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As filed with the Securities and Exchange Commission on November 4, 2013

Registration No. 333-191689

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

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**AMENDMENT NO. 2**

to  
**FORM S-1**  
REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933

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**Xencor, Inc.**

(Exact Name of Registrant as Specified in Its Charter)

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**Delaware**  
(State or Other Jurisdiction of  
Incorporation or Organization)

**2834**  
(Primary Standard Industrial  
Classification Code Number)

**20-1622502**  
(I.R.S. Employer  
Identification Number)

**111 West Lemon Avenue  
Monrovia, California 91016  
(626) 305-5900**

(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

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**Basil I. Dahiyat, Ph.D.**  
President and Chief Executive Officer  
Xencor, Inc.

**111 West Lemon Avenue  
Monrovia, California 91016  
(626) 305-5900**

(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

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

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended (the "Securities Act"), 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   
(Do not check if a  
smaller reporting company)

Smaller reporting company

**CALCULATION OF REGISTRATION FEE**

<b>Title of each class of securities to be registered</b>	<b>Amount to be registered(1)</b>	<b>Proposed maximum offering price per share(2)</b>	<b>Proposed maximum aggregate offering price(2)</b>	<b>Amount of registration fee</b>
Common Stock, \$0.01 par value per share	5,750,000	\$16.00	\$92,000,000	\$11,850(3)

(1) Includes 750,000 shares which the underwriters have the option to purchase from the registrant.

(2) Estimated solely for the purpose of calculating the amount of the registration fee in accordance with Rule 457(a) under the Securities Act. Includes the offering price of shares that the underwriters have the option to purchase to cover over-allotments, if any.

(3) \$8,887 previously paid.

The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment that specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange 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 we are not soliciting offers to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION DATED NOVEMBER 4, 2013

**PRELIMINARY PROSPECTUS**

5,000,000 Shares



**Common Stock**

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This is the initial public offering of our common stock. Prior to this offering, there has been no public market for our common stock. The initial public offering price of our common stock is expected to be between \$14.00 and \$16.00 per share.

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

The underwriters have an option to purchase a maximum of 750,000 additional shares of common stock from us.

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

**Investing in our common stock involves a high degree of risk. See "Risk Factors" beginning on page 11.**

	<u>Price to Public</u>	<u>Underwriting Discounts and Commissions(1)</u>	<u>Proceeds to Xencor</u>
Per Share	\$	\$	\$
Total	\$	\$	\$

(1) See "Underwriting" beginning on page 164 for additional information regarding underwriting compensation.

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Delivery of the shares of common stock will be made on or about \_\_\_\_\_, 2013.

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.

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**Credit Suisse**

**Leerink Swann**

**Wedbush PacGrow Life Sciences**

The date of this prospectus is \_\_\_\_\_, 2013

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We have not, and the underwriters have not, authorized anyone to provide any information or to make any representations other than those contained in this prospectus or in any free writing prospectuses prepared by or on behalf of us or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus or in any applicable free writing prospectus is current only as of its date, regardless of its time of delivery or any sale of shares of our common stock. Our business, financial condition, results of operations and prospects may have changed since that date.

Until \_\_\_\_\_, 2013 (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 obligation of dealers to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

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

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## PROSPECTUS SUMMARY

*This summary highlights information contained in other parts of this prospectus. Because it is only a summary, it does not contain all of the information that you should consider before investing in shares of our common stock and it is qualified in its entirety by, and should be read in conjunction with, the more detailed information appearing elsewhere in this prospectus. You should read the entire prospectus carefully, especially "Risk Factors" and our financial statements and the related notes, before deciding to buy shares of our common stock.*

*Unless the context requires otherwise, references in this prospectus to "Xencor," "we," "us" and "our" refer to Xencor, Inc.*

### Overview

We are a clinical-stage biopharmaceutical company focused on discovering and developing engineered monoclonal antibodies to treat severe and life-threatening diseases with unmet medical needs. We use our proprietary XmAb technology platform to create next-generation antibody product candidates designed to treat autoimmune and allergic diseases, cancer and other conditions. In contrast to conventional approaches to antibody design, which focus on the portion of antibodies that interact with target antigens, we focus on the portion of the antibody that interacts with multiple segments of the immune system. This portion, referred to as the Fc domain, is constant and interchangeable among antibodies. Our engineered Fc domains, the XmAb technology, can be readily substituted for natural Fc domains. We believe our Fc domains enhance antibody performance by, for example, increasing immune inhibitory activity, improving cytotoxicity or extending circulating half-life, while typically maintaining over 99.5% identity in structure and sequence to natural antibodies. By improving over natural antibody function, we believe that our XmAb-engineered antibodies offer innovative approaches to treating disease and potential clinical advantages over other treatments.

Our business strategy is based on the plug-and-play nature of the XmAb technology platform to modify features of natural antibodies and create numerous differentiated antibody product candidates. We have internally generated a pipeline that has allowed us to selectively partner certain development programs while maintaining full ownership of other programs. We also have a number of technology licenses under which we have licensed the XmAb technology platform to pharmaceutical and biotechnology companies for use in a limited number of programs, providing multiple revenue streams that require no further resources from Xencor. There are currently five antibody product candidates in clinical trials that have been engineered with XmAb technology, including four candidates being advanced by licensees and development partners. As of September 30, 2013, our XmAb technology platform is protected by 21 issued U.S. patents and 44 U.S. patent applications, in addition to foreign counterparts.

Our internally-generated pipeline includes the following three lead XmAb-engineered antibodies that are currently in development:

- **XmAb5871** is being developed for the treatment of autoimmune diseases, including rheumatoid arthritis and lupus. It uses our Immune Inhibitor Fc Domain and targets B cells, an important component of the immune system. We believe XmAb5871 has the potential to address a key unmet need in autoimmune therapies due to its combination of potent B-cell inhibition without B-cell depletion. We are currently conducting a Phase 1b/2a clinical trial for XmAb5871 in rheumatoid arthritis patients with active disease on stable non-biologic disease modifying anti-rheumatic drug (DMARD) therapy. We expect to report preliminary data from this trial in the second half of 2014. Our partner, Amgen Inc. (Amgen), has an option to acquire an exclusive worldwide license for XmAb5871, exercisable at any time before completion of a data review period following our planned subsequent Phase 2b proof-of-concept clinical trial. Until the option exercise, we lead research, development and manufacturing activities for XmAb5871 with collaborative input and development support from Amgen. According to the American College

of Rheumatology, rheumatoid arthritis and lupus affect approximately 1.3 million and 160,000 adults in the United States, respectively. Humira, the leading antibody therapy for autoimmune diseases, generated sales of approximately \$9.3 billion worldwide in 2012.

