or more of the issued and outstanding shares or other ownership interests of such corporation are, or voting control is, transferred (but excepting transfers upon deaths of individual owners) from a person or persons or entity or entities which were owners thereof at time of execution of this Lease to persons or entities who were not owners of shares or other ownership interests of the corporation, partnership or limited liability

company at time of execution of this Lease, shall be deemed an assignment of this Lease requiring the consent of Landlord as provided in this [Section 18](#). Notwithstanding the foregoing, any public offering of shares or other ownership interest in Tenant or any private equity financing by one or more investors who regularly invest in private biotechnology companies, for which Tenant has given Landlord prior written notice, shall not be deemed an assignment. Such prior written notice shall be treated by Landlord as confidential information subject to [Section 37\(i\)](#) below.

(b) **Permitted Transfers.** If Tenant desires to assign, sublease (in whole or in part), hypothecate or otherwise transfer this Lease or sublet the Premises, other than pursuant to a Permitted Assignment (as defined below), then at least 15 business days, but not more than 45 business days, before the date Tenant desires the assignment or sublease to be effective (the “**Assignment Date**”), Tenant shall give Landlord a notice (the “**Assignment Notice**”) containing such information about the proposed assignee or sublessee, including the proposed use of the Premises and any Hazardous Materials proposed to be used, stored handled, treated, generated in or released or disposed of from the Premises, the Assignment Date, any relationship between Tenant and the proposed assignee or sublessee, and all material terms and conditions of the proposed assignment or sublease, including a copy of any proposed assignment or sublease in its final form, and such other information as Landlord may deem reasonably necessary or appropriate to its consideration whether to grant its consent. Landlord may, by giving written notice to Tenant within 15 business days after receipt of the Assignment Notice: (i) grant such consent, (ii) refuse such consent, in its sole and absolute discretion, to any proposed assignment, hypothecation or other transfer other than a subletting, (iii) refuse such consent, in its reasonable discretion, to a proposed subletting (provided that Landlord shall further have the right to review and approve or disapprove the proposed form of sublease prior to the effective date of any such subletting), or (iv) with respect to any proposed assignment, hypothecation or transfer, or with respect to any proposed subletting for the remainder of the Term of more than 50% of the Premises (taken together with any prior sublettings), terminate this Lease with respect to the space described in the Assignment Notice as of the Assignment Date (an “**Assignment Termination**”). If Landlord delivers notice of its election to exercise an Assignment Termination, Tenant shall have the right to withdraw such Assignment Notice by written notice to Landlord of such election within 5 business days after Landlord’s notice electing to exercise the Assignment Termination. If Tenant withdraws such Assignment Notice, this Lease shall continue in full force and effect. If Tenant does not withdraw such Assignment Notice, this Lease, and the term and estate herein granted, shall terminate as of the Assignment Date with respect to the space described in such Assignment Notice. No failure of Landlord to exercise any such option to terminate this Lease, or to deliver a timely notice in response to the Assignment Notice, shall be deemed to be Landlord’s consent to the proposed assignment, sublease or other transfer. Tenant shall pay to Landlord a fee equal to One Thousand Five Hundred Dollars (\$1,500) in connection with its consideration of any Assignment Notice and/or its preparation or review of any consent documents.

In considering whether or not to consent to any proposed sublease under clause (iii) of [Section 18\(b\)](#) above, Landlord shall be deemed to have acted reasonably if consent is refused for any of the following reasons: (A) the business or financial reputation of the proposed sublessee,

or the business or financial reputation of any of the respective principals or officers thereof, is objectionable in Landlord's judgment, (B) the proposed sublessee is engaged in areas of scientific research or other business concerns that are reasonably likely in Landlord's judgment to attract negative publicity about, or protest at, the Building, or its proposed use of the Premises will violate any applicable Legal Requirement, (C) the proposed sublessee is at that time an occupant of the Project (and Landlord has comparable available space in the Project) or negotiating with Landlord or an affiliate thereof for the lease of other space in the Project, (D) the proposed sublessee does not have a creditworthiness, as of the date of transfer, sufficient to support the financial obligations it would incur under the proposed sublease in Landlord's judgment, (E) the proposed sublessee is a governmental agency, (F) in Landlord's judgment the use of the Premises by the proposed sublessee would entail any alterations that would lessen the value of the leasehold improvements in the Premises, or would require increased services by Landlord, (G) Landlord has received from any other landlord to the proposed sublessee a negative report concerning such other landlord's experience with the proposed sublessee, (H) Landlord has experienced previous defaults by or is in litigation with the proposed sublessee, (I) the proposed sublease will create a vacancy elsewhere in the Project or at any other property owned in whole or in part by Landlord or any of its affiliates and located in Massachusetts, or (J) the sublease is prohibited by Landlord's lender, if any.

Notwithstanding the foregoing, (i) Landlord's consent to an assignment of this Lease or a subletting of any portion of the Premises to any entity controlling, controlled by or under common control with Tenant shall not be required, provided that Landlord shall have the right to reasonably approve the form of any such sublease or assignment; and (ii) Tenant shall have the right to assign this Lease, upon 10 days prior written notice to Landlord but without obtaining Landlord's prior written consent, to a corporation or other entity which is a successor-in-interest to Tenant, by way of merger, consolidation or corporate reorganization, or by the purchase of all or substantially all of the assets or the ownership interests of Tenant provided that (i) such merger or consolidation, or such acquisition or assumption, as the case may be, is for a good business purpose and not principally for the purpose of transferring the Lease, and (ii) the net worth (as determined in accordance with generally accepted accounting principles ("GAAP")) of the assignee is not less than the net worth (as determined in accordance with GAAP) of Tenant as of the date of Tenant's most current quarterly or annual financial statements, and (iii) such assignee shall agree in writing to assume all of the terms, covenants and conditions of this Lease arising after the effective date of the assignment. The subletting and assignment described in clauses (i) and (ii) of this paragraph are referred to as a "**Permitted Assignment.**"

(c) **Additional Conditions.** As a condition to any such assignment or subletting, whether or not Landlord's consent is required, Landlord may require:

(i) that any assignee or subtenant agree, in writing at the time of such assignment or subletting, that if Landlord gives such party notice that Tenant is in default under this Lease, such party shall thereafter make all payments otherwise due Tenant directly to Landlord, which payments will be received by Landlord without any liability except to credit such payment against those due under the Lease, and any such third party shall agree to attorn to Landlord or its successors and assigns should this Lease be terminated for any reason; provided, however, in no event shall Landlord or its successors or assigns be obligated to accept such attornment; and

(ii) a list of Hazardous Materials, certified by the proposed assignee or sublessee to be true and correct, which the proposed assignee or sublessee intends to use, store, handle, treat, generate in or release or dispose of from the Premises, together with copies of all documents relating to such use, storage, handling, treatment, generation, release or disposal of Hazardous Materials by the proposed assignee or subtenant in the Premises or on the Project, prior to the proposed assignment or subletting, including, without limitation: permits; approvals; reports and correspondence; storage and management plans; plans relating to the installation of any storage tanks to be installed in or under the Project (provided, said installation of tanks shall only be permitted after Landlord has given its written consent to do so, which consent may be withheld in Landlord's sole and absolute discretion); and all closure plans or any other documents required by any and all federal, state and local Governmental Authorities for any storage tanks installed in, on or under the Project for the closure of any such tanks. Neither Tenant nor any such proposed assignee or subtenant is required, however, to provide Landlord with any portion(s) of the such documents containing information of a proprietary nature which, in and of themselves, do not contain a reference to any Hazardous Materials or hazardous activities.

(d) **No Release of Tenant, Sharing of Excess Rents.** Notwithstanding any assignment or subletting, Tenant and any guarantor or surety of Tenant's obligations under this Lease shall at all times remain fully and primarily responsible and liable for the payment of Rent and for compliance with all of Tenant's other obligations under this Lease. If the Rent due and payable by a sublessee or assignee (or a combination of the rental payable under such sublease or assignment plus any bonus or other consideration therefor or incident thereto in any form) exceeds the sum of the rental payable under this Lease, which shall be prorated for a sublease of less than all of the Premises (excluding however, any Rent payable under this Section) and actual and reasonable brokerage fees, free rent included as an inducement, legal costs and any design or construction fees directly related to and required pursuant to the terms of any such sublease or any reasonable services fees payable by subtenant to Tenant for the costs to Tenant to provide typical office services such as coffee machines, telephones and fax machines) ("**Excess Rent**"), then Tenant shall be bound and obligated to pay Landlord as Additional Rent hereunder 50% of such Excess Rent within 10 days following receipt thereof by Tenant. If Tenant shall sublet the Premises or any part 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 Landlord as assignee and as attorney-in-fact for Tenant, or a receiver for Tenant appointed on Landlord's application, may collect such rent and apply it toward Tenant's obligations under this Lease; except that, until the occurrence of a Default, Tenant shall have the right to collect such rent.

(e) **No Waiver.** The consent by Landlord to an assignment or subletting shall not relieve Tenant or any assignees of this Lease or any sublessees of the Premises from obtaining the consent of Landlord to any further assignment or subletting nor shall it release Tenant or any

assignee or sublessee of Tenant from full and primary liability under the Lease. The acceptance of Rent hereunder, or the acceptance of performance of any other term, covenant, or condition thereof, from any other person or entity shall not be deemed to be a waiver of any of the provisions of this Lease or a consent to any subletting, assignment or other transfer of the Premises.

(f) **Prior Conduct of Proposed Transferee.** Notwithstanding any other provision of this Section 18, if (i) the proposed assignee or sublessee of Tenant has been required by any prior landlord, lender or Governmental Authority to take remedial action in connection with Hazardous Materials contaminating a property, where the contamination resulted from such party's action or use of the property in question, (ii) the proposed assignee or sublessee is subject to an enforcement order issued by any Governmental Authority in connection with the use, storage, handling, treatment, generation, release or disposal of Hazardous Materials (including, without limitation, any order related to the failure to make a required reporting to any Governmental Authority), or (iii) because of the existence of a pre-existing environmental condition in the vicinity of or underlying the Project, the risk that Landlord would be targeted as a responsible party in connection with the remediation of such pre-existing environmental condition would be materially increased or exacerbated by the proposed use of Hazardous Materials by such proposed assignee or sublessee, Landlord shall have the absolute right to refuse to consent to any assignment or subletting to any such party.

19. Estoppel Certificate. Tenant shall, within 10 business days of written notice from Landlord, execute, acknowledge and deliver an estoppel certificate on any form reasonably requested by a proposed lender or purchaser.

20. Quiet Enjoyment. So long as Tenant shall perform all of the covenants and agreements herein required to be performed by Tenant, Tenant shall, subject to the terms of this Lease, at all times during the Term, have peaceful and quiet enjoyment of the Premises against any person claiming by, through or under Landlord.

21. Prorations. All prorations required or permitted to be made hereunder shall be made on the basis of a 360-day year and 30-day months.

22. Rules and Regulations. Tenant shall, at all times during the Term and any extension thereof, comply with all reasonable rules and regulations at any time or from time to time established by Landlord covering use of the Premises and the Project. The current rules and regulations are attached hereto as **Exhibit I**. If there is any conflict between said rules and regulations and other provisions of this Lease, the terms and provisions of this Lease shall control. Landlord shall not have any liability or obligation for the breach of any rules or regulations by other tenants in the Project and shall not enforce such rules and regulations in a discriminatory manner.

23. Subordination. This Lease and Tenant's interest and rights hereunder are and shall be subject and subordinate at all times to the lien of any Mortgage now existing or hereafter created on or against the Project or the Premises, and all amendments, restatements, renewals, modifications, consolidations, refinancing, assignments and extensions thereof, without the

necessity of any further instrument or act on the part of Tenant. Tenant agrees, at the election of the Holder of any such Mortgage, to attorn to any such Holder. Tenant agrees within 10 business days after demand to execute, acknowledge and deliver such instruments confirming such subordination and/or attornment as shall be requested by any such Holder. Upon request of Tenant, Landlord shall use commercially reasonable efforts to obtain from any future Holder of a Mortgage on the Project, if any, an agreement of non-disturbance, which agreement may also contain provisions for subordination, attornment and other terms and conditions of Holder. The term "**Mortgage**" whenever used in this Lease shall be deemed to include deeds of trust, security assignments, ground leases or other superior leases and any other encumbrances, and any reference to the "Holder" of a Mortgage shall be deemed to include the beneficiary under a deed of trust. Landlord represents that the Project is currently not encumbered by a Mortgage as of the date of this Lease.

24. Surrender. Upon the expiration of the Term or earlier termination of Tenant's right of possession, Tenant shall surrender the Premises to Landlord in the same condition as received, subject to any Alterations or Installations permitted by Landlord or required to remain in the Premises in accordance with Section 10, free of Hazardous Materials brought upon, kept, used, stored, handled, treated, generated in, or released or disposed of from, the Premises by any person other than Landlord or any Landlord Party (collectively, "**Tenant HazMat Operations**") and released of all Hazardous Materials Clearances, broom clean, ordinary wear and tear and casualty loss and condemnation covered by Section 15 excepted. At least 2 months prior to the surrender of the Premises, Tenant shall deliver to Landlord a narrative description of the actions proposed (or required by any Governmental Authority) to be taken by Tenant in order to surrender the Premises at the expiration or earlier termination of the Term, free from any residual impact from the Tenant HazMat Operations and otherwise released for unrestricted use and occupancy (the "**Surrender Plan**"). Such Surrender Plan shall be accompanied by a listing of (i) all Hazardous Materials licenses and permits held by or on behalf of any Tenant Party with respect to the Premises, and (ii) all Hazardous Materials used, stored, handled, treated, generated, released or disposed of from the Premises, and shall be subject to the review and approval of Landlord's environmental consultant. In connection with the review and approval of the Surrender Plan, upon the request of Landlord, Tenant shall deliver to Landlord or its consultant such additional non-proprietary information concerning Tenant HazMat Operations as Landlord shall request. On or before such surrender, Tenant shall deliver to Landlord evidence that the approved Surrender Plan shall have been satisfactorily completed and Landlord shall have the right, subject to reimbursement at Tenant's expense as set forth below, to cause Landlord's environmental consultant to inspect the Premises and perform such additional procedures as may be deemed reasonably necessary to confirm that the Premises are, as of the effective date of such surrender or early termination of the Lease, free from any residual impact from Tenant HazMat Operations. Tenant shall reimburse Landlord, as Additional Rent, for the actual out-of-pocket expense incurred by Landlord for Landlord's environmental consultant to review and approve the Surrender Plan and to visit the Premises and verify satisfactory completion of the same, which cost shall not exceed \$1,500. Landlord shall have the unrestricted right to deliver such Surrender Plan and any report by Landlord's environmental consultant with respect to the surrender of the Premises to third parties.

If Tenant shall fail to prepare or submit a Surrender Plan approved by Landlord, or if Tenant shall fail to complete the approved Surrender Plan, or if such Surrender Plan, whether or not approved by Landlord, shall fail to adequately address any residual effect of Tenant HazMat Operations in, on or about the Premises, Landlord shall have the right to take such actions as Landlord may deem reasonable or appropriate to assure that the Premises and the Project are surrendered free from any residual impact from Tenant HazMat Operations, the cost of which actions shall be reimbursed by Tenant as Additional Rent, without regard to the limitation set forth in the first paragraph of this Section 24.

Tenant shall immediately return to Landlord all keys and/or access cards to parking, the Project, restrooms or all or any portion of the Premises furnished to or otherwise procured by Tenant. If any such access card or key is lost, Tenant shall pay to Landlord, at Landlord's election, either the cost of replacing such lost access card or key or the cost of reprogramming the access security system in which such access card was used or changing the lock or locks opened by such lost key. Any Tenant's Property, Alterations and property not so removed by Tenant as permitted or required herein shall be deemed abandoned and may be stored, removed, and disposed of by Landlord at Tenant's expense, and Tenant waives all claims against Landlord for any damages resulting from Landlord's retention and/or disposition of such property. All obligations of Tenant hereunder not fully performed as of the termination of the Term, including the obligations of Tenant under Section 26 hereof, shall survive the expiration or earlier termination of the Term, including, without limitation, indemnity obligations, payment obligations with respect to Rent and obligations concerning the condition and repair of the Premises.

25. Waiver of Jury Trial. TENANT AND LANDLORD WAIVE ANY RIGHT TO TRIAL BY JURY OR TO HAVE A JURY PARTICIPATE IN RESOLVING ANY DISPUTE, WHETHER SOUNDING IN CONTRACT, TORT, OR OTHERWISE, BETWEEN LANDLORD AND TENANT ARISING OUT OF THIS LEASE OR ANY OTHER INSTRUMENT, DOCUMENT, OR AGREEMENT EXECUTED OR DELIVERED IN CONNECTION HERewith OR THE TRANSACTIONS RELATED HERETO.

26. Environmental Requirements.

(a) **Prohibition/Compliance/Indemnity.** Tenant shall not cause or permit any Hazardous Materials (as hereinafter defined) to be brought upon, kept, used, stored, handled, treated, generated in or about, or released or disposed of from, the Premises, Shared Science Facility or any other part of the Project in violation of applicable Environmental Requirements (as hereinafter defined) by Tenant or any Tenant Party. If Tenant breaches the obligation stated in the preceding sentence, or if the presence of Hazardous Materials in the Premises during the Term or any holding over results in contamination of the Premises, the Project or any adjacent property or if contamination of the Premises, the Project or any adjacent property by Hazardous Materials brought into, kept, used, stored, handled, treated, generated in or about, or released or disposed of from, the Premises or Shared Science Facility by anyone other than Landlord or any Landlord Party otherwise occurs during the Term or any holding over, Tenant hereby indemnifies and shall defend and hold Landlord and each of the Landlord Parties harmless from any and all actions (including, without limitation, remedial or enforcement actions of any kind,

administrative or judicial proceedings, and orders or judgments arising out of or resulting therefrom), costs, claims, damages (including, without limitation, punitive damages and damages based upon diminution in value of the Premises or the Project, or the loss of, or restriction on, use of the Premises or any portion of the Project), expenses (including, without limitation, attorneys' fees, consultants' and experts' fees, court costs and amounts paid in settlement of any claims or actions), fines, forfeitures or other civil, administrative or criminal penalties, injunctive or other relief (whether or not based upon personal injury, property damage, or contamination of, or adverse effects upon, the environment, water tables or natural resources), liabilities or losses (collectively, "**Environmental Claims**") which arise during or after the Term as a result of such breach by Tenant of its obligations stated in the preceding sentence or as a result of such contamination. This indemnification of Landlord by Tenant includes, without limitation, costs incurred in connection with any investigation of site conditions or any cleanup, treatment, remedial, removal, or restoration work required by any federal, state or local Governmental Authority because of Hazardous Materials present in the air, soil or ground water above, on, or under the Premises. Without limiting the foregoing, if the presence of any Hazardous Materials on the Premises, the Shared Science Facility, the Project or any adjacent property caused or permitted by Tenant or any Tenant Party results in any contamination of the Premises, the Shared Science Facility, the Project or any adjacent property, Tenant shall promptly take all actions at its sole expense and in accordance with applicable Environmental Requirements as are necessary to return the Premises, the Shared Science Facility, the Project or any adjacent property to the condition existing prior to the time of such contamination, provided that Landlord's approval of such action shall first be obtained, which approval shall not unreasonably be withheld so long as such actions would not potentially have any material adverse long-term or short-term effect on the Premises, the Shared Science Facility or the Project. Notwithstanding anything to the contrary contained in this Section 26(a), Tenant shall not be responsible for the clean up or remediation of, and the indemnification and hold harmless obligation set forth in this paragraph shall not apply to contamination on the Project or in the Premises that Tenant can demonstrate to Landlord's reasonable satisfaction was present on the Project or in the Premises prior to the date of this Lease or in the case of contamination in the Shared Science Facility or Shared Conference Facility was not caused by an act or omission of Tenant, except in any case to the extent Tenant and/or any of the Tenant Parties have exacerbated or contributed to such contamination, and provided that it is understood that Tenant shall have the burden of proof with respect to whether such contamination was present on the Project or in the Premises prior to the date of this Lease or whether such contamination in the Shared Science Facility or Shared Conference Facility was not caused by an act or omission of Tenant.