- XmAb7195** is being developed for the treatment of severe asthma and allergic diseases. It uses our Immune Inhibitor Fc Domain and is designed to reduce blood plasma levels of IgE, which mediates allergic responses and allergic disease. Its three specific mechanisms of action give it potential advantages over current therapies: (i) increased IgE binding, (ii) inhibition of IgE production and (iii) rapid clearance of IgE from circulation. We anticipate filing an investigational new drug application (IND) with the United States Food and Drug Administration (FDA) and initiating a Phase 1a clinical trial in the first half of 2014. We plan to report preliminary data from this trial at the end of 2014. According to the U.S. Centers for Disease Control and Prevention (CDC), one in 12 Americans has asthma, and there were 1.8 million emergency room visits caused by asthma in 2010. Xolair, the leading antibody therapy for the treatment of severe refractory asthma, generated approximately \$1.3 billion in worldwide sales in 2012.
- XmAb5574/MOR208** is being developed for the treatment of blood-based cancers and uses our Cytotoxic Fc Domain. Our partner, MorphoSys AG (MorphoSys), is currently conducting two Phase 2 clinical trials of XmAb5574/MOR208 in patients with B-cell acute lymphoblastic leukemia (B-ALL) and non-Hodgkin lymphomas (NHL). According to the Leukemia and Lymphoma Society, over 60,000 Americans are diagnosed with these cancers each year. Rituxan, the leading antibody therapy for NHL, generated approximately \$6.1 billion in worldwide oncology sales in 2012.

**Product Pipeline and Platform**

A summary of the partnered and non-partnered product development programs that we have generated internally is shown below.

	PROGRAM	Fc DOMAIN	PRIMARY INDICATION	DISCOVERY LEAD	PRECLIN	PHASE I	PHASE 2	COMMERCIAL RIGHTS
Partnered Programs	XmAb5871	Immune Inhibitor	Autoimmune	[Progress bar from Discovery Lead to Phase 1]			*	Xencor Option to AMGEN
	XmAb5574/MOR208	Cytotoxic	Oncology CLL/NHL/ALL	[Progress bar from Discovery Lead to Phase 2]				Morphosys
Non-partnered Programs	XmAb7195	Immune Inhibitor	Asthma/allergy	[Progress bar from Discovery Lead to Preclin]				Xencor
	Xtend-TNF	Xtend	Autoimmune	[Progress bar from Discovery Lead to Preclin]				Xencor
	CD3 x CD38	Heterodimer	Oncology	[Progress bar from Discovery Lead to Preclin]				Xencor
	CD3 x CD123	Heterodimer	Oncology	[Progress bar from Discovery Lead to Preclin]				Xencor
	Xtend-CTLA4	Xtend	Autoimmune	[Progress bar from Discovery Lead to Preclin]				Xencor
	Anti-X/CD32b	Immune Inhibitor	TBD	[Progress bar from Discovery Lead to Preclin]				Xencor

\* Currently enrolling Phase 2a portion of Phase 1b/2a clinical trial.

In addition, we have licensed our XmAb technology to pharmaceutical and biotechnology companies for use in a limited number of their programs. These licensees include Boehringer Ingelheim, CSL, Janssen, Merck and Alexion, and collectively these licensees have three Phase 1 clinical development-stage programs and four pre-clinical development-stage programs.

### *Antibody Structure and Fc Domain Function*

Antibodies are Y-shaped proteins that are produced by B cells and used by the immune system to target and neutralize foreign objects known as antigens. These objects may include tumor cells, bacteria and viruses. Antibodies are composed of two structurally independent parts, the variable domain (the Fv domain) and the constant domain (the Fc domain and the CH1 domain). The Fv domain is responsible for targeting a specific antibody to a specific antigen, and is different for every type of antibody. The Fc domain interacts with various receptors on immune cells and other cells and, rather than binding antibodies to target antigens, it endows antibodies with properties beyond simple binding, such as immune response regulation and cytotoxicity. Importantly, Fc domains are the same and interchangeable from antibody to antibody.

### *Our Fc Domain Focused Approach*

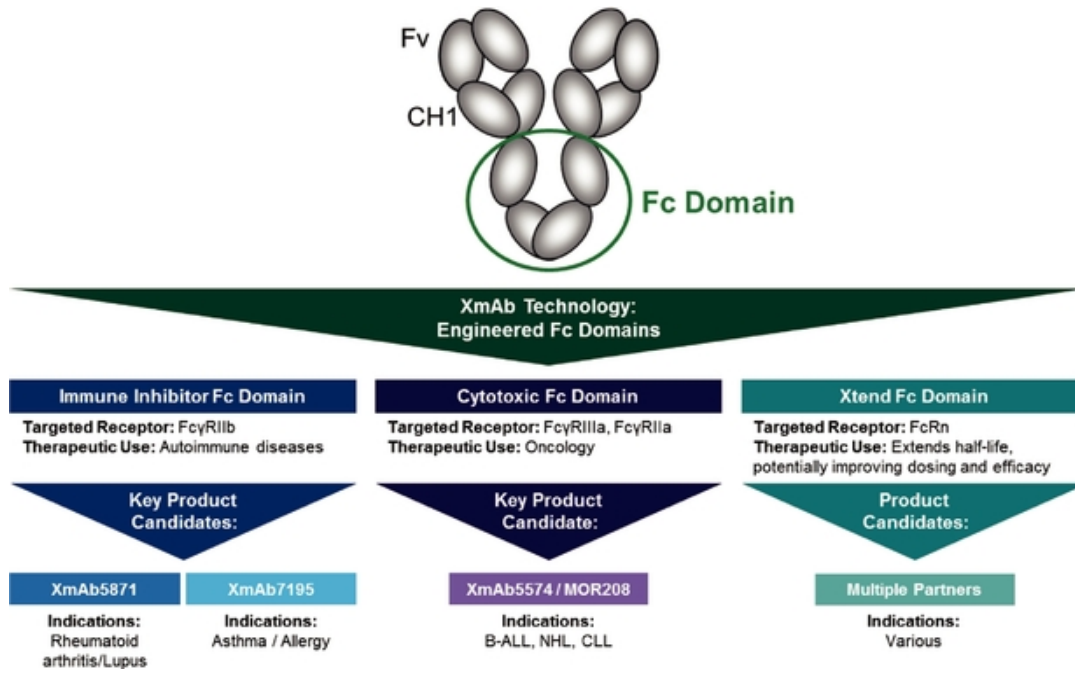
The global market for antibody therapeutics was estimated to be approximately \$45.0 billion in 2011, of which the U.S. market was estimated to be \$20.0 billion. Intense competition drives companies to develop differentiated antibody drugs, often because of the common pursuit of the same antigen Fv targets across the industry. Industry efforts have focused on engineering Fv domains since the mid-1980s to enhance performance. More recently, many efforts at differentiation have attempted to improve upon antibody performance by drastically changing the antibody structure or substituting new molecules altogether, for example, new antibody-like scaffolds, bi-specific antibodies and antibody-drug conjugates. A challenge to these efforts has been making these new drug molecules replicate the beneficial features of natural antibodies, including ease of production, safety, efficacy and simplicity. These efforts, however, have largely ignored the Fc domain.