(b) **Business.** As a material inducement to Landlord to allow Tenant to use Hazardous Materials in connection with its business, Tenant agrees to deliver to Landlord prior to the Commencement Date a list identifying each type of Hazardous Materials to be brought upon, kept, used, stored, handled, treated, generated on, or released or disposed of from, the Premises and setting forth any and all governmental approvals or permits required in connection with the presence, use, storage, handling, treatment, generation, release or disposal of such Hazardous Materials on or from the Premises ("**Hazardous Materials List**"). Tenant shall deliver to Landlord true and correct copies of the following documents (the "**Haz Mat Documents**") relating to the use, storage, handling, treatment, generation, release or disposal of

Hazardous Materials prior to the Commencement Date (or if unavailable at that time, concurrent with the receipt from or submission to a Governmental Authority): permits; approvals; reports and correspondence; storage and management plans; and notices of violations of any Legal Requirements. Tenant hereby represents and warrants to Landlord that (i) Tenant has not been required by any prior landlord or governmental authority to take remedial action in connection with Hazardous Materials contaminating a property, where the contamination resulted from such party's action or use of the property in question; and (ii) Tenant is not subject to an enforcement order issued by any governmental authority in connection with the use, storage, handling, treatment, generation, release or disposal of Hazardous Materials. If Landlord determines that this representation and warranty was not true as of the date of this lease, Landlord shall have the right to terminate this Lease in Landlord's sole and absolute discretion. Tenant shall be permitted, however, to redact any portions(s) of the Haz Mat Documents containing information of a proprietary nature which, in and of themselves, do not contain a reference to any Hazardous Materials or hazardous activities.

(c) **Landlord's Tests.** Landlord shall have access to, and a right to perform inspections and tests of, the Premises and the Shared Science Facility to determine Tenant's compliance with Environmental Requirements, its obligations under this Section 26, or the environmental condition of the Premises, the Shared Science Facility or the Project. In connection with such testing, upon the request of Landlord, Tenant shall deliver to Landlord or its consultant such non-proprietary information concerning the use of Hazardous Materials in or about the Premises and Shared Science Facility by Tenant or any Tenant Party. Access to the Premises shall be granted to Landlord upon Landlord's prior notice to Tenant and at such times so as to minimize, so far as may be reasonable under the circumstances, any disturbance to Tenant's operations. Such inspections and tests shall be conducted at Landlord's expense, unless such inspections or tests reveal that Tenant has not complied with any Environmental Requirement, in which case Tenant shall reimburse Landlord for the reasonable cost of such inspection and tests. Tenant shall, at its sole cost and expense, promptly and satisfactorily remediate any environmental conditions for which Tenant is responsible pursuant to this Section 26 and that are identified by such testing in accordance with all Environmental Requirements. Landlord's receipt of or satisfaction with any environmental assessment in no way waives any rights that Landlord may have against Tenant.

(d) **Tenant's Obligations.** Tenant's obligations under this Section 26 shall survive the expiration or earlier termination of the Lease. During any period of time after the expiration or earlier termination of this Lease required by Tenant or Landlord to complete the removal from the Premises of any Hazardous Materials for which Tenant is responsible under this Lease (including, without limitation, the release and termination of any licenses or permits restricting the use of the Premises and the completion of the approved Surrender Plan), Tenant shall continue to pay the full Rent in accordance with this Lease for any portion of the Premises not relet by Landlord in Landlord's sole discretion, which Rent shall be prorated daily.

(e) **Definitions.** As used herein, the term "**Environmental Requirements**" means all applicable present and future statutes, regulations, ordinances, rules, codes, judgments, orders or other similar enactments of any Governmental Authority regulating or relating to health, safety, or environmental conditions on, under, or about the Premises or the Project, or the

environment, including without limitation, the following: the Comprehensive Environmental Response, Compensation and Liability Act; the Resource Conservation and Recovery Act; and all state and local counterparts thereto, and any regulations or policies promulgated or issued thereunder. As used herein, the term “**Hazardous Materials**” means and includes any substance, material, waste, pollutant, or contaminant listed or defined as hazardous or toxic, or regulated by reason of its impact or potential impact on humans, animals and/or the environment under any Environmental Requirements, asbestos and petroleum, including crude oil or any fraction thereof, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas). As defined in Environmental Requirements, Tenant is and shall be deemed to be the “**operator**” of Tenant’s “**facility**” and the “**owner**” of all Hazardous Materials brought on the Premises by Tenant or any Tenant Party, and the wastes, by-products, or residues generated, resulting, or produced therefrom.

(f) **Asbestos.**

(i) **Notification of Asbestos.** Landlord hereby notifies Tenant of the presence of asbestos-containing materials (“**ACMs**”) and/or presumed asbestos-containing materials (“**PACMs**”) within or about the Premises in the locations identified in **Exhibit J** attached hereto.

(ii) **Tenant Acknowledgement.** Tenant hereby acknowledges receipt of the notification in paragraph (i) of this Section 26 and understand that the purpose of such notification is to make Tenant, and any agents, employees, and contractors of Tenant, aware of the presence of ACMs and/or PACMs within or about the Building in order to avoid or minimize any damage to or disturbance of such ACMs and/or PACMs.

/s/ MJL Tenant’s Initials

(iii) **Acknowledgement from Contractors/Employees.** Tenant shall give Landlord at least 14 days’ prior written notice before conducting, authorizing or permitting any of the activities listed below within or about the Premises, and before soliciting bids from any person to perform such services. Such notice shall identify or describe the proposed scope, location, date and time of such activities and the name, address and telephone number of each person who may be conducting such activities. Thereafter, Tenant shall grant Landlord reasonable access to the Premises to determine whether any ACMs or PACMs will be disturbed in connection with such activities. Tenant shall not solicit bids from any person for the performance of such activities without Landlord’s prior written approval (such approval not to be unreasonably withheld). Upon Landlord’s request, Tenant shall deliver to Landlord a copy of a signed acknowledgement from any contractor, agent, or employee of Tenant acknowledging receipt of information describing the presence of ACMs and/or PACMs within or about the Premises in the locations identified in **Exhibit J** prior to the commencement of such activities. Nothing in this Section 26 shall be deemed to expand Tenant’s rights under the Lease or otherwise to conduct, authorize or permit any such activities.

- (I) Removal of thermal system insulation (“TSI”) and surfacing ACMs and PACMs (i.e., sprayed-on or troweled-on material, e.g., textured ceiling paint or fireproofing material);
- (II) Removal of ACMs or PACMs that are not TSI or surfacing ACMs or PACMs; or
- (III) Repair and maintenance of operations that are likely to disturb ACMs or PACMs.

27. Tenant’s Remedies/Limitation of Liability. Landlord shall not be in default hereunder unless Landlord fails to perform any of its obligations hereunder within 30 days after written notice from Tenant specifying such failure (unless such performance will, due to the nature of the obligation, require a period of time in excess of 30 days, then after such period of time as is reasonably necessary), provided, however, that if the nature of Landlord’s obligation arises from an emergency condition and Tenant provides notice to Landlord (which may be telephonic if followed by written notice on the same day describing the emergency condition in reasonable detail, including without limitation the emergency nature of the condition and specifying in all capital letters and boldface type that the condition is an emergency and response is required by Landlord pursuant to the Lease), then Landlord shall respond within a reasonable period after receipt of such notice of the emergency condition. Upon any default by Landlord, Tenant shall give notice by registered or certified mail to any Holder of a Mortgage covering the Premises and to any landlord of any lease of property in or on which the Premises are located and Tenant shall offer such Holder and/or landlord a reasonable opportunity to cure the default, including time to obtain possession of the Project by power of sale or a judicial action if such should prove necessary to effect a cure; provided Landlord shall have furnished to Tenant in writing the names and addresses of all such persons who are to receive such notices. All obligations of Landlord hereunder shall be construed as covenants, not conditions; and, except as may be otherwise expressly provided in this Lease, Tenant may not terminate this Lease for breach of Landlord’s obligations hereunder.

28. Inspection and Access. Subject to the next sentence, Landlord and its agents, representatives, and contractors may enter the Premises at any reasonable time to inspect the Premises and to make such repairs as may be required or permitted pursuant to this Lease, to perform such environmental tests as may be reasonably required to confirm Tenant’s compliance with the terms hereof and for any other business purpose. Landlord and Landlord’s representatives may enter the Premises during business hours on not less than 48 hours advance written notice (except in the case of emergencies in which case no such notice shall be required and such entry may be at any time) for the purpose of effecting any such repairs, inspecting the Premises, showing the Premises to prospective purchasers and, during the last year of the Term, to prospective tenants or for any other business purpose.

29. Security. Tenant acknowledges and agrees that security devices and services, if any, while intended to deter crime may not in given instances prevent theft or other criminal acts and that Landlord is not providing any security services with respect to the Premises, Shared Science Facility, Shared Conference Facility or Common Areas. Tenant agrees that Landlord shall not be liable to Tenant for, and Tenant waives any claim against Landlord with respect to, any loss by theft or any other damage suffered or incurred by Tenant in connection with any unauthorized entry into the Premises, Shared Science Facility, Shared Conference Facility or Common Areas or any other breach of security with respect to the Premises, Shared Science Facility, Shared Conference Facility, Common Areas or other portion of the Project. Tenant shall be solely responsible for the personal safety of Tenant's officers, employees, agents, contractors, guests and invitees while any such person is in, on or about the Premises and/or the Project. Tenant shall at Tenant's cost obtain insurance coverage to the extent Tenant desires protection against such criminal acts.

30. No Broker; Entire Agreement; Amendment. Landlord and Tenant each represents and warrants that it has not dealt with any broker, agent or other person (collectively, "**Broker**") in connection with this transaction and that no Broker brought about this transaction, other than Cushman & Wakefield of Massachusetts and Richards Barry Joyce & Partners, whose commission shall be paid by Landlord pursuant to a separate agreement. Landlord and Tenant each hereby agree to indemnify and hold the other harmless from and against any claims by any Broker, other than the broker, if any named in this Section 30, claiming a commission or other form of compensation by virtue of having dealt with Tenant or Landlord, as applicable, with regard to this leasing transaction. This Lease constitutes the entire agreement between Landlord and Tenant pertaining to the lease of the Premises and supersedes all other agreements, whether oral or written, pertaining to the lease of the Premises, and no other agreements with respect thereto shall be effective. Any amendments or modifications of this Lease shall be in writing and signed by both Landlord and Tenant, and any other attempted amendment or modification of this Lease shall be void.

31. Limitation on Landlord's Liability. NOTWITHSTANDING ANYTHING SET FORTH HEREIN OR IN ANY OTHER AGREEMENT BETWEEN LANDLORD AND TENANT TO THE CONTRARY: (A) LANDLORD SHALL NOT BE LIABLE TO TENANT OR ANY OTHER PERSON FOR (AND TENANT AND EACH SUCH OTHER PERSON ASSUME ALL RISK OF) LOSS, DAMAGE OR INJURY, WHETHER ACTUAL OR CONSEQUENTIAL TO: TENANT'S PERSONAL PROPERTY OF EVERY KIND AND DESCRIPTION, INCLUDING, WITHOUT LIMITATION TRADE FIXTURES, EQUIPMENT, INVENTORY, SCIENTIFIC RESEARCH, SCIENTIFIC EXPERIMENTS, LABORATORY ANIMALS, PRODUCT, SPECIMENS, SAMPLES, AND/OR SCIENTIFIC, BUSINESS, ACCOUNTING AND OTHER RECORDS OF EVERY KIND AND DESCRIPTION KEPT AT THE PREMISES AND ANY AND ALL INCOME DERIVED OR DERIVABLE THEREFROM; (B) THERE SHALL BE NO PERSONAL RECOURSE TO LANDLORD FOR ANY ACT OR OCCURRENCE IN, ON OR ABOUT THE PREMISES OR ARISING IN ANY WAY UNDER THIS LEASE OR ANY OTHER AGREEMENT BETWEEN LANDLORD AND TENANT WITH RESPECT TO THE SUBJECT MATTER HEREOF AND ANY LIABILITY OF LANDLORD HEREUNDER SHALL BE STRICTLY LIMITED SOLELY TO

LANDLORD'S INTEREST IN THE PROJECT OR ANY PROCEEDS FROM SALE OR CONDEMNATION THEREOF AND ANY INSURANCE PROCEEDS PAYABLE IN RESPECT OF LANDLORD'S INTEREST IN THE PROJECT OR IN CONNECTION WITH ANY SUCH LOSS; AND (C) IN NO EVENT SHALL ANY PERSONAL LIABILITY BE ASSERTED AGAINST LANDLORD OR ITS OFFICERS, DIRECTORS, EMPLOYEES, AGENTS OR CONTRACTORS IN CONNECTION WITH THIS LEASE NOR SHALL ANY RECOURSE BE HAD TO ANY OTHER PROPERTY OR ASSETS OF LANDLORD OR ANY OF LANDLORD'S OFFICERS, DIRECTORS, EMPLOYEES, AGENTS OR CONTRACTORS. UNDER NO CIRCUMSTANCES SHALL LANDLORD OR ANY OF LANDLORD'S OFFICERS, DIRECTORS, EMPLOYEES, AGENTS OR CONTRACTORS BE LIABLE FOR INJURY TO TENANT'S BUSINESS OR FOR ANY LOSS OF INCOME OR PROFIT THEREFROM.

32. Severability. If any clause or provision of this Lease is illegal, invalid or unenforceable under present or future laws, then and in that event, it is the intention of the parties hereto that the remainder of this Lease shall not be affected thereby.

33. Signs; Exterior Appearance. Tenant shall not: (i) attach anything at any time to any outside wall of the Project, (ii) use any window coverings or sunscreen other than Landlord's standard window coverings, (iii) place any articles on the window sills, (iv) place any items on any exterior balcony, or (v) paint, affix or exhibit any signs or any kind in the Premises which can be viewed from the exterior of the Premises. Interior signs on doors and the directory tablet, in each case in Building standard form, shall be provided by Landlord at Landlord's sole cost and expense.

34. Intentionally omitted.

35. Right to Extend Term. Tenant shall have the right to extend the Term of the Lease upon the following terms and conditions:

(a) **Extension Right.** Tenant shall have one right (the "**Extension Right**") to extend the term of this Lease for 3 years (the "**Extension Term**") on the same terms and conditions as this Lease (other than Base Rent) by giving Landlord written notice of its election to exercise the Extension Right at least 9 months prior, and no earlier than 12 months prior, to the expiration of the original Term of the Lease. Promptly after receipt of Tenant's exercise notice, Landlord shall provide Tenant with Landlord's determination of the Market Rate for the Extension Term.

Upon the commencement of the Extension Term, Base Rent shall be payable at the Market Rate (as defined below). Base Rent shall thereafter be adjusted on each annual anniversary of the commencement of such Extension Term by the Rent Adjustment Percentage as provided in Section 3 above. As used herein, "**Market Rate**" shall mean the then market rental rate for combined laboratory and office space in East Cambridge of comparable age, quality, level of finish and proximity to amenities and public transit. The Market Rate shall initially be determined by Landlord and submitted to Tenant for its consideration. If, on or before the date which is 210 days prior to the expiration of the original Term of this Lease, Tenant has not agreed with Landlord's determination of the Market Rate after negotiating in good faith,

Tenant may by written notice to Landlord not later than 180 days prior to the expiration of the original Term of this Lease, elect arbitration as described in Section 35(b) below. If Tenant has not agreed with Landlord's determination of the Market Rate and does not elect such arbitration prior to the date that is 180 days prior to the expiration of the original Term, Tenant shall be deemed to have waived any right to extend.

(b) **Arbitration.** Within 10 days of Tenant's notice to Landlord of its election to arbitrate Market Rate, each party shall deliver to the other a proposal containing the Market Rate that the submitting party believes to be correct ("**Extension Proposal**"). If either party fails to timely submit an Extension Proposal, the other party's submitted proposal shall determine the Base Rent for the Extension Term. If both parties submit Extension Proposals, then Landlord and Tenant shall meet within 7 days after delivery of the last Extension Proposal and make a good faith attempt to mutually appoint a single Arbitrator (and defined below) to determine the Market Rate. If Landlord and Tenant are unable to agree upon a single Arbitrator, then each shall, by written notice delivered to the other within 10 days after the meeting, select an Arbitrator. If either party fails to timely give notice of its selection for an Arbitrator, the other party's submitted proposal shall determine the Base Rent for the Extension Term. The 2 Arbitrators so appointed shall, within 5 business days after their appointment, appoint a third Arbitrator. If the 2 Arbitrators so selected cannot agree on the selection of the third Arbitrator within the time above specified, then either party, on behalf of both parties, may request such appointment of such third Arbitrator by application to any state court of general jurisdiction in the jurisdiction in which the Premises are located, upon 10 days prior written notice to the other party of such intent.

The decision of the Arbitrator(s) shall be made within 30 days after the appointment of a single Arbitrator or the third Arbitrator, as applicable. The decision of the single Arbitrator shall be final and binding upon the parties. The average of the two closest Arbitrators in a three Arbitrator panel shall be final and binding upon the parties. Each party shall pay the fees and expenses of the Arbitrator appointed by or on behalf of such party and the fees and expenses of the third Arbitrator shall be borne equally by both parties. If the Market Rate is not determined by the first day of the Extension Term, then Tenant shall pay Landlord Base Rent in an amount equal to the Base Rent in effect immediately prior to the Extension Term and increased by the Rent Adjustment Percentage until such determination is made. After the determination of the Market Rate, the parties shall make any necessary adjustments to such payments made by Tenant. Landlord and Tenant shall then execute an amendment recognizing the Market Rate for the Extension Term.

An "**Arbitrator**" shall be any person appointed by or on behalf of either party or appointed pursuant to the provisions hereof and: (i) shall be (A) a member of the American Institute of Real Estate Appraisers with not less than 10 years of experience in the appraisal of improved office and high tech or life sciences space in the greater Boston metropolitan area, or (B) a licensed commercial real estate broker with not less than 15 years experience representing landlords and/or tenants in the leasing of improved office and high tech or life sciences space in the greater Boston metropolitan area, (ii) devoting substantially all of their time to professional appraisal or brokerage work, as applicable, at the time of appointment and (iii) be in all respects impartial and disinterested.

(c) **Rights Personal.** The Extension Right is personal to Tenant (and successors pursuant to a Permitted Assignment) and not assignable without Landlord's consent, which may be granted or withheld in Landlord's sole discretion separate and apart from any consent by Landlord to an assignment of Tenant's interest in the Lease.

(d) **Exceptions.** Notwithstanding anything set forth above to the contrary, the Extension Right shall not be in effect and Tenant may not exercise the Extension Right:

(i) during any period of time that Tenant is in Default under any provision of this Lease; or

(ii) if Tenant has been in Default under any provision of this Lease 3 or more times, whether or not the Defaults are cured, during the 12 month period immediately prior to the date that Tenant intends to exercise the Extension Right, whether or not the Defaults are cured.

(iii) if Tenant (including any successor pursuant to one or more Permitted Assignment(s)) is not in occupancy of at least 75% of the entire Premises demised hereunder both at the time of the exercise of the Extension Right and at the time of the commencement date of the Extension Term.

(e) **No Extensions.** The period of time within which the Extension Right may be exercised shall not be extended or enlarged by reason of Tenant's inability to exercise the Extension Right.

(f) **Termination.** The Extension Right shall terminate and be of no further force or effect even after Tenant's due and timely exercise of the Extension Right, if, after such exercise, but prior to the commencement date of the Extension Term, (i) Tenant fails to timely cure any default by Tenant under this Lease; or (ii) Tenant has Defaulted 3 or more times during the period from the date of the exercise of the Extension Right to the date of the commencement of the Extension Term, whether or not such Defaults are cured.

36. Right to Negotiate.

(a) **Expansion to Laboratory Space on Remainder of Fourth Floor of Building.** Subject to rights granted prior to the date hereof to Third Rock Ventures, LLC pursuant to a separate agreement, if at any time any Available Space (as defined below) on the fourth floor of the Project becomes available for lease, Landlord shall give notice of such availability to Tenant (the "**Notice of Availability**"), together with Landlord's determination of the market rental rate for such Available Space. Landlord shall thereafter, for a period of up to 20 days, negotiate in good faith with Tenant for Tenant's lease of such space on such terms as shall be acceptable to Landlord and Tenant (the "**Negotiation Right**"). For purposes of this Section 36(a), "**Available Space**" shall mean any laboratory space on the remainder of the fourth floor of the Project which is not occupied by a tenant or which is occupied by an existing tenant whose lease is expiring within 6 months or less and such tenant does not wish to extend or renew (whether or not such tenant has a right to extend or renew) its occupancy of such space. Provided that no right to

lease or right to expand is exercised by any other party with superior rights, Tenant shall be entitled to lease such Available Space upon the terms and conditions, if any, agreed to by Landlord and Tenant.

(b) **Amended Lease.** If after the expiration of such 20 day period, no lease amendment or lease agreement for the Available Space has been executed, such Negotiation Right shall be waived and of no further force or effect with respect to such Available Space at any time during the balance of the Term; except that if, within 90 days of the date of Landlord's Notice of Availability, Landlord intends to offer the Available Space described in the Notice of Availability to a third party at a base rent equal to or less than 90% of the base rent for such Available Space specified in the Notice of Availability, then Landlord will give Tenant written notice of such new proposed base rent ("**Landlord's Second Notice of Availability**"), which will include the proposed lease amendment for such Available Space at the base rent stated in Landlord's Second Notice of Availability (the "**Proposed Amendment**"). If, after the expiration of 5 business days after Tenant's receipt of Landlord's Second Notice of Availability and Proposed Amendment, the Proposed Amendment for the Available Space has not been executed by Tenant and delivered to Landlord, such Negotiation Right shall be waived and of no further force or effect with respect to such Available Space at any time during the balance of the Term.

(c) **Exceptions.** Notwithstanding the above, the Negotiation Right shall not be in effect and may not be exercised by Tenant:

(i) during any period of time that Tenant is in Default under any provision of the Lease; or

(ii) if Tenant has been in Default under any provision of the Lease 3 or more times, whether or not the Defaults are cured, during the 12 month period prior to the date on which Tenant seeks to exercise the Expansion Right.

(d) **Termination.** The Negotiation Right shall terminate and be of no further force or effect even after Tenant's due and timely exercise of the Negotiation Right, if, after such exercise, but prior to the commencement date of the lease of such Available Space, (i) Tenant fails to timely cure any default by Tenant under the Lease; or (ii) Tenant has Defaulted 3 or more times during the period from the date of the exercise of the Negotiation Right to the date of the commencement of the lease of the Available Space, whether or not such Defaults are cured.

(e) **Rights Personal.** The Negotiation Right is personal to Tenant (and successors pursuant to a Permitted Assignment) and is not assignable without Landlord's consent, which may be granted or withheld in Landlord's sole discretion separate and apart from any consent by Landlord to an assignment of Tenant's interest in the Lease.

(f) **No Extensions.** The period of time within which any Negotiation Right may be exercised shall not be extended or enlarged by reason of Tenant's inability to exercise the Negotiation Right.

37. Miscellaneous.

(a) **Notices.** Except as otherwise provided herein, all notices or other communications between the parties shall be in writing and shall be deemed duly given upon delivery or refusal to accept delivery by the addressee thereof if delivered in person, confirmed receipt by facsimile, or upon delivery if delivered by reputable overnight guaranty courier or certified mail return receipt requested, addressed and sent to the parties at their addresses set forth above. Landlord and Tenant may from time to time by written notice to the other designate another address for receipt of future notices.

(b) **Recordation.** Neither this Lease nor a memorandum of lease shall be filed by or on behalf of Tenant in any public record. Landlord may prepare and file, and upon request by Landlord Tenant will execute, a memorandum of lease.

(c) **Interpretation.** The normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Lease or any exhibits or amendments hereto. The captions inserted in this Lease are for convenience only and in no way define, limit or otherwise describe the scope or intent of this Lease, or any provision hereof, or in any way affect the interpretation of this Lease.

(d) **Not Binding Until Executed.** The submission by Landlord to Tenant of this Lease shall have no binding force or effect, shall not constitute an option for the leasing of the Premises, nor confer any right or impose any obligations upon either party until execution of this Lease by both parties.

(e) **Limitations on Interest.** It is expressly the intent of Landlord and Tenant at all times to comply with applicable law governing the maximum rate or amount of any interest payable on or in connection with this Lease. If applicable law is ever judicially interpreted so as to render usurious any interest called for under this Lease, or contracted for, charged, taken, reserved, or received with respect to this Lease, then it is Landlord's and Tenant's express intent that all excess amounts theretofore collected by Landlord be credited on the applicable obligation (or, if the obligation has been or would thereby be paid in full, refunded to Tenant), and the provisions of this Lease immediately shall be deemed reformed and the amounts thereafter collectible hereunder reduced, without the necessity of the execution of any new document, so as to comply with the applicable law, but so as to permit the recovery of the fullest amount otherwise called for hereunder.

(f) **Choice of Law.** Construction and interpretation of this Lease shall be governed by the internal laws of the state in which the Premises are located, excluding any principles of conflicts of laws.

(g) **Time.** Time is of the essence as to the performance of Tenant's obligations under this Lease.

(h) **Force Majeure.** Landlord shall not responsible or liable for delays in the performance of its obligations hereunder when caused by, related to, or arising out of acts of

God, strikes, lockouts, or other labor disputes, embargoes, quarantines, weather, national, regional, or local disasters, calamities, or catastrophes, inability to obtain labor or materials (or reasonable substitutes therefor) at reasonable costs or failure of, or inability to obtain, utilities necessary for performance, governmental restrictions, orders, limitations, regulations, or controls, national emergencies, delay in issuance or revocation of permits, enemy or hostile governmental action, terrorism, insurrection, riots, civil disturbance or commotion, fire or other casualty, and other causes or events beyond the reasonable control of Landlord (individually or collectively, "**Force Majeure**"), it being understood that Force Majeure shall not include financial difficulties of Landlord, if any.

(i) **Financial Information.** Tenant shall furnish Landlord with true and complete copies of (i) Tenant's most recent audited annual financial statements within 15 days after receipt by Tenant of such audited annual financial statements from Tenant's outside auditor, (ii) Tenant's most recent unaudited quarterly financial statements within 60 days of the end of each of Tenant's first three fiscal quarters of each of Tenant's fiscal years during the Term, (iii) at Landlord's request from time to time, updated business plans, including cash flow projections and/or pro forma balance sheets and income statements, all of which shall be treated by Landlord as confidential information belonging to Tenant, (iv) corporate brochures and/or profiles prepared by Tenant for prospective investors, and (v) any other financial information or summaries that Tenant typically provides to its lenders or shareholders.

Landlord agrees to hold the financial statements and other financial information provided under this paragraph in confidence using at least the same degree of care that Landlord uses to protect its own confidential information of a similar nature; provided, however, that Landlord may disclose such information to Landlord's auditors, attorneys, consultants, lenders, affiliates, prospective purchasers and investors and other third parties as reasonably required in the ordinary course of Landlord's operations, provided that Landlord shall instruct such parties to treat the information as confidential. The obligations of confidentiality hereunder shall not apply to information that was in the public domain at the time it was disclosed to Landlord, entered the public domain subsequent to the time it was disclosed to Landlord, through no fault of Landlord, or was disclosed by Tenant to a third party without any confidentiality restrictions. In addition, Landlord may disclose such information without violating this Section to the extent that disclosure is reasonably necessary (a) for Landlord to enforce its rights or defend itself under this Lease; (b) for submissions to any state or federal regulatory body; or (c) for compliance with a valid order of a court or other governmental body having jurisdiction, or any law, statute, or regulation provided that, other than in an emergency, before disclosing such information Landlord shall give Tenant 5 days prior notice of the same to allow Tenant to obtain a protective order or such other judicial relief.

(j) **OFAC.** Tenant, and all beneficial owners of Tenant, are currently (a) in compliance with, and shall at all times during the Term of this Lease remain in compliance with, the regulations of the Office of Foreign Assets Control ("**OFAC**") of the U.S. Department of Treasury and any statute, executive order, or regulation relating thereto (collectively, the "**OFAC Rules**"), (b) not listed on, and shall not during the Term of this Lease be listed on, the Specially Designated Nationals and Blocked Persons List maintained by OFAC and/or on any other similar list maintained by OFAC or other governmental authority pursuant to any authorizing statute, executive order, or regulation, and (c) not a person or entity with whom a U.S. person is prohibited from conducting business under the OFAC Rules.

(k) **Incorporation by Reference.** All exhibits and addenda attached hereto are hereby incorporated into this Lease and made a part hereof. If there is any conflict between such exhibits or addenda and the terms of this Lease, such exhibits or addenda shall control, except in the case of conflict between the Rules and Regulations in **Exhibit I**. In the event of any conflict between the Rules and Regulations in Exhibit I and the Lease, the Lease shall control.

(l) **No Accord and Satisfaction.** No payment by Tenant or receipt by Landlord of a lesser amount than the monthly installment of Base Rent or any Additional Rent will be other than on account of the earliest stipulated Base Rent and Additional Rent, nor will any endorsement or statement on any check or letter accompanying a check for payment of any Base Rent or Additional Rent be an accord and satisfaction. Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such Rent or to pursue any other remedy provided in this Lease.

(m) **Hazardous Activities.** Notwithstanding any other provision of this Lease, Landlord, for itself and its employees, agents and contractors, reserves the right to refuse to perform any repairs or services in any portion of the Premises which, pursuant to Tenant's routine safety guidelines, practices or custom or prudent industry practices, require any form of protective clothing or equipment other than safety glasses. In any such case, Tenant shall contract with parties who are acceptable to Landlord, in Landlord's reasonable discretion, for all such repairs and services, and Landlord shall, to the extent required, equitably adjust Tenant's Share of Operating Expenses in respect of such repairs or services to reflect that Landlord is not providing such repairs or services to Tenant.

[remainder of page intentionally left blank; Lease Agreement continues on next page]

IN WITNESS WHEREOF, Landlord and Tenant have executed this Lease as of the day and year first above written.

TENANT:

DENOVO THERAPEUTICS, INC.,
a Delaware corporation

By: /s/ Mark Levin

Name: Mark Levin

Title: Acting CEO

LANDLORD:

ARE-MA REGION NO. 38, LLC, a Delaware limited
liability corporation

By: Alexandria Real Estate Equities, L.P.,
a Delaware limited partnership, member

By: ARE-QRS Corp., a Maryland corporation, general
partner

By: /s/ Jackie Clem

Name: JACKIE CLEM

Title: LEGAL AFFAIRS

EXHIBIT A TO LEASE

DESCRIPTION OR PLAN OF PREMISES

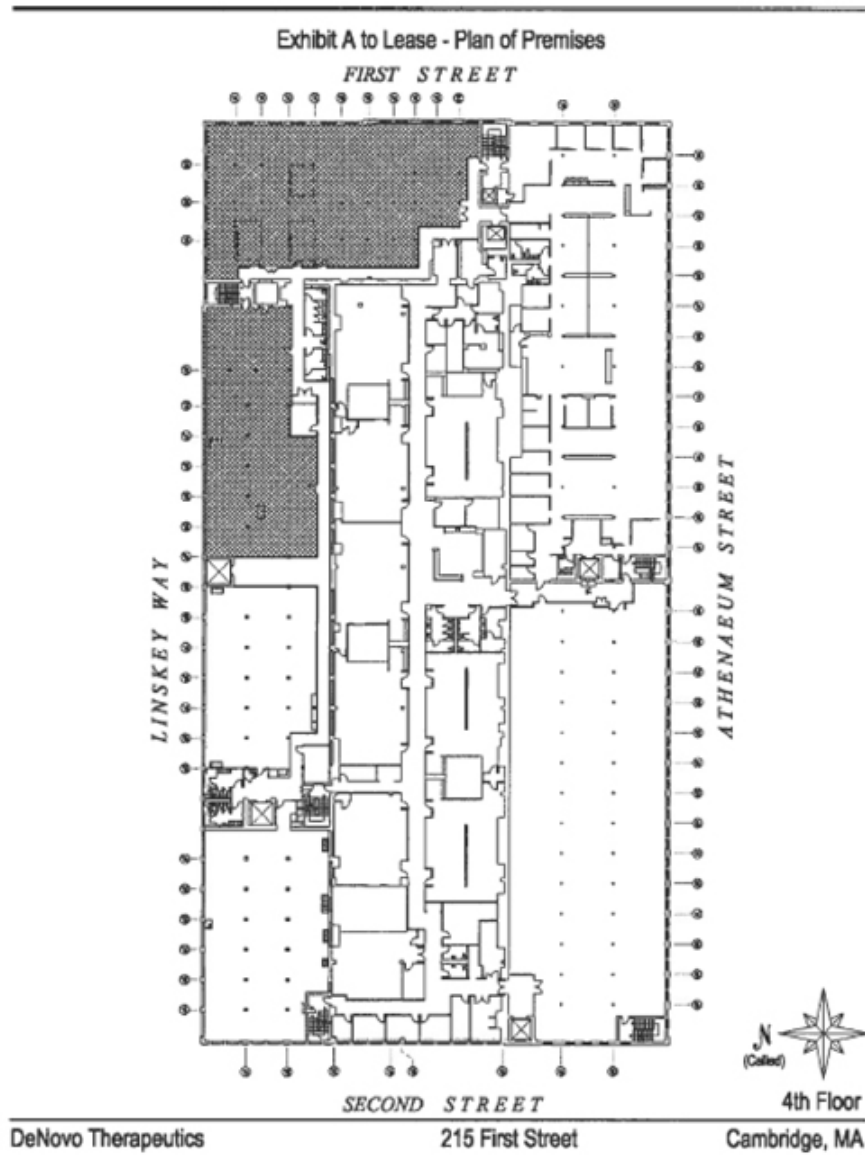


EXHIBIT C TO LEASE

DESCRIPTION OR PLAN OF SHARED CONFERENCE FACILITY

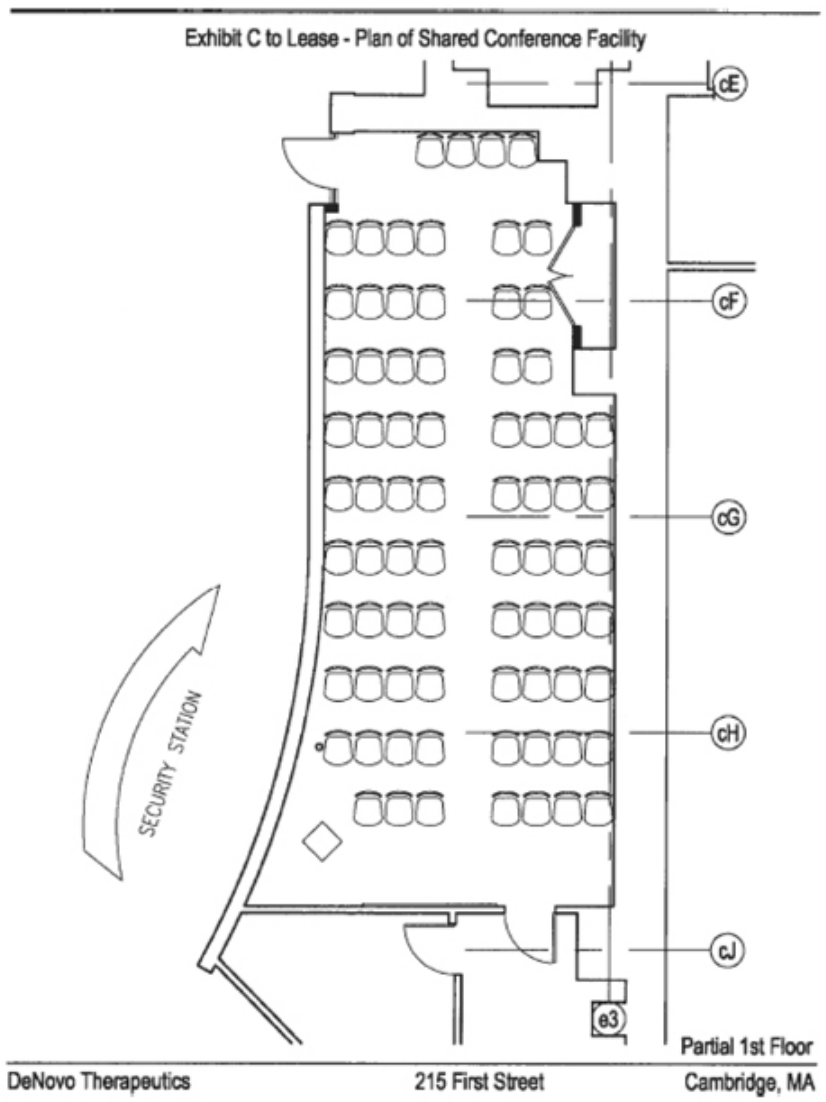


EXHIBIT D TO LEASE

DESCRIPTION OF PROJECT

A certain parcel of land with the buildings thereon, in Cambridge, Middlesex County, Massachusetts, known as and numbered 215 First Street, and bounded and described as follows:

Beginning at the northwest corner of Athenaeum Street and First Street, said point being the southeasterly corner of the parcel;

Thence running N 80 degrees 12'27" W, a distance of 399.30 feet along the northerly line of said Athenaeum Street;

Thence turning and running N 09 degrees 43'10" E, a distance of 200.00 feet along the easterly line of Second Street;

Thence turning and running S 80 degrees 12'27" E, a distance of 399.41 feet along the southerly line of Munroe Street;

Thence turning and running S 09 degrees 45'06" W, a distance of 200.00 feet along the westerly line of First Street to the point of beginning.