In contrast, in the last decade Xencor has focused on Fc engineering. Fc engineering involves additional complexities, particularly consideration of simultaneous interactions with multiple Fc receptors and immune cell types and requires significant expertise in structural biology and immunology. Our XmAb Fc domain technology is a platform of patented antibody components that enable the creation of therapeutic antibody candidates that have novel interactions with the human immune and antibody regulation systems. Each XmAb Fc domain consists of a naturally occurring Fc domain with a small number of amino acid changes found to be critical for modulating interactions with the desired Fc receptors. We have identified a set of Fc domains, each of which is engineered with particular amino acid changes to augment a specific naturally-occurring antibody function based on its Fc receptor binding profile, including:

- ***Immune Inhibitor Fc Domain***—selective immune inhibition and rapid target clearance, targeting the receptor FcγRIIb;
- ***Cytotoxic Fc Domain***—increased cytotoxicity, targeting the receptors FcγRIIIa on natural killer (NK) cells and FcγRIIa on other immune system cells and
- ***Xtend Fc Domain***—extended antibody half-life, targeting the receptor FcRn on endothelial cells.

With such limited modifications of the natural Fc domain, XmAb-engineered antibodies are typically over 99.5% identical in structure and sequence to natural antibodies, simplifying product

development yet enhancing function. A summary of the Fc domain properties improved by our XmAb technology and the associated product candidates and targeted indications are summarized below:



### Our Strategy

Our goal is to become a leading biopharmaceutical company focused on developing and commercializing engineered monoclonal antibodies to treat severe and life-threatening diseases with unmet medical needs. Key elements of our strategy are to:

- **Advance the clinical development of our lead Immune Inhibitor Fc Domain product candidates.** We are developing XmAb5871, in partnership with Amgen, for the treatment of autoimmune diseases and are developing XmAb7195 independently for the treatment of asthma and allergic diseases.
- **Continue to monetize and expand the use of our XmAb technology platform.** We are seeking additional licensing and partnering opportunities, similar to our partnerships with Amgen and with MorphoSys for XmAb5574/MOR208, with leading pharmaceutical and biotechnology companies.
- **Build a large and diversified portfolio of product candidates.** We aim to create new XmAb-engineered antibody product candidates that exploit the novel properties of our XmAb technology platform.
- **Broaden the functionality of our XmAb technology platform.** We are conducting further research into the function and application of antibody Fc domains in order to expand the scope of our XmAb technology platform.
- **Continue to expand our patent portfolio protecting our XmAb technology platform.** We seek to expand and protect our development programs and product candidates by filing and prosecuting patent applications in the United States and other countries.



## **Risks Associated with Our Business**

Our business is subject to numerous risks and uncertainties, including those highlighted in the section entitled "Risk Factors" immediately following this prospectus summary. These risks include, but are not limited to, the following:

- We have incurred significant losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future. Our accumulated deficit was \$223.9 million as of September 30, 2013, representing our cumulative losses since our inception in 1997.
- Biopharmaceutical product development is a highly speculative undertaking and involves a substantial degree of uncertainty. We have never generated any revenue from product sales and may never be profitable.
- We will require additional financing and may be unable to raise sufficient capital, which could lead us to delay, reduce or abandon research and development programs or commercialization.
- If we are unable to obtain, maintain and enforce intellectual property protection covering our products, others may be able to make, use or sell product substantially the same as ours, which could adversely affect our ability to compete in the market.
- The development and commercialization of biologic products is subject to extensive regulation, and we may not obtain regulatory approvals for any of our product candidates.
- Even if we receive regulatory approval for any of our product candidates, we will be subject to ongoing regulatory obligations and continued regulator review, which may result in significant additional expense. Additionally, our product candidates, if approved, could be subject to labeling and other restrictions and market withdrawal and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our products.
- We may not be successful in our efforts to use and expand our XmAb technology platform to build a pipeline of product candidates and develop marketable products.
- Our existing partnerships are important to our business, and future partnerships may also be important to us. If we are unable to maintain any of these partnerships, or if these partnerships are not successful, our business could be adversely affected.
- We face significant competition from other biotechnology and pharmaceutical companies and our operating results will suffer if we fail to compete effectively.

## **Corporate and Other Information**

We were incorporated in California in August 1997 under the name Xencor, Inc. In September 2004, we reincorporated in the state of Delaware under the name Xencor, Inc. Our principal executive offices are located at 111 West Lemon Avenue, Monrovia, California, 91016, and our telephone number is (626) 305-5900. Our corporate website address is [www.xencor.com](http://www.xencor.com). Information contained on or accessible through our website is not a part of this prospectus, and the inclusion of our website address in this prospectus is an inactive textual reference only.

This prospectus contains references to our trademarks and to trademarks belonging to other entities. Solely for convenience, trademarks and trade names referred to in this prospectus, including logos, artwork and other visual displays, may appear without the ® or ™ symbols, but such references are not intended to indicate, in any way, that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto. We do not intend our use or display of other companies' trade names or trademarks to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

### **Implications of Being an Emerging Growth Company**

As a company with less than \$1.0 billion in revenue during our last fiscal year, we qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act (JOBS Act) enacted in April 2012. An "emerging growth company" may take advantage of reduced reporting requirements that are otherwise applicable to public companies. These provisions include, but are not limited to:

- being permitted to present only two years of audited financial statements and only two years of related Management's Discussion and Analysis of Financial Condition and Results of Operations in this prospectus;
- not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended;
- reduced disclosure obligations regarding executive compensation in our periodic reports, proxy statements and registration statements; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

We may use these provisions until the last day of our fiscal year following the fifth anniversary of the completion of this offering. However, if certain events occur prior to the end of such five-year period, including if we become a "large accelerated filer," our annual gross revenues exceed \$1.0 billion or we issue more than \$1.0 billion of non-convertible debt in any three-year period, we will cease to be an emerging growth company prior to the end of such five-year period.