The above described parcel contains 79,871 square feet, more or less.

EXHIBIT E TO LEASE**LICENSE AGREEMENT**

THIS LICENSE AGREEMENT (this “**Agreement**”), dated as of _____, 20____, is made and entered into by and between ARE-MA REGION NO. 38, LLC, a Delaware limited liability company (“**Licensor**”), and DENOVO THERAPEUTICS, INC., a Delaware corporation (“**Licensee**”), with reference to the following Recitals:

RECITALS

A. Licensor is the owner of that certain property commonly known as 215 First Street, Cambridge, Massachusetts (the “**Property**”).

B. Concurrently herewith, Licensee and Licensor are entering into that certain Lease Agreement (the “**Lease**”) for certain space located at the Property and more particularly described therein (the “**Premises**”). All initially capitalized terms used herein but not otherwise defined shall have the respective meanings ascribed thereto in the Lease.

C. Licensee desires to have, and Licensor desires to grant to Licensee, certain rights to access and use a certain area of the Property described as the “**Shared Science Facility**” on Exhibit 1 attached hereto and a certain area of the Property described as the “**Shared Conference Facility**” on Exhibit 2 attached hereto, all in accordance with the terms and provisions set forth below.

AGREEMENT

For and in consideration of the covenants and premises herein contained and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

1. License: Scheduling and Fees for Shared Conference Facility.

(a) **License.** Licensor hereby grants Licensee, and Licensee hereby accepts, a non-exclusive license to use the Shared Science Facility and the Shared Conference Facility subject to the terms and provisions of this Agreement.

(b) **Scheduling and Fees for Shared Conference Facility.** Use by Licensee of the Shared Conference Facility shall be in common with others entitled to use the Shared Conference Facility in accordance with scheduling procedures reasonably determined by Licensor. Licensor shall use commercially reasonable efforts to schedule users on a first-come, first-served basis, but Licensor reserves the right to exercise its discretion in the event of conflicting scheduling requests among users. The first two occasions in a calendar month that Licensee uses the Shared Conference Facility shall be at no charge for such use, and thereafter Licensee shall pay the hourly charges established by Licensor from time to time for use of the Shared Conference Facility. The current hourly charge for the use of the Shared Conference Facility as of the date

of this Lease is \$200 per hour and is subject to change as determined by Licensor from time to time. Payment of such hourly charges shall be made within 10 days of invoice therefor, and Licensor reserves the right to require an advance deposit from time to time.

2. **Use.** Licensee shall exercise its limited rights hereunder in compliance with all laws, orders, judgments, ordinances, regulations, codes, directives, permits, licenses, covenants and restrictions now or hereafter applicable to the Property, Shared Science Facility or Shared Conference Facility and the use and occupancy thereof, including the rules and regulations attached as **Exhibit 3** hereto, as the same may be revised by Licensor from time to time.

3. **Term.** The term of this Agreement shall commence on the Commencement Date set forth in the Lease (the "**Commencement Date**") and continue until the earlier to occur of (a) the last day on which Licensee is entitled to occupy the Premises pursuant to the terms of the Lease, (b) the date this Agreement is sooner terminated pursuant to its terms, and (c) the date the Lease is sooner terminated pursuant to its terms. The period between the Commencement Date and the date of termination of this Agreement shall be the "**Term.**"

4. **Relocation and Modification of Shared Science Facility or Shared Conference Facility.** Licensor shall have the right at any time to reconfigure, relocate or modify the Shared Science Facility and/or Shared Conference Facility from time to time and to revise or expand any of the services (if any) provided therein; provided, however, that such reconfiguration, relocation or modification of the respective facility or any revision or expansion of services shall not materially adversely affect Tenant's use of such facility or service as permitted pursuant to this Agreement.

5. **Interference.** Licensee shall use the Shared Science Facility and Shared Conference Facility in a manner that will not interfere with the rights of any tenants, other licensees or Licensor's service providers. Licensor assumes no responsibility for enforcing Licensee's rights or for protecting the Shared Science Facility or Shared Conference Facility from interference or use from any person, including, without limitation, tenants or other licensees of the Property.

6. **Default by Licensee.**

(a) It is mutually agreed that Licensee shall be in default hereunder ("**Default**"),

(i) if Licensee fails to comply with any of the terms or provisions of this Agreement, and fails to cure such default within 30 days after the date of delivery of written notice of default from Licensor, provided that if the nature of such default is such that it cannot be cured by the payment of money and reasonably requires more than 30 days to cure, then Licensee shall not be deemed to be in Default under this License if Licensee commences such cure within 30 days of the aforesaid notice from Licensor and thereafter diligently prosecutes such cure to completion within 90 days of the aforesaid notice from Licensor; or

(ii) with respect to the Shared Conference Facility, if Licensee fails to pay any fees or charges for use of the Shared Conference Facility or other amounts required hereunder when due pursuant to this Agreement; provided, however, that Licensor will give Licensee notice and an opportunity to cure any failure to pay such fees or charges within 3 business days of any such notice not more than once in any 12 month period and Licensee agrees that such notice shall be in lieu of and not in addition to, or shall be deemed to be, any notice required by law or

(iii) during the occurrence and continuation of any Default (as defined in the Lease) under the Lease.

(b) In the event of any Default by Licensee hereunder, Licensor shall be entitled to all rights and remedies provided for Landlord under the Lease, and all other rights and remedies provided at law or in equity, including without limitation, termination of this Agreement and the license granted hereunder.

7. Indemnification and Limitation of Liability.

(a) Licensor's sole obligation for providing standby generators or any other standby power equipment, other equipment, systems, furnishings or personal property to the Shared Science Facility or Shared Conference Facility, whether or not affixed to the Building (collectively, "**Equipment**") shall be (i) to provide such Equipment as is determined by Licensor in its sole and absolute discretion, and (ii) to contract with a third party (determined by Licensor to be qualified) to maintain the Equipment that is deemed by Licensor (in its reasonable professional discretion) to need periodic maintenance per the manufacturer's standard maintenance guidelines. Licensor shall have no obligation to provide Licensee with operational Equipment, back-up Equipment or back-up utilities or to supervise, oversee or confirm that the third party maintaining the Equipment is maintaining the Equipment as per the manufacturer's standard guidelines or otherwise. During any period of replacement, repair or maintenance of the Equipment when such Equipment is not operational, including any delays thereto due to the inability to obtain parts or replacements, Licensor shall have no obligation to provide Licensee with alternative or back-up Equipment or alternative sources of utilities. Licensee expressly acknowledges and agrees that Licensor does not guaranty that the Equipment will be operational at all times, will function or perform adequately, or that emergency power will be available to the Premises when needed, and Licensor shall not be liable for any damages resulting from the failure of such Equipment. Licensee hereby releases Licensor from and against any and all claims arising directly or indirectly out of or relating to the Equipment, or the existence, use of failure thereof, unless caused solely by the willful misconduct or gross negligence of Licensor. The terms and provisions of this Section 7(a) shall survive the expiration or earlier termination of this Agreement.

(b) NOTWITHSTANDING ANYTHING SET FORTH HEREIN OR IN ANY OTHER AGREEMENT BETWEEN LICENSOR AND LICENSEE TO THE CONTRARY: (i) LICENSOR SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER PERSON FOR (AND LICENSEE AND EACH SUCH OTHER PERSON ASSUME ALL RISK

OF) LOSS, DAMAGE OR INJURY, WHETHER ACTUAL OR CONSEQUENTIAL TO PERSONAL PROPERTY OF EVERY KIND AND DESCRIPTION, INCLUDING, WITHOUT LIMITATION, TRADE FIXTURES, EQUIPMENT, INVENTORY, SCIENTIFIC RESEARCH, SCIENTIFIC EXPERIMENTS, LABORATORY ANIMALS, PRODUCT, SPECIMENS, SAMPLES, AND/OR SCIENTIFIC, BUSINESS, ACCOUNTING AND OTHER RECORDS OF EVERY KIND AND DESCRIPTION AND ANY AND ALL INCOME DERIVED OR DERIVABLE THEREFROM; and (ii) THERE SHALL BE NO PERSONAL RECOURSE TO LICENSOR FOR ANY ACT OR OCCURRENCE IN, ON OR ABOUT THE PREMISES, SHARED SCIENCE FACILITY, SHARED CONFERENCE FACILITY OR PROJECT OR ARISING IN ANY WAY UNDER THIS LICENSE AGREEMENT OR ANY OTHER AGREEMENT BETWEEN LICENSOR AND LICENSEE WITH RESPECT TO THE SUBJECT MATTER HEREOF AND ANY LIABILITY OF LICENSOR HEREUNDER SHALL BE STRICTLY LIMITED SOLELY TO LICENSOR'S INTEREST IN THE PROJECT OR ANY PROCEEDS FROM SALE OR CONDEMNATION THEREOF AND ANY INSURANCE PROCEEDS PAYABLE IN RESPECT OF LICENSOR'S INTEREST IN THE PROJECT OR IN CONNECTION WITH ANY SUCH LOSS; AND (iii) IN NO EVENT SHALL ANY PERSONAL LIABILITY BE ASSERTED AGAINST LICENSOR OR ANY OF ITS OFFICERS, DIRECTORS, EMPLOYEES, AGENTS OR CONTRACTORS IN CONNECTION WITH THIS LICENSE AGREEMENT NOR SHALL ANY RECOURSE BE HAD TO ANY OTHER PROPERTY OR ASSETS OF LICENSOR OR ANY OF LICENSOR'S OFFICERS, DIRECTORS, EMPLOYEES, AGENTS OR CONTRACTORS.

(c) Licensee acknowledges and agrees that there are no warranties of any kind, whether express or implied, made by Licensor or otherwise with respect to the Shared Science Facility, Shared Conference Facility or any services (if any) provided in either the Shared Science Facility or Shared Conference Facility, and Licensee disclaims any and all such warranties.

(d) Licensor shall not be in default hereunder unless Licensor fails to perform any of its obligations hereunder within thirty (30) days after written notice from Licensee specifying such failure, with such extension of time by reason of Force Majeure as may be reasonably necessary; provided, however, that if the nature of Licensor's obligation arises from an emergency condition and Licensee provides notice to Licensor (which may be telephonic if followed by written notice on the same day describing the emergency condition in reasonable detail, including without limitation the emergency nature of the condition and specifying in all capital letters and boldface type that the condition is an emergency and response is required by Licensor pursuant to this Agreement), then Licensor shall respond within a reasonable period after receipt of such notice of the emergency condition. Licensee's sole remedy for any breach or default by Licensor hereunder shall be to terminate this Agreement and Licensee hereby, to the maximum extent possible, knowingly waives the provisions of any law or regulation, now or hereafter in effect which provides additional or other remedies to Licensee as a result of any breach by Licensor hereunder or under any such law or regulation.

8. Miscellaneous.

(a) This Agreement, together with the Lease, constitutes the entire agreement and understanding between the parties, and supersedes all offers, negotiations and other agreements concerning the subject matter contained herein. Any amendments to this Agreement must be in writing and executed by both parties.

(b) If any clause or provision of this Agreement is illegal, invalid or unenforceable under present or future laws, then and in that event, it is the intention of the parties hereto that the remainder of this Agreement shall not be affected thereby.

(c) This Agreement shall be binding on and inure to the benefit of the successors and permitted assigns of the respective parties.

(d) All notices or other communications between the parties shall be in writing and shall be deemed duly given upon delivery or refusal to accept delivery by the addressee thereof if delivered in person, or upon actual receipt if delivered by reputable overnight guaranty courier, addressed and sent to the parties at their addresses set forth in the Lease (as the same may be revised from time to time in accordance with the terms of the Lease).

(e) The license granted hereunder is appurtenant to Licensee's leasehold interest in the Premises and may not be assigned or otherwise pledged or transferred, directly or indirectly, except in connection with any assignment of the Lease or sublease of the Premises to which Landlord consents or is otherwise permitted under the Lease. In the event of a permitted assignment of the Lease, this Agreement shall automatically be assigned thereby, and thereupon the assigning Licensee shall have no further rights to use or access the Shared Science Facility or Shared Conference Facility. No assignment or other transfer of the Lease or of this License shall release Licensee of its obligations hereunder.

(f) This Agreement shall be construed, interpreted, governed and enforced pursuant to the laws of the state in which the Property is located.

(g) This Agreement may be executed in multiple counterparts but all counterparts taken together shall constitute a single document.

(h) Time is of the essence of each and every provision of this Agreement.

(i) The parties to this Agreement hereby acknowledge that each such party and its counsel have participated in the negotiation and preparation of this Agreement, and this Agreement shall be construed and interpreted without regard to any presumption or other rule requiring construction against the party causing the Agreement to be drafted.

(j) Licensee acknowledges that its use of the Shared Science Facility and Shared Conference Facility are non-exclusive and will be subject to the use of other tenants and licensees of the Property. Licensee acknowledges that it will be important for all such users to cooperate with each other to maintain the confidentiality of each party's documents and

operations as well as information a party may hold under confidential arrangements with third parties. Licensee shall maintain and treat as confidential and secret all information and materials which may intentionally or unintentionally be disclosed to it in connection with such shared occupancy (the “**Confidential Information**”). Licensee shall not disclose Confidential Information to any third party and will take appropriate action by instruction, agreement or otherwise with its employees, agents, affiliates, associates, representatives, contractors and invitees to ensure that security of the Confidential Information is maintained. Notwithstanding the foregoing, Licensee may disclose Confidential Information to the extent that (a) disclosure is compelled by judicial or administrative process or other requirements of law, or (b) Licensee can show that such Confidential Information (i) was publicly available prior to the date of this Agreement or thereafter became publicly available without violation of this Agreement by Licensee or its employees, agents, affiliates, associates, representatives, contractors or invitees, or (ii) became available to Licensee by means other than its use of or access to the Shared Science Facility or Shared Conference Facility. The provisions of this Section 8(j) shall survive the expiration or earlier termination of this Agreement.

[SIGNATURES ON NEXT PAGE]

IN WITNESS WHEREOF, Licensors and Licensee have caused this Agreement to be executed by their duly authorized representatives as of the date first above written.

LICENSEE:

DENOVO THERAPEUTICS, INC.,
a Delaware corporation

By: _____

Name: _____

Title: _____

LICENSOR:

ARE-MA REGION NO. 38, LLC, a Delaware limited liability corporation

By: Alexandria Real Estate Equities, L.P.,
a Delaware limited partnership, member

By: ARE-QRS Corp., a Maryland corporation, general partner

By: _____

Name: _____

Title: _____

EXHIBIT 1 TO LICENSE AGREEMENT

DESCRIPTION OR PLAN OF SHARED SCIENCE FACILITY

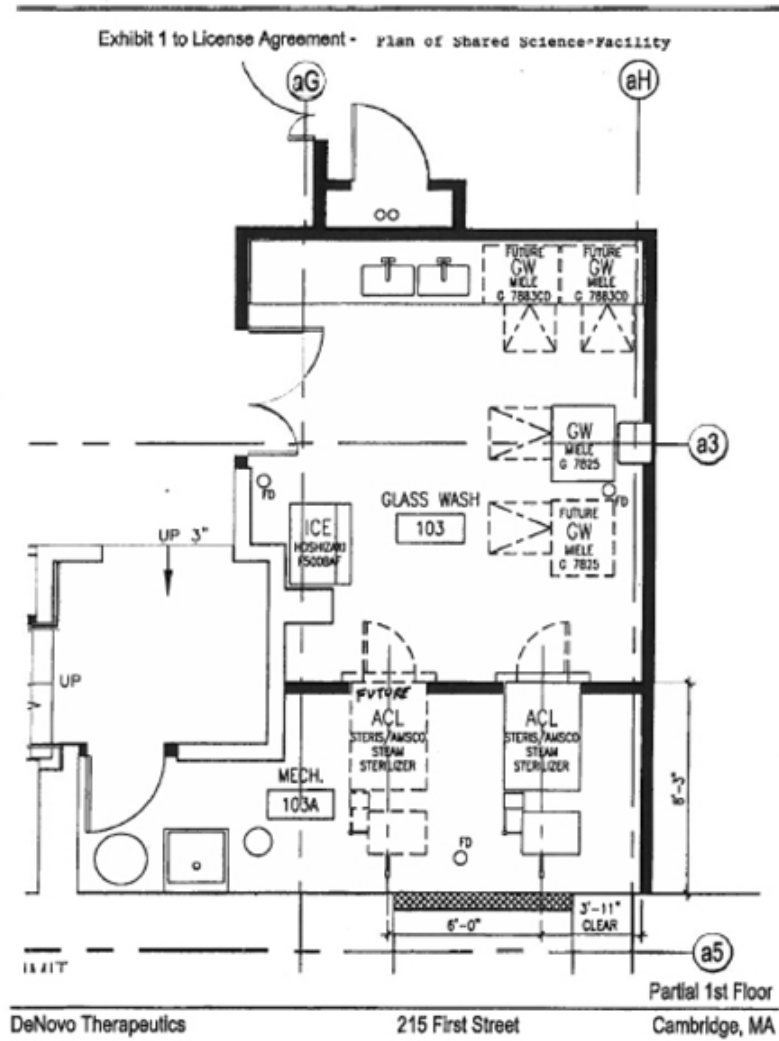


EXHIBIT 2 TO LICENSE AGREEMENT

DESCRIPTION OR PLAN OF SHARED CONFERENCE FACILITY

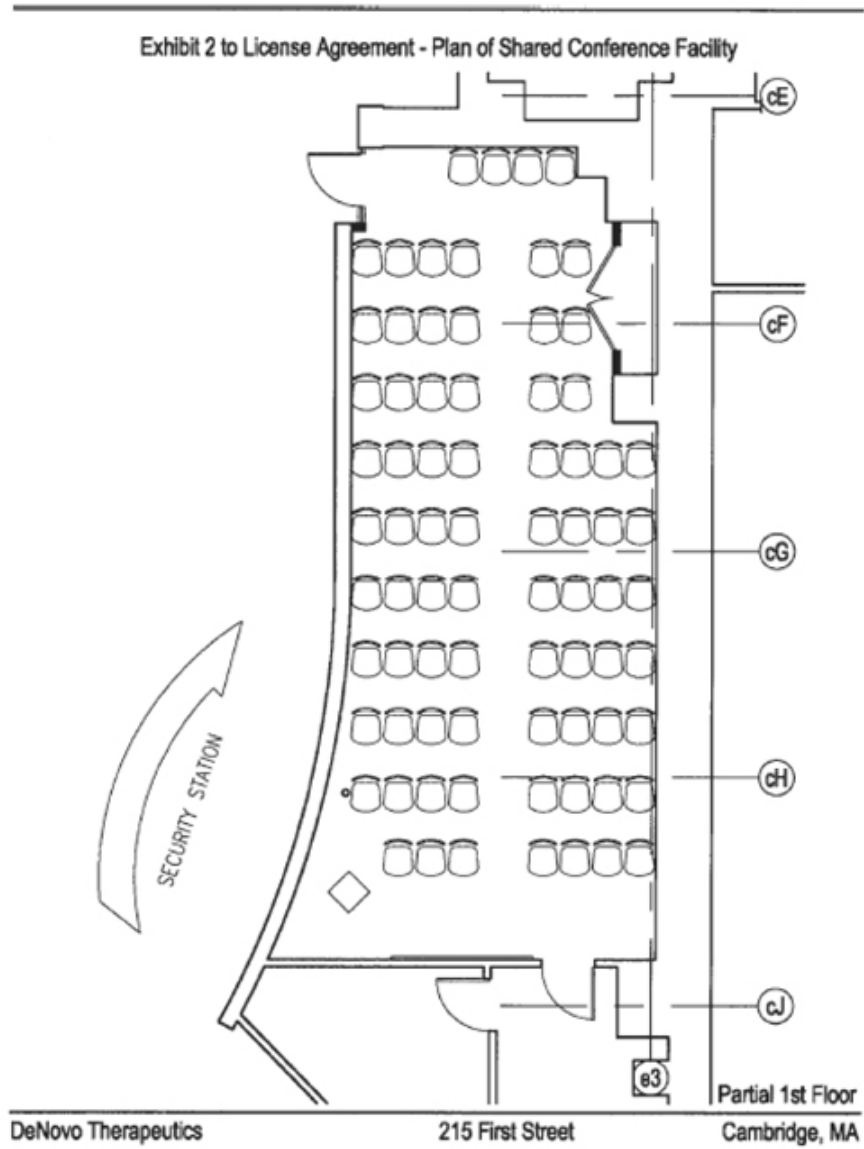


EXHIBIT 3 TO LICENSE AGREEMENT

RULES AND REGULATIONS

Rules and regulations (if any) will be established and implemented by Licensor during the Term.

EXHIBIT F TO LEASE

WORK LETTER**[Landlord Build]**

THIS **WORK LETTER** dated January 14, 2010 (this "**Work Letter**") is made and entered into by and between ARE-MA REGION NO. 36, LLC, a Delaware limited liability company ("Landlord"), and DENOVO THERAPEUTICS, INC., a Delaware corporation ("**Tenant**"), and is attached to and made a part of the Lease dated January 14, 2010 (the "**Lease**"), by and between Landlord and Tenant. Any initially capitalized terms used but not defined herein shall have the meanings given them in the Lease.

1. General Requirements.

(a) **Tenant's Authorized Representative.** Tenant designates Arthur Brunelle and Cameron Wheeler (either such individual acting alone, "**Tenant's Representative**") as the only persons authorized to act for Tenant pursuant to this Work Letter. Landlord shall not be obligated to respond to or act upon any request, approval, inquiry or other communication ("**Communication**") from or on behalf of Tenant in connection with this Work Letter unless such Communication is in writing from Tenant's Representative. Tenant may change either Tenant's Representative at any time upon not less than 5 business days advance written notice to Landlord. Neither Tenant nor Tenant's Representative shall be authorized to direct Landlord's contractors in the performance of Landlord's Work (as hereinafter defined).

(b) **Landlord's Authorized Representative.** Landlord designates Joe Maguire and Andy Reinach (either such individual acting alone, "**Landlord's Representative**") as the only persons authorized to act for Landlord pursuant to this Work Letter. Tenant shall not be obligated to respond to or act upon any request, approval, inquiry or other Communication from or on behalf of Landlord in connection with this Work Letter unless such Communication is in writing from Landlord's Representative. Landlord may change either Landlord's Representative at any time upon not less than 5 business days advance written notice to Tenant. Landlord's Representative shall be the sole persons authorized to direct Landlord's contractors in the performance of Landlord's Work.

(c) **Architects, Consultants and Contractors.** Landlord and Tenant hereby acknowledge and agree that the general contractor for the Tenant Improvements shall be The Richmond Group, Inc., and the architect (the "**TI Architect**") for the Tenant Improvements shall be R.E. Dinneen Architects & Planners, Inc.

2. Tenant Improvements.

(a) **Tenant Improvements Defined.** As used herein, "**Tenant Improvements**" shall mean all improvements to the Project of a fixed and permanent nature as shown on the TI Construction Drawings, as defined in Section 2(c) below. Other than performance of the work on the Tenant Improvements, Landlord shall not have any obligation whatsoever with respect to the finishing of the Premises for Tenant's use and occupancy.

(b) **Tenant's Space Plans.** The schematic drawings and outline specifications (the "**TI Design Drawings**") detailing Tenant's requirements for the Tenant Improvements are attached hereto and made a part hereof as **Exhibit #1**.

(c) **Working Drawings.** Not later than 15 business days after the date of this Lease, Landlord shall cause the TI Architect to prepare and deliver to Tenant for review and comment construction plans, specifications and drawings for the Tenant Improvements ("**TI Construction Drawings**"), which TI Construction Drawings shall be prepared substantially in accordance with the TI Design Drawings. Tenant shall be solely responsible for ensuring that the TI Construction Drawings reflect Tenant's requirements for the Tenant Improvements. Tenant shall deliver its written comments on the TI Construction Drawings to Landlord not later than 5 business days after Tenant's receipt of the same; provided, however, that Tenant may not disapprove any matter that is consistent with the TI Design Drawings without submitting a Change Request. Landlord and the TI Architect shall consider all such comments in good faith and shall, within 5 business days after receipt, notify Tenant how Landlord proposes to respond to such comments, but Tenant's review rights pursuant to the foregoing sentence shall not delay the design or construction schedule for the Tenant Improvements. Any disputes in connection with such comments shall be resolved in accordance with Section 2(d) hereof. Provided that the design reflected in the TI Construction Drawings is consistent with the TI Design Drawings, Tenant shall approve the TI Construction Drawings submitted by Landlord, unless Tenant submits a Change Request. Once approved by Tenant, subject to the provisions of Section 4 below, Landlord shall not materially modify the TI Construction Drawings except as may be reasonably required in connection with the issuance of the TI Permit (as defined in Section 3(b) below). Landlord shall notify Tenant of any such material modifications as may be reasonably required in connection with the issuance of the TI Permit.

(d) **Approval and Completion.** It is hereby acknowledged by Landlord and Tenant that the TI Construction Drawings must be completed and approved not later than February 4, 2010, in order for the Landlord's Work to be Substantially Complete by the Target Commencement Date (as defined in the Lease). Upon any dispute regarding the design of the Tenant Improvements, which is not settled within 10 business days after notice of such dispute is delivered by one party to the other, Tenant may make the final decision regarding the design of the Tenant Improvements, provided (i) Tenant acts reasonably and such final decision is either a compromise between Landlord's and Tenant's positions with respect to such dispute, (ii) that all costs and expenses resulting from any such decision by Tenant shall be payable by Tenant, except to the extent that the design chosen by Tenant is included in the TI Design Drawings, and (iii) Tenant's decision will not affect the base Building, Base Building Work, structural components of the Building or any Building Systems. Any changes to the TI Construction Drawings following Landlord's and Tenant's approval of same requested by Tenant shall be processed as provided in Section 4 hereof.

3. Performance of Construction of Tenant Improvements, Base Building Work and Landlord's Work.

(a) **Definition of Landlord's Work.** As used herein, "**Landlord's Work**" shall mean the work of constructing the Tenant Improvements and the work described in the plans and specifications attached hereto as **Exhibit #2** (the "**Base Building Work**"), subject to such modifications to the Base Building Work as Landlord may determine to be necessary. Landlord shall cause its contractor to perform the Base Building Work at Landlord's sole cost and expense and to coordinate the scheduling of the performance of the Tenant Improvements with the Base Building Work so that the Base Building Work can be Substantially Completed on or before Substantial Completion of the Tenant Improvements.

(b) **Commencement and Permitting.** Landlord shall commence construction of the Tenant Improvements upon obtaining a building permit (the "**TI Permit**") authorizing the construction of the Tenant Improvements consistent with the TI Construction Drawings approved by Tenant. The cost of obtaining the TI Permit shall be paid by Landlord. Tenant shall assist Landlord in obtaining the TI Permit. If any Governmental Authority having jurisdiction over the construction of Landlord's Work or any portion thereof shall impose terms or conditions upon the construction thereof that: (i) are inconsistent with Landlord's obligations hereunder, (ii) increase the cost of constructing Landlord's Work, or (iii) will materially delay the construction of Landlord's Work, Landlord and Tenant shall reasonably and in good faith seek means by which to mitigate or eliminate any such adverse terms and conditions.

(c) **Completion of the Tenant Improvements.** On or before the Target Commencement Date (subject to Tenant Delays and delays due to Force Majeure), Landlord shall substantially complete or cause to be substantially completed the Tenant Improvements in a good and workmanlike manner, in accordance with applicable Legal Requirements and the TI Permit subject, in each case, to Minor Variations and normal "punch list" items of a non-material nature that do not interfere with the use of the Premises ("**Substantial Completion**" or "**Substantially Complete**"). Upon Substantial Completion of the Tenant Improvements, Landlord shall require the TI architect and the general contractor to execute and deliver, for the benefit of Tenant and Landlord, a Certificate of Substantial Completion in the form of the American Institute of Architects ("**AIA**") document G704. If required by applicable Legal Requirements, a certificate of occupancy (which may include a conditional certificate of occupancy) for the Tenant Improvements or permission to occupy issued by the appropriate municipal official shall be required for Substantial Completion; provided, however, that no delay on the part of the applicable Governmental Authority or municipal official in the issuance of such certificate of occupancy or permission to occupy, which delay arises from or relates to work by Tenant or its contractors, shall operate to delay Substantial Completion, and any such delay that arises from or relates to work by Tenant or its contractors shall be deemed to be a "Tenant Delay" under Section 3(f) below. If a conditional certificate of occupancy is issued, Landlord agrees to use commercially reasonable efforts to obtain the certificate of occupancy prior to the expiration of the conditional certificate of occupancy or obtain an extension of such conditional certificate of occupancy. For purposes of this Work Letter, "**Minor Variations**" shall mean any modifications reasonably required: (i) to comply with all applicable Legal Requirements and/or

to obtain or to comply with any required permit (including the TI Permit); (ii) to comply with any request by Tenant for modifications to the Tenant Improvements; (iii) to comport with good design, engineering, and construction practices that are not material; or (iv) to make reasonable adjustments for field deviations or conditions encountered during the construction of Landlord's Work. For purposes of this Work Letter and the Lease, Substantial Completion of the Base Building Work shall mean that Landlord's contractor has substantially completed the Base Building Work in a good and workmanlike manner, in accordance with the building permit therefor, subject to Minor Variations and normal "punch list" items of a non-material nature that do not interfere with the use of the Premises.

(d) **Selection of Materials.** Where more than one type of material or structure is indicated on the TI Construction Drawings approved by Landlord and Tenant, the option will be selected at Landlord's sole and absolute subjective discretion. As to all building materials and equipment that Landlord is obligated to supply under this Work Letter, Landlord shall select the manufacturer thereof in its sole and absolute subjective discretion.

(e) **Delivery of the Premises.** When the Tenant Improvements are Substantially Complete, subject to the remaining terms and provisions of this Section 3(e), Tenant shall accept the Premises. Tenant's taking possession and acceptance of the Premises shall not constitute a waiver of: (i) any warranty with respect to workmanship (including installation of equipment) or material (exclusive of equipment provided directly by manufacturers), (ii) any non-compliance of the Tenant Improvements with applicable Legal Requirements, or (iii) any claim that the Tenant Improvements were not completed substantially in accordance with the TI Construction Drawings (subject to Minor Variations and such other changes as are permitted hereunder) (collectively, a "**Construction Defect**"). Tenant shall have one year after Substantial Completion within which to notify Landlord of any such Construction Defect discovered by Tenant, and Landlord shall use reasonable efforts to remedy or cause the responsible contractor to remedy any such Construction Defect within 30 days thereafter; provided, however, that Landlord shall not be in default under the Lease if the applicable contractor, despite Landlord's reasonable efforts, fails to remedy such Construction Defect within such 30-day period, in which case Landlord shall continue to use reasonable efforts to cause such contractor to remedy such Construction Defect.

Tenant shall be entitled to receive the benefit of all construction warranties and manufacturer's equipment warranties relating to equipment installed in the Premises. If requested by Tenant, Landlord shall attempt to obtain extended warranties from manufacturers and suppliers of such equipment, but the cost of any such extended warranties shall be borne solely by Tenant. Landlord shall promptly undertake and complete, or cause to be completed, all punch list items in a manner that does not materially adversely affect Tenant's use of the Premises for the Permitted Use.

(f) **Commencement Date Delay.** Except as otherwise provided in the Lease, Delivery of the Premises shall occur when the Tenant Improvements have been Substantially Completed, except to the extent that completion of the Tenant Improvements shall have been actually delayed by any one or more of the following causes ("**Tenant Delay**"):

(i) Tenant's Representative was not available to give or receive any Communication or to take any other action required to be taken by Tenant hereunder;

- (ii) Tenant's request for Change Requests (as defined in Section 4(a) below) whether or not any such Change Requests are actually performed;
- (iii) Construction of any Change Requests;
- (iv) Tenant's request for materials, finishes or installations requiring unusually long lead times provided that Landlord has advised Tenant of such long lead time items and Tenant continued to require such long lead time items;
- (v) Tenant's delay in reviewing, revising or approving plans and specifications beyond the periods set forth herein;
- (vi) Tenant's delay in providing information critical to the normal progression of the Project. Tenant shall provide such information as soon as reasonably possible, but in no event longer than 3 business days after receipt of any request for such information from Landlord;
- (vii) Tenant's delay in making payments to Landlord for Excess TI Costs (as defined in Section 5(c) below); or
- (viii) Any other act or omission by Tenant or any Tenant Party (as defined in the Lease), or persons employed by any of such persons.

If Delivery is delayed for any of the foregoing reasons, then Landlord shall cause the TI Architect to certify the date on which the Tenant Improvements would have been completed but for such Tenant Delay and such certified date shall be the date of Delivery.

4. Changes. Any changes requested by Tenant to the Tenant Improvements after the delivery and approval by Landlord of the TI Design Drawings shall be requested and instituted in accordance with the provisions of this Section 4 and shall be subject to the written approval of Landlord and the TI Architect, such approval not to be unreasonably withheld, conditioned or delayed.

(a) **Tenant's Request For Changes.** If Tenant shall request changes to the Tenant Improvements ("**Changes**"), Tenant shall request such Changes by notifying Landlord in writing in substantially the same form as the AIA standard change order form (a "**Change Request**"), which Change Request shall detail the nature and extent of any such Change. Such Change Request must be signed by Tenant's Representative. Landlord shall, before proceeding with any Change, use commercially reasonable efforts to respond to Tenant as soon as is reasonably possible with an estimate of: (i) the time it will take, and (ii) the architectural and engineering fees and costs that will be incurred, to analyze such Change Request (which costs shall be paid by Tenant to the extent actually incurred, whether or not such change is

implemented). Landlord shall thereafter submit to Tenant in writing, within 5 business days of receipt of the Change Request (or such longer period of time as is reasonably required depending on the extent of the Change Request), an analysis of the additional cost or savings involved, including, without limitation, architectural and engineering costs and the period of time, if any, that the Change will extend the date on which the Tenant Improvements or Base Building Work will be Substantially Complete. Any such delay in the completion of the Tenant Improvements or Base Building Work caused by a Change, including any suspension of the Tenant Improvements work and/or Base Building Work while any such Change is being evaluated and/or designed, shall be Tenant Delay.

(b) **Implementation of Changes.** If Tenant: (i) approves in writing the cost or savings and the estimated extension in the time for completion of the Tenant Improvements and Base Building Work, if any, and (ii) deposits with Landlord any Excess TI Costs required in connection with such Change, Landlord shall cause the approved Change to be instituted. Notwithstanding any approval or disapproval by Tenant of any estimate of the delay caused by such proposed Change, the TI Architect's determination of the amount of Tenant Delay in connection with such Change shall be final and binding on Landlord and Tenant.

5. Excess TI Costs. Landlord shall pay for the design, permits and construction costs in connection with the construction of the Tenant Improvements and Base Building Work, including, without limitation, the cost of electrical power and other utilities used in connection with the construction of the Tenant Improvements and Base Building Work, the cost of preparing the TI Design Drawings and TI Construction Drawings, except that Tenant shall be solely responsible for paying Landlord for all costs resulting from Tenant Delays, Changes and Minor Variations resulting from any request by Tenant for modifications to the Tenant Improvements or Base Building Work. The costs resulting from Tenant Delays, Changes and such Minor Variations are referred to as "**Excess TI Costs**". Landlord shall have no obligation to bear any portion of the Excess TI Costs. If Tenant fails to pay Landlord within 10 days after demand for any Excess TI Costs, Landlord shall have all of the rights and remedies set forth in the Lease for nonpayment of Rent (including, but not limited to, the right to interest at the Default Rate and the right to assess a late charge). For purposes of any litigation instituted with regard to such amounts, those amounts will be deemed Rent under the Lease. Notwithstanding anything to the contrary contained herein, Landlord shall not be responsible for the purchase or installation of any furniture, personal property or other non-Building system materials or equipment, including, but not limited to, Tenant's voice or data cabling, non-ducted biological safety cabinets and other scientific equipment not incorporated into the Tenant Improvements.

6. Tenant Access.

(a) **Tenant's Access Rights.** Landlord hereby agrees to permit Tenant access, at Tenant's sole risk and expense, to the Building (i) 30 days prior to the Target Commencement Date to perform any work ("**Tenant's Work**") required by Tenant other than the Tenant Improvements, provided that such Tenant's Work is coordinated with the TI Architect and the general contractor, and complies with the Lease and all other reasonable restrictions and conditions Landlord may impose, and (ii) prior to the completion of the Tenant Improvements, to

inspect and observe work in process; all such access shall be during normal business hours or at such other times as are reasonably designated by Landlord. Notwithstanding the foregoing, Tenant shall have no right to enter onto the Premises or the Project unless and until Tenant shall deliver to Landlord evidence reasonably satisfactory to Landlord demonstrating that any insurance reasonably required by Landlord in connection with such pre-commencement access (including, but not limited to, any insurance that Landlord may require pursuant to the Lease) is in full force and effect. Any entry by Tenant shall comply with all established safety practices of Landlord's contractor and Landlord until completion of the Tenant Improvements and acceptance thereof by Tenant.

(b) **No Interference.** Neither Tenant nor any Tenant Party (as defined in the Lease) shall interfere with the performance of work on the Tenant Improvements or performance of the Base Building Work, nor with any inspections or issuance of final approvals by applicable Governmental Authorities, and upon any such interference, Landlord shall have the right to exclude Tenant and any Tenant Party from the Premises and the Project until Substantial Completion of the Tenant Improvements and Base Building Work. Tenant agrees to take such steps as may be required, or as otherwise directed by Landlord, with respect to contractors and subcontractors performing any Alterations to ensure that no labor disruption, strikes, pickets, protests or other similar labor actions occur on or about the Premises in connection with the performance of any of Tenant's Work.