We have elected to take advantage of certain of the reduced disclosure obligations in the registration statement of which this prospectus is a part and may elect to take advantage of other reduced reporting requirements in future filings. As a result, the information that we provide to our stockholders may be different than you might receive from other public reporting companies in which you hold equity interests.

The JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. We have irrevocably elected not to avail ourselves of this exemption and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

### The Offering

Common stock offered by us	5,000,000 shares
Common stock to be outstanding after this offering	21,692,576 shares
Option to purchase additional shares	The underwriters have a 30-day option to purchase a maximum of 750,000 additional shares of common stock from us.
Use of proceeds	We intend to use the net proceeds from this offering to fund the clinical development of XmAb587 and XmAb7195, product candidate discovery, technology development, patent prosecution activities, working capital and other general corporate purposes, including the costs associated with being a public company. See "Use of Proceeds."
Risk factors	See "Risk Factors" beginning on page 11 and the other information included in this prospectus for discussion of factors to consider carefully before deciding to purchase any shares of our common stock.
Proposed NASDAQ Global Market symbol	"XNCR"

The number of shares of our common stock to be outstanding after this offering is based on 16,692,576 shares of common stock outstanding as of September 30, 2013, after giving effect to the conversion of our outstanding convertible preferred stock into 16,620,274 shares of common stock and excludes:

- 1,803,685 shares of common stock issuable upon the exercise of outstanding stock options as of September 30, 2013, at a weighted-average exercise price of \$1.61 per share;
- 2,390,448 shares of common stock reserved for future issuance under our 2013 equity incentive plan (the 2013 plan), which will become effective as of the date of the effectiveness of the registration statement of which this prospectus forms a part (including 880,771 shares of common stock reserved for issuance under our 2010 equity incentive plan (the 2010 pre-IPO plan), which shares will be added to the shares reserved under the 2013 plan upon its effectiveness); and
- 267,741 shares of common stock reserved for future issuance under our 2013 employee stock purchase plan (the 2013 purchase plan), which will become effective as of the date of the effectiveness of the registration statement of which this prospectus forms a part.

Unless otherwise indicated, all information contained in this prospectus and the number of shares of common stock outstanding as of September 30, 2013 assumes:

- the conversion of all our outstanding convertible preferred stock outstanding as of September 30, 2013 into an aggregate of 16,620,274 shares of common stock upon the effectiveness of the registration statement of which this prospectus is a part;
- no exercise by the underwriters of their over-allotment option to purchase up to an additional 750,000 shares of our common stock;
- the filing of our amended and restated certificate of incorporation and the adoption of our amended and restated bylaws immediately prior to the closing of this offering; and
- a 3.1-for-one reverse stock split of our common stock effected on November 1, 2013.

### Summary Financial Data

The following table summarizes certain of our financial data. We derived the summary statement of operations data for the years ended December 31, 2012 and 2011 from our audited financial statements and related notes appearing elsewhere in this prospectus. The summary statement of operations data for the nine months ended September 30, 2013 and 2012 and the summary balance sheet data as of September 30, 2013 were derived from our unaudited financial statements appearing elsewhere in this prospectus. The unaudited financial data, in management's opinion, have been prepared on the same basis as the audited financial statements and related notes included elsewhere in this prospectus, and include all adjustments, consisting only of normal recurring adjustments, that management considers necessary for a fair presentation of the information for the periods presented. Our historical results are not necessarily indicative of the results that may be expected in the future and results of interim periods are not necessarily indicative of the results for the entire year. The summary financial data should be read together with our financial statements and related notes, "Selected Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" appearing elsewhere in this prospectus.

	Year Ended December 31,		Nine Months Ended September 30,	
	2011	2012	2012	2013
	(in thousands, except share and per share data)			
	(Restated)		(unaudited)	
<b>Statement of Operations Data:</b>				
Revenues	\$ 6,849	\$ 9,524	\$ 7,099	\$ 8,428
Operating expenses:				
Research and development	12,663	12,668	8,725	12,857
General and administrative	3,638	3,086	2,081	2,381
Total operating expenses	16,301	15,754	10,806	15,238
Loss from operations	(9,452)	(6,230)	(3,707)	(6,810)
Other income (expenses)				
Interest income	34	11	11	7
Interest expense	(1,850)	(2,461)	(1,811)	(1,212)
Other income (expense)	65	86	24	15
Loss on settlement of notes(1)	—	—	—	(48,556)
Total other income (expenses), net	(1,751)	(2,364)	(1,776)	(49,746)
Net loss	(11,203)	(8,594)	(5,483)	(56,556)
Net deemed contribution on exchange and sale of preferred stock(2)	—	—	—	144,765
Net income (loss) attributable to common stockholders	\$ (11,203)	\$ (8,594)	\$ (5,483)	\$ 88,209
Net income (loss) per share attributable to common stockholders(3):				
Basic	\$ (154.95)	\$ (118.86)	\$ (75.83)	\$ 1,220.01
Diluted	\$ (154.95)	\$ (118.86)	\$ (75.83)	\$ (4.10)
Weighted average shares of common stock used in computing net income (loss) per share attributable to common stockholders:				
Basic	72,302	72,302	72,302	72,302
Diluted	72,302	72,302	72,302	13,794,138
Pro forma net loss per share of common stock, basic and diluted (unaudited)(4)		\$ (0.51)		\$ (0.48)
Weighted average shares used in computing pro forma net loss per share of common stock, basic and diluted (unaudited)(4)		16,692,576		16,692,576

- (1) See note 3 to our interim financial statements appearing elsewhere in this prospectus for a description of the adjustment to net loss resulting from exchange of convertible notes for preferred stock.
- (2) See notes 8 and 3 to our annual and interim financial statements, respectively, appearing elsewhere in this prospectus for a description of the deemed contribution on exchange and sale of preferred stock.
- (3) See notes 1 and 5 to our annual and interim financial statements, respectively, appearing elsewhere in this prospectus for a description of the method used to calculate basic and diluted loss per common.