(c) **No Acceptance of Premises.** The fact that Tenant may, with Landlord's consent, enter into the Project prior to the date the Tenant Improvements are Substantially Complete for the purpose of performing Tenant's Work shall not be deemed an acceptance by Tenant of possession of the Premises, but in such event Tenant shall defend with counsel reasonably acceptable by Landlord, indemnify and hold Landlord harmless from and against any loss of or damage to Tenant's property, completed work, fixtures, equipment, materials or merchandise, and from liability for death of, or injury to, any person, caused by the act or omission of Tenant or any Tenant Party.

7. Miscellaneous.

(a) **Consents.** Whenever consent or approval of either party is required under this Work Letter, that party shall not unreasonably withhold, condition or delay such consent or approval, unless expressly set forth herein to the contrary.

(b) **Modification.** No modification, waiver or amendment of this Work Letter or of any of its conditions or provisions shall be binding upon Landlord or Tenant unless in writing signed by Landlord and Tenant.

(c) **Default.** Notwithstanding anything set forth herein or in the Lease to the contrary, Landlord shall not have any obligation to perform any work hereunder or to fund any portion of the Tenant Improvements during any period Tenant is in Default under the Lease.

Exhibit #1 to Work Letter

TI Design Drawings

**[13 pages attached, consisting of:
TI Design Drawing (2 pages)
TI Finish Schedule (3 pages)
MEP Basis of Design (3 pages)
HVAC Zoning Plan (1 page)
Equipment Matrix (4 pages)]**

Exhibit #2 to Work Letter

Plans and Specifications for Base Building Work

**[9 pages attached, consisting of:
Landlord/Tenant Turnkey Scope Allocation Matrix (5 pages) and
Plans and Specifications for Base Building Work (4 pages)]**

EXHIBIT G TO LEASE

ACKNOWLEDGMENT OF COMMENCEMENT DATE

This **ACKNOWLEDGMENT OF COMMENCEMENT DATE** is made as of this day of , 20 between ARE-MA Region No. 38, LLC, a Delaware limited liability company (“**Landlord**”), and DeNovo Therapeutics, Inc., a Delaware corporation (“**Tenant**”), and is attached to and made a part of the Lease dated as of , 20 (the “**Lease**”), by and between Landlord and Tenant. Any initially capitalized terms used but not defined herein shall have the meanings given them in the Lease.

Landlord and Tenant hereby acknowledge and agree, for all purposes of the Lease, that the Commencement Date of the Term of the Lease is , 2010 and the termination date of the Term of the Lease shall be midnight on , 20 . In case of a conflict between this Acknowledgment of Commencement Date and the Lease, this Acknowledgment of Commencement Date shall control for all purposes.

IN WITNESS WHEREOF, Landlord and Tenant have executed this ACKNOWLEDGMENT OF COMMENCEMENT DATE to be effective on the date first above written.

TENANT:

DENOVO THERAPEUTICS, INC.,
a Delaware corporation

By: _____

Name: _____

Title: _____

LANDLORD:

ARE-MA REGION NO. 38, LLC, a Delaware limited liability corporation

By: Alexandria Real Estate Equities, L.P.,
a Delaware limited partnership, member

By: ARE-QRS Corp., a Maryland corporation,
general partner

By: _____

Name: _____

Title: _____

EXHIBIT H TO LEASE

TENANT'S PERSONAL PROPERTY

1. Amsco Eagle Model 3021 Gravity Steam Sterilizer (20x20x38), or similar make and model autoclave.
2. Miele G7883AE Laboratory Glassware Washer (with half mobile injector basket), or similar make and model glassware washer.

EXHIBIT I TO LEASE

RULES AND REGULATIONS

1. The sidewalk, entries, and driveways of the Project shall not be obstructed by Tenant, or any Tenant Party, or used by them for any purpose other than ingress and egress to and from the Premises.
2. Tenant shall not place any objects, including antennas, outdoor furniture, etc., in the parking areas, landscaped areas or other areas outside of its Premises, or on the roof of the Project.
3. Except for animals assisting the disabled, no animals shall be allowed in the offices, halls, or corridors in the Project.
4. Tenant shall not disturb the occupants of the Project or adjoining buildings by the use of any radio or musical instrument or by the making of loud or improper noises.
5. If Tenant desires telegraphic, telephonic or other electric connections in the Premises, Landlord or its agent will direct the electrician as to where and how the wires may be introduced; and, without such direction, no boring or cutting of wires will be permitted. Any such installation or connection shall be made at Tenant's expense.
6. Tenant shall not install or operate any steam or gas engine or boiler, or other mechanical apparatus in the Premises, except as specifically approved in the Lease. The use of oil, gas or inflammable liquids for heating, lighting or any other purpose is expressly prohibited. Explosives or other articles deemed extra hazardous shall not be brought into the Project.
7. Parking any type of recreational vehicles is specifically prohibited on or about the Project. Except for the overnight parking of operative vehicles, no vehicle of any type shall be stored in the parking areas at any time. In the event that a vehicle is disabled, it shall be removed within 48 hours. There shall be no "For Sale" or other advertising signs on or about any parked vehicle. All vehicles shall be parked in the designated parking areas in conformity with all signs and other markings. All parking will be open parking, and no reserved parking, numbering or lettering of individual spaces will be permitted except as specified by Landlord.
8. Tenant shall maintain the Premises free from rodents, insects and other pests.
9. Landlord reserves the right to exclude or expel from the Project any person who, in the judgment of Landlord, is intoxicated or under the influence of liquor or drugs or who shall in any manner do any act in violation of the Rules and Regulations of the Project.
10. Tenant shall not cause any unnecessary labor by reason of Tenant's carelessness or indifference in the preservation of good order and cleanliness. Landlord shall not be responsible to Tenant for any loss of property on the Premises, however occurring, or for any damage done to the effects of Tenant by the janitors or any other employee or person.

11. Tenant shall give Landlord prompt notice of any defects in the water, lawn sprinkler, sewage, gas pipes, electrical lights and fixtures, heating apparatus, or any other service equipment affecting the Premises.
12. Tenant shall not permit storage outside the Premises, including without limitation, outside storage of trucks and other vehicles, or dumping of waste or refuse or permit any harmful materials to be placed in any drainage system or sanitary system in or about the Premises.
13. All moveable trash receptacles provided by the trash disposal firm for the Premises must be kept in the trash enclosure areas, if any, provided for that purpose.
14. No auction, public or private, will be permitted on the Premises or the Project.
15. No awnings shall be placed over the windows in the Premises except with the prior written consent of Landlord.
16. The Premises shall not be used for lodging, sleeping or cooking (except that Tenant may use microwave ovens, toasters and coffee makers in the Premises for the benefit of Tenant's employees and contractors in an area designated for such items, but only if the use thereof is at all times supervised by the individual using the same) or for any immoral or illegal purposes or for any purpose other than that specified in the Lease. No gaming devices shall be operated in the Premises.
17. Tenant shall ascertain from Landlord the maximum amount of electrical current which can safely be used in the Premises, taking into account the capacity of the electrical wiring in the Project and the Premises and the needs of other tenants, and shall not use more than such safe capacity. Landlord's consent to the installation of electric equipment shall not relieve Tenant from the obligation not to use more electricity than such safe capacity.
18. Tenant assumes full responsibility for protecting the Premises from theft, robbery and pilferage.
19. Tenant shall not install or operate on the Premises any machinery or mechanical devices of a nature not directly related to Tenant's ordinary use of the Premises and shall keep all such machinery free of vibration, noise and air waves which may be transmitted beyond the Premises.

EXHIBIT J TO LEASE

NOTIFICATION OF THE PRESENCE OF ASBESTOS CONTAINING MATERIALS

This notification provides certain information about asbestos within or about the Premises at 215 First Street, Cambridge, MA (“**Building**”).

Historically, asbestos was commonly used in building products used in the construction of buildings across the country. Asbestos-containing building products were used because they are fire-resistant and provide good noise and temperature insulation. Because of their prevalence, asbestos-containing materials, or ACMs, are still sometimes found in buildings today.

No ACMs were identified in an asbestos survey of the building conducted in 2007. However, to avoid damage, several materials were not sampled and are presumed asbestos-containing materials or PACMs as listed in the following table:

<u>Material Description</u>	<u>Material Location</u>
Ceramic tile adhesive and grout	Throughout restrooms; ground floor hallways; first floor lobby and hallways
Built-up roofing beneath rubber	Throughout roof
Flashing cement	Roof
Flex connectors on HVAC units	Roof

The PACMs described above were observed to be in good condition and may be managed in place. Because ACMs may be present within or about the Building, we have hired an independent environmental consulting firm to prepare an operations and maintenance program (“**O&M Program**”). The O&M Program is designed to minimize the potential of any harmful asbestos exposure to any person within or about the Building. The O&M Program includes a description of work methods to be taken in order to maintain any ACMs or PACMs within or about the Building in good condition and to prevent any significant disturbance of such ACMs or PACMs. Appropriate personnel receive regular periodic training on how to properly administer the O&M Program.

The O&M Program describes the risks associated with asbestos exposure and how to prevent such exposure through appropriate work practices. ACMs and PACMs generally are not thought to be a threat to human health unless asbestos fibers are released into the air and inhaled. This does not typically occur unless (1) the ACMs are in a deteriorating condition, or (2) the ACMs have been significantly disturbed (such as through abrasive cleaning, or maintenance or renovation activities). If inhaled, asbestos fibers can accumulate in the lungs and, as exposure increases, the risk of disease (such as asbestosis or cancer) increases. However, measures to minimize exposure, and consequently minimize the accumulation of asbestos fibers, reduce the risks of adverse health effects.

The O&M Program describes a number of activities that should be avoided in order to prevent a release of asbestos fibers. In particular, you should be aware that some of the activities which may present a health risk include moving, drilling, boring, or otherwise disturbing ACMs. Consequently, such activities should not be attempted by any person not qualified to handle ACMs.

The O&M Program is available for review during regular business hours at Landlord's office located at 700 Technology Square, Suite 302, Cambridge, MA 02139.

FIRST AMENDMENT TO LEASE

THIS FIRST AMENDMENT TO LEASE (this "**First Amendment**") is made as of November 30, 2013, by and between **ARE-MA REGION NO. 38, LLC**, a Delaware limited liability company ("**Landlord**"), and **ELEVEN BIOTHERAPEUTICS, INC.**, a Delaware corporation ("**Tenant**") formerly known as Denovo Therapeutics, Inc., a Delaware corporation.

RECITALS

A. Landlord and Tenant are now parties to that certain Lease Agreement dated as of January 14, 2010 (the "**Lease**"). Pursuant to the Lease, Tenant leases certain premises containing approximately 17,484 rentable square feet ("**Original Premises**"), in a building located at 215 First Street, Cambridge, Massachusetts. The Original Premises are more particularly described in the Lease. Capitalized terms used herein without definition shall have the meanings defined for such terms in the Lease.

B. The Base Term of the Lease is scheduled to expire on November 30, 2013.

C. Landlord and Tenant desire, subject to the terms and conditions set forth below, to amend the Lease to, among other things, (i) extend the Base Term of the Lease through January 31, 2016, and (ii) reflect the surrender of a portion of the Premises as shown on **Exhibit A** attached hereto ("**Surrender Premises**") on the date that is 5 days after the Substantial Completion (as defined in the Work Letter attached hereto as **Exhibit B**) of Landlord's Work (as defined in the Work Letter attached hereto as **Exhibit B**) ("**Surrender Date**").

NOW, THEREFORE, in consideration of the foregoing Recitals, which are incorporated herein by this reference, the mutual promises and conditions contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant hereby agree to amend the Lease as follows:

- 1. Extension of Base Term.** Notwithstanding anything to the contrary contained in the Lease, the Base Term (except with respect to the Surrender Premises) is hereby extended until January 31, 2016.
- 2. Premises and Rentable Area of Premises.** Commencing on the date that is 10 days after the date Landlord's Work is Substantially Completed (the "**Reduced Premises Commencement Date**"), the definitions of "**Premises**" and "**Rentable Area of Premises**" on Page 1 of the Lease are deleted in their entirety and replaced with the following:

"**Premises:** That portion of the Building (as defined below), located on the 4th floor of the Building and containing approximately 11,022 rentable square feet, as determined by Landlord, as shown on **Exhibit A.**"

"**Rentable Area of Premises:** 11,022 sq. ft."

Commencing on the Reduced Premises Commencement Date, **Exhibit A** attached to the Lease is modified to exclude the Surrender Premises.

- 3. Base Rent.** Tenant shall continue paying Base Rent as provided in the Lease through November 30, 2013. Commencing (i) on December 1, 2013, through the last day of the 12th month following the Reduced Premises Commencement Date, Tenant shall pay Base Rent in the amount of \$34,640 per month, and (ii) on the first anniversary of the Reduced Premises Commencement Date through January 31, 2016, Tenant shall pay Base Rent in the amount of \$35,361.66 per month.

4. **Tenant's Share.** Commencing on the Reduced Premises Commencement Date, the defined terms "**Tenant's Share**" and "**Tenant's Percentage Share (Science Facility)**" on page 1 of the Lease are deleted in their entirety and replaced with the following:

"**Tenant's Share:** 3.01%"

"**Tenant's Percentage Share (Science Facility):** 12.69%"

Notwithstanding anything to the contrary contained in the Lease or in this First Amendment, commencing on December 1, 2013, through the day immediately preceding the Reduced Premises Commencement Date, Tenant shall be required to pay (i) Operating Expenses with respect to only 11,022 rentable square feet of the Premises (which is equal to 3.01%), and (ii) Tenant's Percentage Share (Science Facility) with respect to only 11,022 rentable square feet of the Premises (which is equal to 12.69%).

5. **Security Deposit.** Commencing on the Expansion Premises Commencement Date, the defined term "**Security Deposit**" on Page 1 of the Lease is deleted in its entirety and replaced with the following:

"**Security Deposit:** \$93,687"

Landlord currently holds a Security Deposit of \$134,044 under the Lease. Concurrently with Tenant's delivery of a signed original of this First Amendment to Landlord, Tenant shall deliver to Landlord an amended Letter of Credit which decreases the amount of the existing Letter of Credit being held by Landlord to \$93,687 or a replacement Letter of Credit in the amount of \$93,687. If Tenant delivers to Landlord a replacement Letter of Credit pursuant to the immediately preceding sentence, then Landlord shall return the original Letter of Credit to Tenant within a reasonable period thereafter.

6. **Landlord's Work.** Landlord shall perform Landlord's Work in the Premises pursuant to the Work Letter attached hereto as **Exhibit B**. Tenant acknowledges that Landlord shall require access to the Premises after the date of this First Amendment in order to complete Landlord's Work. Landlord and its contractors and agents shall have the right to enter the Premises to complete Landlord's Work upon reasonable prior written notice to Tenant and Tenant shall reasonably cooperate with Landlord in connection with the same. Tenant acknowledges that Landlord's completion of Landlord's Work may adversely affect Tenant's use and occupancy of the Premises. In connection with Landlord's performance of Landlord's Work, Landlord shall use reasonable efforts to minimize interference with Tenant's use of the Premises for the Permitted use. Tenant waives all claims against Landlord in connection with the construction of Landlord's Work including, without limitation, claims for rent abatement.

7. **Surrender of the Surrender Premises.** The Lease with respect to the Surrender Premises shall terminate as provided for in the Lease on the Surrender Date. Tenant shall voluntarily surrender the Surrender Premises on or before such date in the condition which Tenant is required to surrender the Premises as of the expiration of the Lease and in compliance with the surrender requirements set forth in the Lease. From and after the Surrender Date, Tenant shall have no further rights or obligations of any kind with respect to the Surrender Premises. Notwithstanding the foregoing, those provisions (i) of Section 5 of the Lease providing for the reconciliation of Operating Expenses, and (ii) which, by their terms, survive the termination of the Lease shall survive the surrender of the Surrender Premises and termination of the Lease with respect to the Surrender Premises as provided for herein. Nothing herein shall excuse Tenant from its obligations under the Lease with respect to the Surrender Premises prior to the Surrender Date.

8. **Right to Extend.** As of the date of this First Amendment, Section 35 of the Lease is hereby deleted in its entirety and replaced with the following:

“35. **Right to Extend.** Tenant shall have the right to extend the Term of the Lease upon the following terms and conditions:

(a) **Extension Rights.** Tenant shall have 1 right (an “**Extension Right**”) to extend the term of the Lease through April 30, 2018 (an “**Extension Term**”) on the same terms and conditions as the Lease (other than with respect to Base Rent or any Work Letter) by giving Landlord written notice of its election to exercise the Extension Right at least 9 months prior to the expiration of the Base Term of the Lease.

Upon the commencement of the Extension Term, Base Rent shall be payable at the Market Rate (as defined below). Base Rent shall thereafter be adjusted on each annual anniversary of the commencement of such Extension Term by 3%. As used herein, “**Market Rate**” shall mean the then market rental rate as determined by Landlord and agreed to by Tenant for combined laboratory and office space in East Cambridge of comparable age, quality (including all Landlord’s Work, Alterations and other improvements), level of finish and proximity to amenities and public transit; provided, however, that in no event shall the Market Rate be less the Base Rent payable as of the date immediately preceding the commencement of the Extension Term.

The Market Rate shall initially be determined by Landlord and submitted to Tenant for its consideration. If, on or before the date which is 180 days prior to the expiration of the Base Term of the Lease, Tenant has not agreed with Landlord’s determination of the Market Rate during the Extension Term after negotiating in good faith, Tenant shall be deemed to have elected arbitration as described in Section 35(b) below. Tenant acknowledges and agrees that, if Tenant has elected to exercise the Extension Right by delivering notice to Landlord as required in this Section 35(a), Tenant shall have no right thereafter to rescind or elect not to extend the term of the Lease for the Extension Term.

(b) **Arbitration.**

(i) Within 10 days of Tenant’s notice to Landlord of its election (or deemed election) to arbitrate Market Rate, each party shall deliver to the other a proposal containing the Market Rate that the submitting party believes to be correct (“**Extension Proposal**”). If either party fails to timely submit an Extension Proposal, the other party’s submitted proposal shall determine the Base Rent for the Extension Term. If both parties submit Extension Proposals, then Landlord and Tenant shall meet within 7 days after delivery of the last Extension Proposal and make a good faith attempt to mutually appoint a single Arbitrator (and defined below) to determine the Market Rate. If Landlord and Tenant are unable to agree upon a single Arbitrator, then each shall, by written notice delivered to the other within 10 days after the meeting, select an Arbitrator. If either party fails to timely give notice of its selection for an Arbitrator, the other party’s submitted proposal shall determine the Base Rent for the Extension Term. The 2 Arbitrators so appointed shall, within 5 business days after their appointment, appoint a third Arbitrator. If the 2 Arbitrators so selected cannot agree on the selection of the third Arbitrator within the time above specified, then either party, on behalf of both parties, may request such appointment of such third Arbitrator by application to any state court of general jurisdiction in the jurisdiction in which the Premises are located, upon 10 days prior written notice to the other party of such intent.