- (4) Pro forma net loss per share attributable to common stockholders excludes the impact of non-recurring items recognized in income attributable to common stockholders for the periods presented. We calculated pro forma weighted average shares outstanding for the nine months ended September 30, 2013 to give effect to the automatic conversion into shares of common stock, on a 3.1:1 basis, of all shares of convertible preferred stock outstanding at September 30, 2013. We calculated pro forma weighted average shares outstanding for the year ended December 31, 2012 to give effect to the automatic conversion into shares of common stock, on a 3.1:1 basis, of all shares of convertible preferred stock outstanding at September 30, 2013, which includes 13,666,071 shares of common stock issuable upon conversion of the shares of preferred stock received in connection with the exchange of our outstanding promissory notes on June 13, 2013. We believe the calculation of pro forma shares described above is the most meaningful to investors, as such calculation represents the actual number of shares of common stock our notes became convertible into, and prior to the exchange of our convertible notes in June 2013, such notes were not convertible at the option of the holders, and the number of shares of common stock such notes were automatically convertible into upon an initial public offering was contingent on the public offering price, which was not known at the time of the conversion of the notes or applicable to the actual number of shares of common stock issued upon conversion of the notes.

*Pro forma net loss attributable to common stockholders (in thousands):*

	<b>Year Ended December 31, 2012</b>	<b>Nine Months Ended September 30, 2013</b>
Net income (loss) attributable to common stockholders	\$ (8,594)	\$ 88,209
Loss on settlement of notes	—	48,556
Net deemed contribution on exchange and sale of preferred stock	—	(144,765)
Pro forma net loss attributable to common stockholders	<u>\$ (8,594)</u>	<u>\$ (8,000)</u>

*Pro forma weighted average shares outstanding, basic and diluted:*

	<b>Year Ended December 31, 2012</b>	<b>Nine Months Ended September 30, 2013</b>
Common stock	72,302	72,302
Preferred Stock	16,620,274	16,620,274
Pro forma weighted average shares outstanding, basic and diluted	<u>16,692,576</u>	<u>16,692,576</u>
Pro forma net loss per share of common stock, basic and diluted (unaudited)	<u>\$ (0.51)</u>	<u>\$ (0.48)</u>

	As of September 30, 2013		
	Actual	Pro Forma(1) (in thousands) (unaudited)	Pro Forma as Adjusted(2)(3)
<b>Balance Sheet Data:</b>			
Cash and cash equivalents	\$ 9,621	\$ 9,621	\$ 76,871
Working capital	2,127	2,127	69,377
Patents, licenses, and other intangible assets, net	9,013	9,013	9,013
Total assets	20,206	20,206	87,456
Deferred revenue, less current portion	7,000	7,000	7,000
Convertible preferred stock	79,601	—	—
Total stockholders' equity (deficit)	(75,029)	4,572	71,822

- (1) Pro forma amounts reflect the conversion of all our outstanding shares of convertible preferred stock outstanding as of September 30, 2013 into an aggregate of 16,620,274 shares of our common stock.
- (2) Pro forma as adjusted amounts reflect the pro forma conversion adjustments described in footnote (1) above, as well as the sale of 5,000,000 shares of our common stock in this offering at an assumed initial public offering price of \$15.00 per share (the mid-point of the price range set forth on the cover page of this prospectus), and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.
- (3) A \$1.00 increase (decrease) in the assumed initial public offering price would increase (decrease) each of cash, cash equivalents, working capital, total assets and total stockholders' equity by approximately \$4.7 million, assuming the number of shares offered by us as stated on the cover page of this prospectus remains unchanged and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, a one million share increase (decrease) in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase (decrease) each of cash and cash equivalents, working capital, total assets and total stockholder equity by approximately \$14.0 million, assuming the assumed initial public offering price of \$15.00 per share (the mid-point of the price range set forth on the cover page of this prospectus) remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

## RISK FACTORS

*An investment in shares of our common stock involves a high degree of risk. You should carefully consider the following information about these risks, together with the other information appearing elsewhere in this prospectus, before deciding to invest in our common stock. The occurrence of any of the following risks could have a material adverse effect on our business, financial condition, results of operations and future growth prospects. In these circumstances, the market price of our common stock could decline, and you may lose all or part of your investment.*

### **Risks Relating to Our Business and to the Discovery, Development and Regulatory Approval of Our Product Candidates**

*We have incurred significant losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future.*

We are a clinical-stage biopharmaceutical company. To date, we have financed our operations primarily through private placements of convertible debt and preferred stock and our research and licensing agreements and have incurred significant operating losses since our inception in 1997. Our net loss for the nine months ended September 30, 2013 was \$56.6 million (including a \$48.6 million loss on settlement of convertible notes) and for the years ended December 31, 2011 and 2012 it was \$11.2 million and \$8.6 million, respectively. As of September 30, 2013, we had an accumulated deficit of \$223.9 million. Such losses are expected to increase in the future as we execute our plan to continue our discovery, research and development activities, including the ongoing and planned clinical development of our antibody product candidates, and incur the additional costs of operating as a public company. We are unable to predict the extent of any future losses or when we will become profitable, if ever. Even if we do achieve profitability, we may not be able to sustain or increase profitability on an ongoing basis which would adversely affect our business, prospects, financial condition and results of operations.

For the reasons cited above, without giving effect to the proceeds of this offering, the report of our independent registered public accountant on our financial statements as of and for the year ended December 31, 2012 includes explanatory language describing the existence of substantial doubt about our ability to continue as a going concern. There have been no adjustments in the accompanying financial statements to reflect this uncertainty.

*Biopharmaceutical product development is a highly speculative undertaking and involves a substantial degree of uncertainty. We have never generated any revenue from product sales and may never be profitable.*

We have devoted substantially all of our financial resources and efforts to developing our proprietary XmAb technology platform, identifying potential product candidates and conducting preclinical studies and clinical trials. We and our partners are still in the early stages of developing our product candidates, and we have not completed development of any products. Our revenue to date has been primarily revenue from the license of our proprietary XmAb technology platform for the development of product candidates by others or revenue from our partners. Our ability to generate revenue and achieve profitability depends in large part on our ability, alone or with partners, to achieve milestones and to successfully complete the development of, obtain the necessary regulatory approvals for, and commercialize, product candidates. We do not anticipate generating revenues from sales of products for the foreseeable future. Our ability to generate future revenues from product sales depends heavily on our and our partners' success in:

- completing clinical trials through all phases of clinical development of our current product candidates, XmAb5871 and XmAb7195, as well as the product candidates that are being developed by our partners and licensees;

- seeking and obtaining marketing approvals for product candidates that successfully complete clinical trials;
- launching and commercializing product candidates for which we obtain marketing approval, with a partner or, if launched independently, successfully establishing a sales force, marketing and distribution infrastructure;
- identifying and developing new XmAb-engineered therapeutic antibody candidates;
- establishing and maintaining supply and manufacturing relationships with third parties;
- obtaining additional licensing and partnering opportunities, similar to our partnership with MorphoSys for XmAb5574/MOR208, with leading pharmaceutical and biotechnology companies;
- achieving the milestones set forth in our agreements with our partners;
- conducting further research into the function and application of antibody Fc domains in order to expand the scope of our proprietary XmAb technology platform;
- maintaining, protecting, expanding and enforcing our intellectual property; and
- attracting, hiring and retaining qualified personnel.