(ii) The decision of the Arbitrator(s) shall be made within 30 days after the appointment of a single Arbitrator or the third Arbitrator, as applicable. The decision of the single Arbitrator shall be final and binding upon the parties. The average of the two closest Arbitrators in a three Arbitrator panel shall be final and binding upon the parties. Each party shall pay the fees and expenses of the Arbitrator appointed by or on behalf of such party and the fees and expenses of the third Arbitrator shall be borne equally by both parties. If the Market Rate are not determined by the first day of the Extension Term, then Tenant shall pay Landlord Base Rent in an amount equal to the Base Rent in effect immediately prior to the Extension Term and increased by the Rent Adjustment Percentage until such determination is made. After the

determination of the Market Rate, the parties shall make any necessary adjustments to such payments made by Tenant. Landlord and Tenant shall then execute an amendment recognizing the Market Rate for the Extension Term.

(iii) An “**Arbitrator**” shall be any person appointed by or on behalf of either party or appointed pursuant to the provisions hereof and: (i) shall be (A) a member of the American Institute of Real Estate Appraisers with not less than 10 years of experience in the appraisal of improved office and high tech industrial real estate in the greater Boston metropolitan area, or (B) a licensed commercial real estate broker with not less than 15 years experience representing landlords and/or tenants in the leasing of high tech or life sciences space in the greater Boston metropolitan area, (ii) devoting substantially all of their time to professional appraisal or brokerage work, as applicable, at the time of appointment and (iii) be in all respects impartial and disinterested.

(c) **Rights Personal.** The Extension Right is personal to Tenant and is not assignable without Landlord’s consent, which may be granted or withheld in Landlord’s sole discretion separate and apart from any consent by Landlord to an assignment of Tenant’s interest in the Lease, except that they may be assigned in connection with any Permitted Assignment of the Lease.

(d) **Exceptions.** Notwithstanding anything set forth above to the contrary, the Extension Right shall, at Landlord’s option, not be in effect and Tenant may not exercise the Extension Right:

(i) during any period of time that Tenant is in Default under any provision of the Lease; or

(ii) if Tenant has been in Default under any provision of the Lease 3 or more times, whether or not the Defaults are cured, during the 12 month period immediately prior to the date that Tenant intends to exercise the Extension Right, whether or not the Defaults are cured.

(iii) If Tenant (including any successor pursuant to one or more Permitted Assignment(s)) is not in occupancy of at least 75% of the entire Premises demised hereunder both at the time of the exercise of the Extension Right and at the time of the commencement date of the Extension Term.

(e) **No Extensions.** The period of time within which the Extension Right may be exercised shall not be extended or enlarged by reason of Tenant’s inability to exercise the Extension Right.

(f) **Termination.** The Extension Right shall, at Landlord’s option, terminate and be of no further force or effect even after Tenant’s due and timely exercise of the Extension Right, if, after such exercise, but prior to the commencement date of the Extension Term, (i) Tenant fails to timely cure any default by Tenant under the Lease; or (ii) Tenant has Defaulted 3 or more times during the period from the date of the exercise of the Extension Right to the date of the commencement of the Extension Term, whether or not such Defaults are cured.”

9. **Parking.** As of the Reduced Premises Commencement Date, Section 8 of the Lease is hereby deleted in its entirety and replaced with the following:

“8. **Parking.** Subject to all matters of record, Force Majeure, a Taking (as defined in Section 15 below) and the exercise by Landlord of its rights hereunder, Landlord shall make available to Tenant at then-current market rates from time to time a license for up to 11 parking spaces in the surface parking lots at the Project or at the “Brown Lot” at 100 Binney Street, Cambridge, Massachusetts, all of such parking spaces to be on a non-reserved basis; provided, however, that Tenant shall be required to pay for the number of parking spaces that Tenant elects to license

pursuant to this Section 8 (not to exceed 11 parking spaces). As of the Reduced Premises Commencement Date, the market parking rate for the parking spaces in such surface lots is \$235 per parking space per month. Tenant shall notify Landlord prior to the Reduced Premises Commencement Date as to how many parking spaces (not to exceed 11) that Tenant will license hereunder for the balance of the Term. Landlord shall not be responsible for enforcing Tenant's parking rights against any third parties, including other tenants of the Project. If all or a portion of the surface parking lots at the Project or the Brown Lot become unavailable due to construction at or around the Project, Landlord shall have the right, exercisable by notice to Tenant given at any time during the Term, to relocate during such construction period the parking spaces made available to Tenant hereunder to another location within a 7-minute walk of the Building; provided, however, that Tenant shall have the right, upon written notice to Landlord, not to use any of the relocated parking spaces during the construction period, in which case Tenant shall not be required to pay for any relocated parking spaces during such construction period."

10. **Signage.** In addition to the signage rights granted to Tenant pursuant to Section 33 of the Lease, signage bearing Tenant's name shall be inscribed, painted or affixed for Tenant by Landlord at the entrance of the Premises and on all of the tenant directories located at the Building, at the sole cost and expense of Landlord, and shall be of a size, color and type acceptable to Landlord.
11. **Right to Negotiate.** Notwithstanding anything to the contrary contained herein or in the Lease, as of the date of this First Amendment, Section 36 of the Lease is hereby deleted and is null and void and of no further force or effect.
12. **Brokers.** Landlord and Tenant each represents and warrants that it has not dealt with any broker, agent or other person (collectively, "**Broker**") in connection with the transaction reflected in this First Amendment and that no Broker brought about this transaction, other than Richards, Barry Joyce & Partners and Cushman & Wakefield. Landlord and Tenant each hereby agrees to indemnify and hold the other harmless from and against any claims by any Broker (other than the brokers named in this Section 12) claiming a commission or other form of compensation by virtue of having dealt with Tenant or Landlord, as applicable, with regard to this leasing transaction.
13. **Miscellaneous.**
 - a. This First Amendment is the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior and contemporaneous oral and written agreements and discussions. This First Amendment may be amended only by an agreement in writing, signed by the parties hereto.
 - b. This First Amendment is binding upon and shall inure to the benefit of the parties hereto and their respective successors and assigns.
 - c. This First Amendment may be executed in any number of counterparts, each of which shall be deemed an original, but all of which when taken together shall constitute one and the same instrument. The signature page of any counterpart may be detached therefrom without impairing the legal effect of the signature(s) thereon provided such signature page is attached to any other counterpart identical thereto except having additional signature pages executed by other parties to this First Amendment attached thereto.
 - d. Except as amended and/or modified by this First Amendment, the Lease is hereby ratified and confirmed and all other terms of the Lease shall remain in full force and effect, unaltered and unchanged by this First Amendment. In the event of any conflict between the provisions of this First Amendment and the provisions of the Lease, the provisions of this First Amendment shall prevail. Whether or not specifically amended by this First Amendment, all of the terms and provisions of the Lease are hereby amended to the extent necessary to give effect to the purpose and intent of this First Amendment.

[Signatures are on the next page.]

IN WITNESS WHEREOF, the parties hereto have executed this First Amendment as of the day and year first above written.

TENANT:

ELEVEN BIOTHERAPEUTICS, INC.,
a Delaware corporation

By: /s/ Abbie Celniker

Its: Chief Executive Officer

LANDLORD:

ARE-MA REGION NO. 38, LLC, a Delaware limited liability company

By: Alexandria Real Estate Equities, L.P.,
a Delaware limited partnership, managing member

By: ARE-QRS Corp., a Maryland corporation, general partner

By: /s/ Eric Johnson

Its: Vice President
Real Estate Legal Affairs

Exhibit A

Surrender Premises

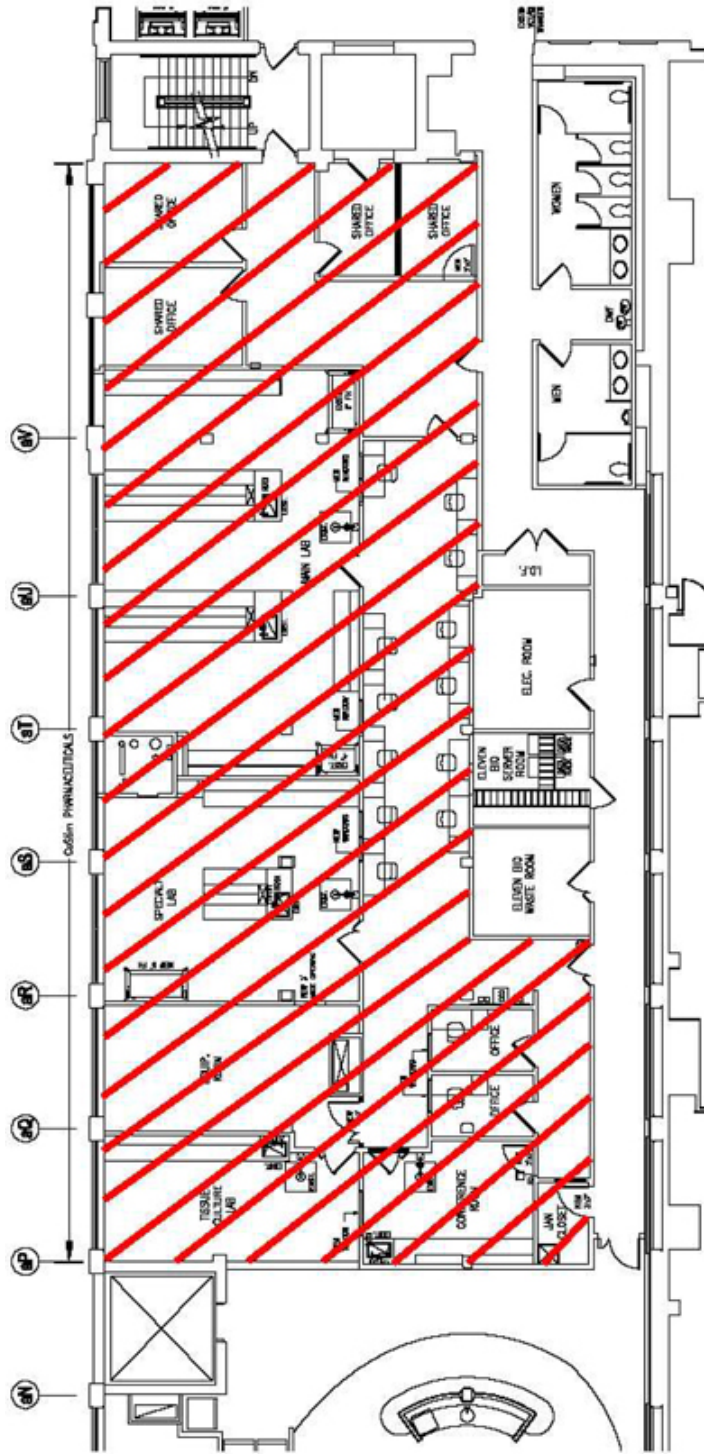


Exhibit B

Work Letter

THIS WORK LETTER dated November 30, 2013 (this "**Work Letter**") is incorporated into that certain Lease Agreement dated as of January 14, 2010, as amended by that certain First Amendment to Lease dated as of November 30, 2013, (as amended, the "**Lease**"), by and between **ARE-MA REGION NO. 38, LLC**, a Delaware limited liability company ("**Landlord**"), and **ELEVEN BIOTHERAPEUTICS, INC.**, a Delaware corporation ("**Tenant**"). Any initially capitalized terms used but not defined herein shall have the meanings given them in the Lease.

1. **General Requirements.**

(a) **Tenant's Authorized Representative.** Tenant designates John McCabe ("**Tenant's Representative**") as the only person authorized to act for Tenant pursuant to this Work Letter. Landlord shall not be obligated to respond to or act upon any request, approval, inquiry or other communication ("**Communication**") from or on behalf of Tenant in connection with this Work Letter unless such Communication is in writing from Tenant's Representative. Tenant may change Tenant's Representative at any time upon not less than 5 business days advance written notice to Landlord. Neither Tenant nor Tenant's Representative shall be authorized to direct Landlord's contractors in the performance of Landlord's Work (as hereinafter defined).

(b) **Landlord's Authorized Representative.** Landlord designates Jeff McComish and Joe Maguire (either such individual acting alone, "**Landlord's Representative**") as the only persons authorized to act for Landlord pursuant to this Work Letter. Tenant shall not be obligated to respond to or act upon any request, approval, inquiry or other Communication from or on behalf of Landlord in connection with this Work Letter unless such Communication is in writing from Landlord's Representative. Landlord may change either Landlord's Representative at any time upon not less than 5 business days advance written notice to Tenant. Landlord's Representative shall be the sole persons authorized to direct Landlord's contractors in the performance of Landlord's Work.

(c) **Architects, Consultants and Contractors.** Landlord and Tenant hereby acknowledge and agree that: (i) TRG Builders shall be the general contractor for the Tenant Improvements, (ii) any subcontractors for the Tenant Improvements shall be selected by Landlord, subject to Tenant's approval, which approval shall not be unreasonably withheld, conditioned or delayed, and (iii) R.E. Dineen shall be the architect (the "**TI Architect**") for the Tenant Improvements.

2. **Tenant Improvements.**

(a) **Tenant Improvements Defined.** As used herein, "**Tenant Improvements**" shall mean all improvements to the Premises of a fixed and permanent nature as shown on the TI Construction Drawings, as defined in Section 2(c) below. Other than Landlord's Work (as defined in Section 3(a) below, Landlord shall not have any obligation whatsoever with respect to the finishing of the Premises for Tenant's use and occupancy.

(b) **Tenant's Space Plans.** Landlord and Tenant acknowledge and agree that the plan prepared by the TI Architect attached to this Work Letter as **Schedule 1** (the "**Space Plan**") has been approved by both Landlord and Tenant. Landlord and Tenant further acknowledge and agree that any changes to the Space Plan that result in any delays or additional TI Costs (as defined in Section 5(a)) shall constitute a Change Request the cost of which changes shall be paid for by Tenant. Tenant shall be solely responsible for all costs incurred by Landlord to alter the Building (or Landlord's plans for the Building) as a result of Tenant's requested changes to the attached Space Plan.

(c) **Working Drawings.** Landlord shall cause the TI Architect to prepare and deliver to Tenant for review and comment construction plans, specifications and drawings for the Tenant

Improvements (“**TI Construction Drawings**”), which TI Construction Drawings shall be prepared substantially in accordance with the Space Plan. Tenant shall be solely responsible for ensuring that the TI Construction Drawings reflect Tenant’s requirements for the Tenant Improvements. Tenant shall deliver its written comments on the TI Construction Drawings to Landlord not later than 10 business days after Tenant’s receipt of the same; provided, however, that Tenant may not disapprove any matter that is consistent with the Space Plan without submitting a Change Request. Landlord and the TI Architect shall consider all such comments in good faith and shall, within 10 business days after receipt, notify Tenant how Landlord proposes to respond to such comments, but Tenant’s review rights pursuant to the foregoing sentence shall not delay the design or construction schedule for the Tenant Improvements. Any disputes in connection with such comments shall be resolved in accordance with Section 2(d) hereof. Provided that the design reflected in the TI Construction Drawings is consistent with the Space Plan, Tenant shall approve the TI Construction Drawings submitted by Landlord, unless Tenant submits a Change Request. Once approved by Tenant, subject to the provisions of Section 4 below, Landlord shall not materially modify the TI Construction Drawings except as may be reasonably required in connection with the issuance of the TI Permit (as defined in Section 3(b) below).

(d) **Approval and Completion.** Upon any dispute regarding the design of the Tenant Improvements, which is not settled within 10 business days after notice of such dispute is delivered by one party to the other, Tenant may make the final decision regarding the design of the Tenant Improvements, provided (i) Tenant acts reasonably and such final decision is either consistent with or a compromise between Landlord’s and Tenant’s positions with respect to such dispute, (ii) that all costs and expenses resulting from any such decision by Tenant shall be payable by Tenant, and (iii) Tenant’s decision will not affect the base Building, structural components of the Building or any Building systems. Any changes to the TI Construction Drawings following Landlord’s and Tenant’s approval of same requested by Tenant shall be processed as provided in Section 4 hereof.

3. **Performance of Landlord’s Work.**

(a) **Definition of Landlord’s Work.** As used herein, “**Landlord’s Work**” shall mean the work of constructing the Tenant Improvements.

(b) **Commencement and Permitting.** Landlord shall commence construction of the Tenant Improvements upon obtaining a building permit (the “**TI Permit**”) authorizing the construction of the Tenant Improvements consistent with the TI Construction Drawings approved by Tenant. Landlord shall use reasonable efforts to obtain the TI Permit within a reasonable period after the date of this Work Letter. The cost of obtaining the TI Permit shall be payable by Landlord. Tenant shall assist Landlord in obtaining the TI Permit. If any Governmental Authority having jurisdiction over the construction of Landlord’s Work or any portion thereof shall impose terms or conditions upon the construction thereof that: (i) are inconsistent with Landlord’s obligations hereunder, (ii) increase the cost of constructing Landlord’s Work, or (iii) will materially delay the construction of Landlord’s Work, Landlord and Tenant shall reasonably and in good faith seek means by which to mitigate or eliminate any such adverse terms and conditions.

(c) **Completion of Landlord’s Work.** Landlord shall substantially complete or cause to be substantially completed Landlord’s Work in a good and workmanlike manner, in accordance with the TI Permit subject, in each case, to Minor Variations and normal “punch list” items of a non-material nature that do not interfere with the use of the Premises and shall obtain a permit card issued by the applicable Governmental Authority or verbal approval from the building inspector permitting occupancy of the Premises (“**Substantial Completion**” or “**Substantially Complete**”). Landlord shall use reasonable efforts to Substantially Complete Landlord’s Work by February 28, 2014. Upon Substantial Completion of Landlord’s Work, Landlord shall require the TI Architect and the general contractor to execute and deliver, for the benefit of Tenant and Landlord, a Certificate of Substantial Completion in the form of the American Institute of Architects (“**AIA**”) document G704. Landlord shall secure the MWRA Waste Water Permit required in connection with the acid neutralization system serving the Premises, but shall not be required to secure any permits, licenses or other governmental approvals required to be obtained in connection with Tenant’s operations in the Premises. For purposes of this Work Letter, “**Minor Variations**” shall

mean any modifications reasonably required: (i) to comply with all applicable Legal Requirements and/or to obtain or to comply with any required permit (including the TI Permit); (ii) to comply with any request by Tenant for modifications to Landlord's Work; (iii) to comport with good design, engineering, and construction practices that are not material; or (iv) to make reasonable adjustments for field deviations or conditions encountered during the construction of Landlord's Work.

(d) **Selection of Materials.** Where more than one type of material or structure is indicated on the TI Construction Drawings approved by Landlord and Tenant, the option will be selected at Landlord's sole and absolute subjective discretion. As to all building materials and equipment that Landlord is obligated to supply under this Work Letter, Landlord shall select the manufacturer thereof in its sole and absolute subjective discretion.