Because of the numerous risks and uncertainties associated with biologic product development, we are unable to predict the timing or amount of increased expenses and when we will be able to achieve or maintain profitability, if ever. In addition, our expenses could increase beyond expectations if we are required by the U.S. Food and Drug Administration (FDA), or foreign regulatory agencies, to perform studies and trials in addition to those that we currently anticipate, or if there are any delays in our or our partners completing clinical trials or the development of any of our product candidates. If one or more of the product candidates that we independently develop is approved for commercial sale, we anticipate incurring significant costs associated with commercializing such product candidates. Even if we or our partners are able to generate revenues from the sale of any approved products, we may not become profitable and may need to obtain additional funding to continue operations, which may not be available to us on favorable terms, if at all. 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 require additional financing and may be unable to raise sufficient capital, which could lead us to delay, reduce or abandon research and development programs or commercialization.***

Our operations have used substantial amounts of cash since inception. Our research and development expenses were \$12.9 million for the nine months ended September 30, 2013, and \$12.7 million for each of the years ended December 31, 2011 and 2012, respectively. We expect our expenses to increase in connection with our ongoing development activities, including the continuation of our ongoing Phase 1b/2a clinical trial of XmAb5871 in patients with rheumatoid arthritis, the initiation of additional clinical trials of XmAb5871 and the submission of an investigational new drug application (IND) to the FDA for XmAb7195 to be followed by our first clinical trial of XmAb7195. Identifying potential product candidates and conducting preclinical testing and clinical trials are time-consuming, expensive and uncertain processes that takes years to complete, and we or our partners may never generate the necessary data or results required to obtain regulatory approval and achieve product sales. In addition, our product candidates, if approved, may not achieve commercial success.



Our commercial revenues, if any, will be derived from sales of products that we do not expect to be commercially available for many years, if at all. If we obtain regulatory approval for any of our product candidates, we expect to incur significant commercialization expenses related to product manufacturing, marketing, sales and distribution. Furthermore, after 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.

We believe that the net proceeds from this offering and our existing cash, together with interest thereon, will be sufficient to fund our operations through 2016. However, changing circumstances or inaccurate estimates by us may cause us to use capital significantly faster than we currently anticipate, and we may need to spend more money than currently expected because of circumstances beyond our control. For example, our planned clinical trials for XmAb5871 may encounter technical, enrollment or other issues that could cause our development costs to increase more than we expect. Even with the expected net proceeds from this offering, we do not have sufficient cash to complete the clinical development of any of our product candidates and will require additional funding in order to complete the development activities required for regulatory approval of either XmAb5871 or XmAb7195 or any future product candidates that we develop independently. Because successful development of our product candidates is uncertain, we are unable to estimate the actual funds we will require to complete research and development and commercialize our product candidates. 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. 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.

***The development and commercialization of biologic products is subject to extensive regulation, and we may not obtain regulatory approvals for any of our product candidates.***

The clinical development, manufacturing, labeling, packaging, storage, recordkeeping, advertising, promotion, export, import, marketing and distribution and other possible activities relating to XmAb5871, XmAb7195 and XmAb5574/MOR208, our current lead antibody product candidates, as well as any other antibody product candidate that we may develop in the future, are subject to extensive regulation in the United States as biologics. Biologics require the submission of a Biologics License Application (BLA) to the FDA and we are not permitted to market any product candidate in the United States until we obtain approval from the FDA of a BLA for that product. A BLA must be supported by extensive clinical and preclinical data, as well as extensive information regarding chemistry, manufacturing and controls (CMC) sufficient to demonstrate the safety, purity, potency and effectiveness of the applicable product candidate to the satisfaction of the FDA.

Regulatory approval of a BLA is not guaranteed, and the approval process is an expensive and uncertain process that may take several years. The FDA and foreign regulatory entities also have substantial discretion in the approval process. The number and types of preclinical studies and clinical trials that will be required for BLA approval varies depending on the product candidate, the disease or the condition that the product candidate is designed to target and the regulations applicable to any particular product candidate. Despite the time and expense associated with preclinical studies and clinical trials, failure can occur at any stage, and we could encounter problems that require us to repeat or perform additional preclinical studies or clinical trials or generate additional CMC data. The FDA and similar foreign authorities could delay, limit or deny approval of a product candidate for many reasons, including because they:

- may not deem our product candidate to be adequately safe and effective;

- may not find the data from our preclinical studies and clinical trials or CMC data to be sufficient to support a claim of safety and efficacy;
- may not approve the manufacturing processes or facilities associated with our product candidate;
- may conclude that we have not sufficiently demonstrated long-term stability of the formulation of the drug product for which we are seeking marketing approval;
- may change approval policies or adopt new regulations; or
- may not accept a submission due to, among other reasons, the content or formatting of the submission.

Generally, public concern regarding the safety of drug and biologic products could delay or limit our ability to obtain regulatory approval, result in the inclusion of unfavorable information in our labeling, or require us to undertake other activities that may entail additional costs.

We have not submitted an application for approval or obtained FDA approval for any product. This lack of experience may impede our ability to obtain FDA approval in a timely manner, if at all, for our product candidates.

To market any biologics outside of the United States, we and current or future collaborators must comply with numerous and varying regulatory and compliance related requirements of other countries. Approval procedures vary among countries and can involve additional product testing and additional administrative review periods, including obtaining reimbursement and pricing approval in select markets. The time required to obtain approval in other countries might differ from that required to obtain FDA approval. The regulatory approval process in other countries may include all of the risks associated with FDA approval as well as additional, presently unanticipated, risks. Regulatory approval in one country does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country may negatively impact the regulatory process in others, including the risk that our product candidates may not be approved for all indications requested and that such approval may be subject to limitations on the indicated uses for which the drug may be marketed. Certain countries have a very difficult reimbursement environment and we may not obtain reimbursement or pricing approval, if required, in all countries where we expect to market a product, or we may obtain reimbursement approval at a level that would make marketing a product in certain countries not viable.