(e) **Delivery of the Tenant Improvements.** When the Tenant Improvements are Substantially Complete, subject to the remaining terms and provisions of this Section 3(e), Tenant shall accept the Tenant Improvements. Tenant's taking possession and acceptance of the Tenant Improvements shall not constitute a waiver of: (i) any warranty with respect to workmanship (including installation of equipment) or material (exclusive of equipment provided directly by manufacturers), (ii) any non-compliance of Landlord's Work with applicable Legal Requirements, or (iii) any claim that Landlord's Work was not completed substantially in accordance with the TI Construction Drawings (subject to Minor Variations and such other changes as are permitted hereunder) (collectively, a "**Construction Defect**"). Tenant shall have one year after Substantial Completion within which to notify Landlord of any such Construction Defect discovered by Tenant, and Landlord shall use reasonable efforts to remedy or cause the responsible contractor to remedy any such Construction Defect within 30 days thereafter. Notwithstanding the foregoing, Landlord shall not be in default under the Lease if the applicable contractor, despite Landlord's reasonable efforts, fails to remedy such Construction Defect within such 30-day period, in which case Landlord shall continue to use reasonable efforts to remedy such Construction Defect.

Tenant shall be entitled to receive the benefit of all construction warranties and manufacturer's equipment warranties relating to equipment installed in the Premises. If requested by Tenant, Landlord shall attempt to obtain extended warranties from manufacturers and suppliers of such equipment, but the cost of any such extended warranties shall be borne solely by Tenant. Landlord shall promptly undertake and complete, or cause to be completed, all punch list items.

4. Changes. Any changes requested by Tenant to the Tenant Improvements shall be requested and instituted in accordance with the provisions of this Section 4 and shall be subject to the written approval of Landlord and the TI Architect, such approval not to be unreasonably withheld, conditioned or delayed.

(a) **Tenant's Request For Changes.** If Tenant shall request changes to the Tenant Improvements ("**Changes**"), Tenant shall request such Changes by notifying Landlord in writing in substantially the same form as the AIA standard change order form (a "**Change Request**"), which Change Request shall detail the nature and extent of any such Change. Such Change Request must be signed by Tenant's Representative. Landlord shall, before proceeding with any Change, use commercially reasonable efforts to respond to Tenant as soon as is reasonably possible with an estimate of: (i) the time it will take, and (ii) the architectural and engineering fees and costs that will be incurred, to analyze such Change Request (which costs shall be paid by Tenant to the extent actually incurred, whether or not such change is implemented). Landlord shall thereafter submit to Tenant in writing, within 5 business days of receipt of the Change Request (or such longer period of time as is reasonably required depending on the extent of the Change Request), an analysis of the additional cost or savings involved, including, without limitation, architectural and engineering costs and the period of time, if any, that the Change will extend the date on which Landlord's Work will be Substantially Complete. Any such delay in the completion of Landlord's Work caused by a Change, including any suspension of Landlord's Work while any such Change is being evaluated and/or designed, shall be a delay caused by Tenant.

(b) **Implementation of Changes.** If Tenant: (i) approves in writing the cost or savings and the estimated extension in the time for completion of Landlord's Work, if any, and (ii) deposits with Landlord any Excess TI Costs required in connection with such Change, Landlord shall cause the approved Change to be instituted. Notwithstanding any approval or disapproval by Tenant of any estimate of the delay caused by such proposed Change, the TI Architect's determination of the amount of delay caused by Tenant in connection with such Change shall be final and binding on Landlord and Tenant.

5. **Costs.**

(a) **TI Costs.** Landlord shall be responsible for the payment of design, permits and construction costs in connection with the construction of the Tenant Improvements, including, without limitation, the cost of preparing the TI Construction Drawings and the Space Plan and Landlord's out-of-pocket expenses (collectively, "**TI Costs**"). Notwithstanding anything to the contrary contained herein, in no event shall Landlord be required to pay for any furniture, personal property or other non-Building system materials or equipment, including, but not limited to, Tenant's voice or data cabling, non-ducted biological safety cabinets and other scientific equipment not incorporated into the Tenant Improvements.

(b) **Excess TI Costs.** Notwithstanding anything to the contrary contained herein, Tenant acknowledges and agrees that Landlord shall have no responsibility for any costs arising from or related to Tenant's changes to the Space Plan or TI Construction Drawings, delays caused by Tenant, and the cost of Changes and Change Requests (collectively, "**Excess TI Costs**"). Tenant shall deposit with Landlord, as a condition precedent to Landlord's obligation to complete the Tenant Improvements, 100% of the Excess TI Costs. If Tenant fails to deposit any Excess TI Costs with Landlord, Landlord shall have all of the rights and remedies set forth in the Lease for nonpayment of Rent (including, but not limited to, the right to interest at the Default Rate and the right to assess a late charge). For purposes of any litigation instituted with regard to such amounts, those amounts will be deemed Rent under the Lease.

6. **Tenant Access.**

(a) **Tenant's Access Rights.** Landlord and Tenant acknowledge that, pursuant to the terms of the Lease, Tenant is occupying the Premises during the construction of Tenant Improvements. Tenant shall have the right to continue to occupy the Premises (except those portions of the Premises in which Tenant Improvements are being constructed while Tenant Improvements are being constructed in such portions), at Tenant's sole risk and expense, during the construction of the Tenant Improvements; provided, however, that Tenant's occupancy shall be coordinated with the TI Architect and the general contractor and shall be subject to Tenant's compliance with (i) applicable Legal Requirements, and (ii) all other reasonable restrictions which Landlord, the TI Architect or the general contractor may impose. Tenant shall cooperate with Landlord in connection with the performance of the Tenant Improvements.

(b) **No Interference.** Neither Tenant nor any Tenant Party (as defined in the Lease) shall interfere with the performance of Landlord's Work, nor with any inspections or issuance of final approvals by applicable Governmental Authorities, and upon any such interference, Landlord shall have the right to exclude Tenant and any Tenant Party from the portions of the Premises in which Landlord's Work is being performed until Substantial Completion of Landlord's Work.

(c) **No Acceptance of Landlord's Work.** The fact that Tenant is occupying the Premises prior to the date Landlord's Work is Substantially Complete shall not be deemed an acceptance by Tenant of Landlord's Work, but Tenant shall defend with counsel reasonably acceptable by Landlord, indemnify and hold Landlord harmless from and against any loss of or damage to Tenant's property, completed work, fixtures, equipment, materials or merchandise, and from liability for death of, or injury to, any person, caused by the act or omission of Tenant or any Tenant Party.

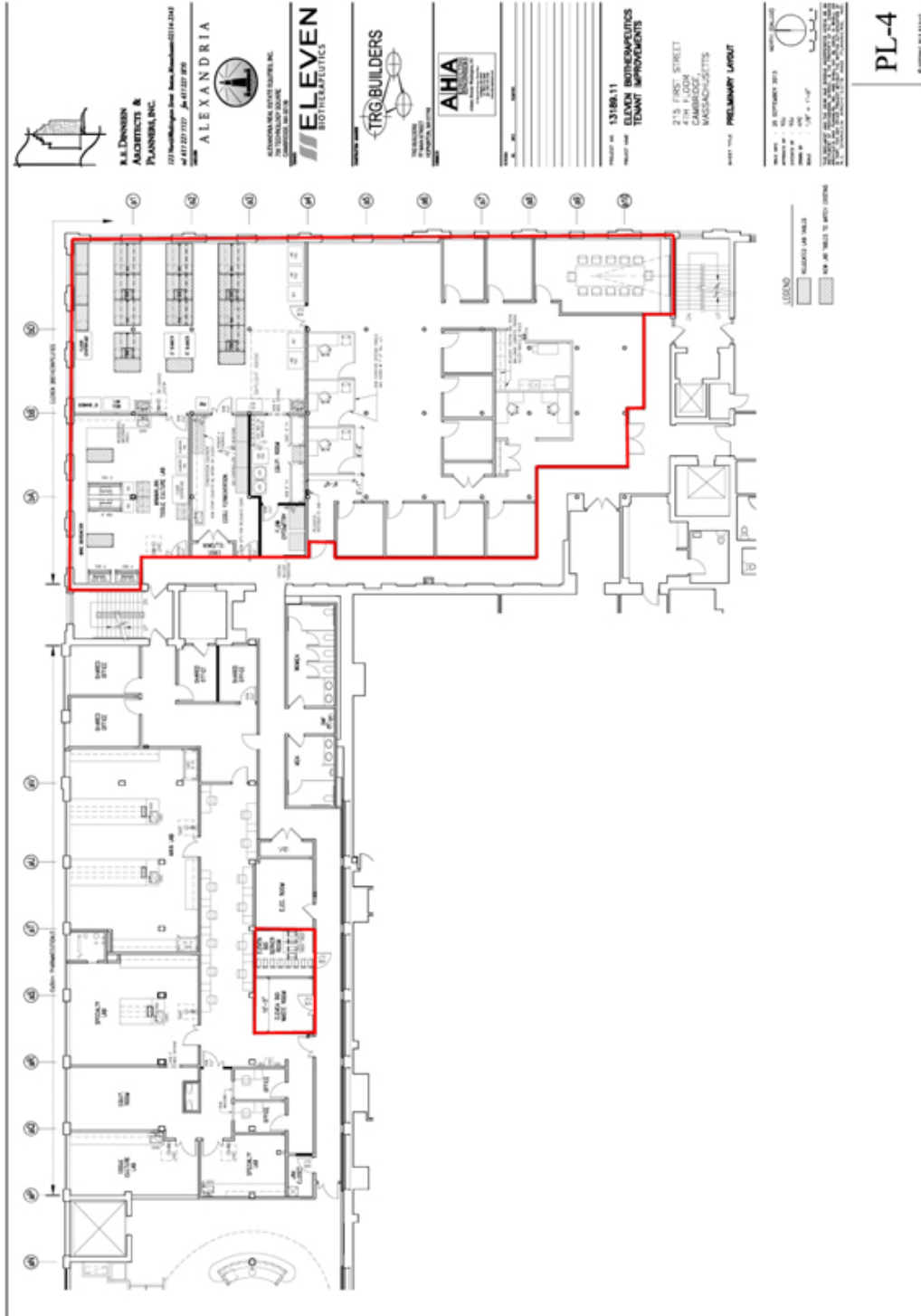
7. **Miscellaneous.**

(a) **Consents.** Whenever consent or approval of either party is required under this Work Letter, that party shall not unreasonably withhold, condition or delay such consent or approval, unless expressly set forth herein to the contrary.

(b) **Modification.** No modification, waiver or amendment of this Work Letter or of any of its conditions or provisions shall be binding upon Landlord or Tenant unless in writing signed by Landlord and Tenant.

Schedule 1

Space Plan



December 9, 2013

+1 617 526-6000 (t)

+1 617 526 5000 (f)

Via EDGAR Submission

Securities and Exchange Commission
Division of Corporation Finance
100 F Street, NE
Washington, DC 20549
Attention: Jeffrey P. Riedler

Re: Eleven Biotherapeutics, Inc.
Draft Registration Statement on Form S-1
Submitted November 7, 2013
CIK No. 0001485003

Ladies and Gentlemen:

On behalf of Eleven Biotherapeutics, Inc. (the “**Company**”), we are responding to the comments of the staff (the “**Staff**”) of the Securities and Exchange Commission contained in its letter dated December 4, 2013 (the “**Comment Letter**”), relating to the above referenced Draft Registration Statement on Form S-1 (the “**Registration Statement**”). The Company also is confidentially submitting a revised draft of the Registration Statement with this response letter.

Set forth below are the Company’s responses to the Staff’s comments. The responses set forth below are based upon information provided to Wilmer Cutler Pickering Hale and Dorr LLP by the Company. For convenience, the responses are keyed to the numbering of the comments and the headings used in the Comment Letter.

On behalf of the Company, we advise you as follows:

Form S-1**General**

1. *We note that there are a number of additional exhibits that still need to be filed. Please provide these exhibits as promptly as possible. Please note that we may have comments on these materials once they are provided.*

Response: The Company will file all exhibits as soon as practicable and acknowledges that the Staff may have further comments once these exhibits are provided.

2. *We note that you intend to seek confidential treatment for several of your exhibits. Please note that comments on your confidential treatment request will be sent under separate cover.*

Wilmer Cutler Pickering Hale and Dorr LLP, 60 State Street, Boston, Massachusetts 02109

Beijing Berlin Boston Brussels Frankfurt London Los Angeles New York Oxford Palo Alto Waltham Washington

Securities and Exchange Commission

December 9, 2013

Page 2

Response: The Company acknowledges the Staff's comment.

3. *Please confirm that the graphics included in your draft registration statement are the only graphics you will use in your prospectus. If those are not the only graphics, please provide any additional graphics prior to their use for our review.*

Response: Other than as included in the prospectus forming part of the Registration Statement, the Company does not currently intend to include any additional graphics. If the Company determines to include any additional graphic or other visual information in the prospectus, the Company will promptly provide such material to the Staff on a supplemental basis. The Company acknowledges that the Staff may have additional comments regarding this material.

4. *Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications. Similarly, please supplementally provide us with any research reports about you that are published or distributed in reliance upon Section 2(a)(3) of the Securities Act of 1933 added by Section 105(a) of the Jumpstart Our Business Startups Act by any broker or dealer that is participating or will participate in your offering.*

Response: The Company acknowledges the Staff's request and undertakes to comply with it as applicable. To date, neither the Company nor anyone authorized on its behalf has presented any written communications in reliance on Section 5(d) of the Securities Act to potential investors. In addition, to the Company's knowledge, to date, no broker or dealer that is participating or will participate in the Company's initial public offering has published or distributed a research report in reliance upon Section 2(a)(3) of the Securities Act.

5. *Please define the terms "in vitro" and "in vivo" the first time you use them and in the sixth paragraph of the section entitled "Competition" when you discuss the FDA issued draft bioequivalence guidance regarding Restasis.*

Response: In response to the Staff's comment, the Company has revised the disclosure on pages 3, 4, 84, 103 and 109 of the revised draft of the Registration Statement.

Summary

Company Overview, page 1

6. *You reference a “separate clinical trial conducted by your scientific founder using another IL-1 receptor antagonist” in the third paragraph of this section. Please revise your disclosure to identify this clinical trial.*

Response: In response to the Staff’s comment, the Company has revised the disclosure on page 1 of the revised draft of the Registration Statement.

Our Approach

EB-005 – a Novel IL-1 Receptor Antagonist

7. *We note your lack of disclosure regarding INDs related to EBI-005. Please disclose the date of filing, the filer and the indications covered by any EBI-005-related IND. If an IND has not been filed yet for EBI-005, please provide appropriate disclosure explaining why no IND has been filed.*

Response: In response to the Staff’s comment, the Company has revised the disclosure on pages 4 and 86 of the revised draft of the Registration Statement.

Risk Factors

8. *Please include an appropriately titled risk factor discussing your ability to use your net operating loss carryforwards and your federal and state research and development tax credit carryforwards. In doing so, please quantify the amount of your net operating loss carryforwards and tax credit carryforwards and provide the expiration dates for the carryforwards in the risk factor.*

Response: In response to the Staff’s comment, the Company has revised the disclosure on pages 42 and 43 of the revised draft of the Registration Statement to include the requested risk factor.

Risks Related to Our Financial Position and Need For Additional Capital

We will need substantial additional funding. If we are unable to raise capital..., page 12

9. *Please disclose the amount of your cash and cash equivalents in the third paragraph of this risk factor when you discuss how long these funds along with the proceeds of this offering will enable you to fund your business.*

Response: In response to the Staff's comment, the Company has revised the disclosure on pages 13 and 74 of the revised draft of the Registration Statement.

Risks Related to the Commercialization of Our Product Candidates

Even if EBI-005 or any other product candidate that we develop receives..., page 20

10. *We note that your statement, "Our estimates of the potential market opportunity for EBI-005 include several key assumptions based on our industry knowledge, industry publications, third-party research reports and other surveys." Please expand your disclosure in this risk factor to discuss these "key assumptions."*

Response: In response to the Staff's comment, the Company has revised the disclosure on page 21 of the revised draft of the Registration Statement to reflect the appropriate risk based on the Company's having obtained data from third party sources.

Risks Related to Our Common Stock and This Offering

We are an "emerging growth company," and the reduced disclosure requirements..., page 43

11. *We note your disclosure in this risk factor and in the section entitled "Emerging Growth Company Status" on page 68 that you have elected to not delay the adoption of new accounting standards. Please expand your disclosure in both sections to state that your election is irrevocable.*

Response: In response to the Staff's comment, the Company has revised the disclosure on pages 44 and 69 of the revised draft of the Registration Statement.

Business

Proof of Concept Clinical Trial with Anakinra, an IL-1 Blocker, page 83

12. *Please expand your disclosure in this section to provide the two different doses of anakinra that were used during the proof of concept clinical trial.*

Response: In response to the Staff's comment, the Company has revised the disclosure on page 85 of the revised draft of the Registration Statement.

13. *We note that you subsequently conducted additional, retrospective analysis of the individual questions of the OSDI and observed a statistically significant improvement from baseline in pain and discomfort. Please expand your disclosure to describe the additional, retrospective analysis that was done on the OSDI data. Similarly please expand your disclosure under the section entitled "Completed Phase 1b/2a Clinical Trial in Dry Eye Disease" to describe the additional, retrospective analyses that were done in that trial.*

Response: In response to the Staff's comment, the Company has revised the disclosure on pages 85 and 93 of the revised draft of the Registration Statement.

Planned Pivotal Phase 3 Clinical Program of EBI-005 for the Treatment of Dry Eye Disease

Planned Phase 3 Clinical Trial Endpoints, page 85

14. *Please define the term "immunogenicity" the first time you use it in the second paragraph of this section.*

Response: In response to the Staff's comment, the Company has revised the disclosure on page 87 of the revised draft of the Registration Statement.

Intellectual Property, page 102

15. *We note the list of your 19 material patent applications which you own or in-license. Please revise your disclosure to specify which patent applications you own and which ones are in-licensed. For the ones that are in-licensed, please disclose from whom you in- license these applications. Also, please specify for which U.S. patent applications you have foreign counterparts, and disclose the foreign jurisdictions where these counterparts are located and their anticipated expiration dates.*

Response: In response to the Staff's comment, the Company has revised the disclosure on pages 104 and 105 of the revised draft of the Registration Statement.

Transactions with Related Person

Indemnification Agreements, page 133

16. *Please file the indemnification agreements, or form of agreement, with your directors and executive officers as exhibits.*

Response: The Company will file the form of indemnification agreement to be entered into with the Company's directors and executive officers as soon as practicable.

Securities and Exchange Commission
December 9, 2013
Page 6

Shares Eligible For Future Sale

Lock-Up Agreements, page 143

17. *Please file the lock-up agreements as exhibits.*

Response: The Company notes that the form of lock-up agreement signed by the Company's directors, officers and stockholders, as referenced on page 147 of the revised draft of the Registration Statement, will be filed with the underwriting agreement as soon as practicable.

If you have any further questions or comments, or if you require any additional information, please contact the undersigned by telephone at (617) 526-6506 or facsimile at (617) 526-5000. Thank you for your assistance.

Very truly yours,

/s/ Richard A. Hoffman
Richard A. Hoffman, Partner

cc: Abbie C. Celniker, Ph.D.