If we experience delays in obtaining approval or if we fail to obtain approval of our product candidates, the commercial prospects for our product candidates may be harmed and our ability to generate revenues will be materially impaired which would adversely affect our business, prospects, financial condition and results of operations.

***Even if we receive regulatory approval for any of our product candidates, we will be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense. Additionally, our product candidates, if approved, could be subject to labeling and other restrictions and market withdrawal and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our products.***

Any regulatory approvals that we or our partners receive for our product candidates may also be subject to limitations on the approved indicated uses for which the product may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase 4 clinical trials, and surveillance to monitor the safety and efficacy of the product candidate. In addition, if the FDA or a comparable foreign regulatory authority approves any of our product candidates, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion, import, export and recordkeeping for the product will be subject to

extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, registration, as well as continued compliance with current good manufacturing practices (cGMPs), and current good clinical practices (cGCPs), for any clinical trials that we conduct post-approval. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, undesirable side effects caused by the product, problems encountered by our third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, either before or after product approval, may result in, among other things:

- restrictions on the marketing or manufacturing of the product;
- requirements to include additional warnings on the label;
- requirements to create a medication guide outlining the risks to patients;
- withdrawal of the product from the market;
- voluntary or mandatory product recalls;
- requirements to change the way the product is administered or for us to conduct additional clinical trials;
- fines, warning letters or holds on clinical trials;
- refusal by the FDA to approve pending applications or supplements to approved applications filed by us or our strategic partners, or suspension or revocation of product license approvals;
- product seizure or detention, or refusal to permit the import or export of products;
- injunctions or the imposition of civil or criminal penalties; and
- harm to our reputation.

Additionally if any of our product candidates receives marketing approval, the FDA could require us to adopt a Risk Evaluation and Mitigation Strategy (REMS) to ensure that the benefits of the therapy outweigh its risks, which may include, among other things, a medication guide outlining the risks for distribution to patients and a communication plan to health care practitioners.

Any of these events could prevent us from achieving or maintaining market acceptance of the product or the particular product candidate at issue and could significantly harm our business, prospects, financial condition and results of operations.

The FDA's policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained and we may not achieve or sustain profitability, which would adversely affect our business, prospects, financial condition and results of operations.

***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 our product candidates if we are unable to locate and enroll a sufficient number of eligible patients to participate in these trials as required by the FDA or similar regulatory authorities outside the United States. In addition, some of our competitors have ongoing clinical trials for product candidates that treat the same indications as

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

For example, in our Phase 1a clinical trial of XmAb5871, which we completed in December 2012, delays in patient enrollment that were outside our control caused several weeks of delay that we did not predict at the outset of that clinical trial. Our inability to enroll a sufficient number of patients for any of our clinical trials could result in significant delays and could require us to abandon one or more clinical trials altogether. Enrollment delays in our clinical trials may result in increased development costs for our product candidates and in delays to commercially launching our product candidates, if approved, which would cause the value of our company to decline and limit our ability to obtain additional financing.

***The manufacture of biopharmaceutical products, including XmAb-engineered antibodies, is complex and manufacturers often encounter difficulties in production. If we or any of our third-party manufacturers encounter any loss of our master cell banks or if any of our third-party manufacturers encounter other difficulties, or otherwise fail to comply with their contractual obligations, our ability to provide product candidates for clinical trials or our products to patients, once approved, the development or commercialization of our product candidates could be delayed or stopped.***

The manufacture of biopharmaceutical products is complex and requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls. We and our contract manufacturers must comply with cGMP regulations and guidelines. Manufacturers of biopharmaceutical products often encounter difficulties in production, particularly in scaling up and validating initial production and contamination. These problems include difficulties with production costs and yields, quality control, including stability of the product, quality assurance testing, operator error, shortages of qualified personnel, as well as compliance with strictly enforced federal, state and foreign regulations. Furthermore, if microbial, viral or other contaminations are discovered in our products or in the manufacturing facilities in which our products are made, such manufacturing facilities may need to be closed for an extended period of time to investigate and remedy the contamination.

All of our XmAb engineered antibodies are manufactured by starting with cells which are stored in a cell bank. We have one master cell bank for each antibody manufactured in accordance with cGMP and multiple working cell banks and believe we would have adequate backup should any cell bank be lost in a catastrophic event. However, it is possible that we could lose multiple cell banks and have our manufacturing severely impacted by the need to replace the cell banks.

We cannot assure you that any stability or other issues relating to the manufacture of any of our product candidates or products will not occur in the future. Additionally, our manufacturer may experience manufacturing difficulties due to resource constraints or as a result of labor disputes or unstable political environments. If our manufacturers were to encounter any of these difficulties, or

otherwise fail to comply with their contractual obligations, our ability to provide any product candidates to patients in clinical trials and products to patients, once approved, would be jeopardized. Any delay or interruption in the supply of clinical trial supplies could delay the completion of clinical trials, increase the costs associated with maintaining clinical trial programs and, depending upon the period of delay, require us to commence new clinical trials at additional expense or terminate clinical trials completely. Any adverse developments affecting clinical or commercial manufacturing of our product candidates or products may result in shipment delays, inventory shortages, lot failures, product withdrawals or recalls, or other interruptions in the supply of our product candidates or products. We may also have to take inventory write-offs and incur other charges and expenses for product candidates or products that fail to meet specifications, undertake costly remediation efforts or seek more costly manufacturing alternatives. Accordingly, failures or difficulties faced at any level of our supply chain could materially adversely affect our business and delay or impede the development and commercialization of any of our product candidates or products and could have a material adverse effect on our business, prospects, financial condition and results of operations.

***Adverse side effects or other safety risks associated with our product candidates could delay or preclude approval, cause us to suspend or discontinue clinical trials, abandon product candidates, limit the commercial profile of an approved label, or result in significant negative consequences following marketing approval, if any.***

Undesirable side effects caused by our product candidates could result in the delay, suspension or termination of clinical trials by us, our collaborators, the FDA or other regulatory authorities for a number of reasons. If we elect or are required to delay, suspend or terminate any clinical trial of any product candidates that we develop, the commercial prospects of such product candidates will be harmed and our ability to generate product revenues from any of these product candidates will be delayed or eliminated. Serious adverse events observed in clinical trials could hinder or prevent market acceptance of the product candidate at issue. Any of these occurrences may harm our business, prospects, financial condition and results of operations significantly.

In our Phase 1a clinical trial of XmAb5871, for example, some subjects reported mild to severe gastrointestinal symptoms including nausea, vomiting, abdominal pain, abdominal discomfort, epigastric discomfort (upper stomach pain) and diarrhea. As of September 30, 2013, one patient in our on-going Phase 1b clinical trial of XmAb5871 experienced an infusion related reaction with hypotension and other adverse events that have been reported by investigators include nausea, vomiting, fever-increased temperature, headache and bronchitis. If these or other side effects cause excessive discomfort, safety risks or reduction in acceptable dosage, then the development and commercialization of XmAb5871 could suffer significant negative consequences. We cannot predict if additional types of adverse events or more serious adverse events will be observed in future clinical trials of XmAb5871, XmAb7195 or any future product candidate.

In addition, we observed detectable levels of immunogenicity, or the creation by the immune system of anti-XmAb5871 antibodies, in 44% of subjects receiving XmAb5871 in the Phase 1a clinical trial. While a common occurrence for antibody therapies, immunogenicity to XmAb5871 or any of our other product candidates could neutralize the therapeutic effects of XmAb5871 or such other candidates and/or alter their pharmacokinetics, which could have a material adverse effect on the effectiveness of our product candidates and on our ability to commercialize them.

***We may not be successful in our efforts to use and expand our XmAb technology platform to build a pipeline of product candidates and develop marketable products.***

We are using our proprietary XmAb technology platform to develop engineered antibodies, with an initial focus on three properties: immune inhibition, cytotoxicity and extended half-life. This platform has led to our three lead product candidates, XmAb5871, XmAb7195 and

XmAb5574/MOR208 as well as the other programs that utilize our technology and that are being developed by our partners and licensees. While we believe our preclinical and clinical data to date, together with our established partnerships, has validated our platform to a degree, we are at a very early stage of development and our platform has not yet, and may never lead to, approved or marketable therapeutic antibody products. Even if we are successful in continuing to build our pipeline, the potential product candidates that we identify may not be suitable for clinical development, including as a result of their harmful side effects, limited efficacy 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 product candidates based upon our technological approach, we may not be able to obtain product or partnership revenues in future periods, which would adversely affect our business, prospects, financial condition and results of operations.

***We face significant competition from other biotechnology and pharmaceutical companies and our operating results will suffer if we fail to compete effectively.***

The biotechnology and pharmaceutical industries are intensely competitive. We have competitors both in the United States and internationally, including major multinational pharmaceutical companies, biotechnology companies, universities and other research institutions. Many of our competitors have substantially greater financial, technical and other resources, such as larger research and development staff and experienced marketing and manufacturing organizations and well-established sales forces. Competition may increase further as a result of advances in the commercial applicability of technologies and greater availability of capital for investment in these industries. Our competitors may succeed in developing, acquiring or licensing on an exclusive basis drug products that are more effective or less costly than any product candidate that we are currently developing or that we may develop.

We face intense competition in autoimmune disease drug development from multiple monoclonal antibodies, other biologics and small molecules approved for the treatment of rheumatoid arthritis and autoimmune diseases many of which are being developed or marketed by large multinational pharmaceutical companies such as GlaxoSmithKline plc, AbbVie Inc., Janssen Pharmaceuticals, Inc., Roche/Genentech Inc. and Amgen Inc. GlaxoSmithKline's Benlysta (belimumab) is currently the only monoclonal antibody that we are aware of that is approved for the treatment of lupus although we believe that Biogen Idec/Genentech's Rituxan (rituximab) is prescribed, off label, for this indication. Pfizer's Xeljanz (tofacitinib), AbbVie's Humira (adalimumab), Amgen's Enbrel (etanercept), Janssen Pharmaceuticals, Inc.'s Remicade (infliximab) and Simponi (golimumab), Bristol-Myers Squibb's Orencia (abatacept) and Rituxan, among others, are approved for the treatment of rheumatoid arthritis. In addition, these and other pharmaceutical companies have monoclonal antibodies or other biologics in clinical development for the treatment of autoimmune diseases.

Many companies have approved therapies or are developing drugs for the treatment of asthma including multinational pharmaceutical companies such as GlaxoSmithKline, Roche/Genentech, Novartis AG and AstraZeneca plc. Monoclonal antibody drug development has primarily focused on allergic asthma. Xolair is currently the only monoclonal antibody that we are aware of that is approved for the treatment of severe asthma. In addition, Novartis, AstraZeneca/MedImmune and Genentech each have an antibody targeting IgE in Phase 1 or 2 clinical development for asthma.

Competition in blood cancer drug development is intense, with more than 250 compounds in clinical trials by large multinational pharmaceutical companies and Rituxan is just one of many monoclonal antibodies approved for the treatment of non-Hodgkin lymphomas or other blood cancers.

Our ability to compete successfully will depend largely on our ability to leverage our experience in drug discovery and development to:

- discover and develop products that are superior to other products in the market;

- attract qualified scientific, product development and commercial personnel;
- obtain and maintain patent and/or other proprietary protection for our products and technologies;
- obtain required regulatory approvals; and
- successfully collaborate with pharmaceutical companies in the discovery, development and commercialization of new products.

The availability and price of our competitors' products could limit the demand, and the price we are able to charge, for any of our product candidates, if approved. We will not achieve our business plan if acceptance is inhibited by price competition or the reluctance of physicians to switch from existing drug products to our products, or if physicians switch to other new drug products or choose to reserve our products for use in limited circumstances.

Established biopharmaceutical companies may invest heavily to accelerate discovery and development of products that could make our product candidates less competitive. In addition, any new product that competes with an approved product must demonstrate compelling advantages in efficacy, convenience, tolerability and safety in order to overcome price competition and to be commercially successful. Accordingly, our competitors may succeed in obtaining patent protection, receiving FDA approval or discovering, developing and commercializing medicines before we do, which would have a material adverse impact on our business. We will not be able to successfully commercialize our product candidates without establishing sales and marketing capabilities internally or through collaborators.

#### **Risks Relating to Our Dependence on Third Parties**

***Our existing partnerships are important to our business, and future partnerships may also be important to us. If we are unable to maintain any of these partnerships, or if these partnerships are not successful, our business could be adversely affected.***

Because developing biologics products, conducting clinical trials, obtaining regulatory approval, establishing manufacturing capabilities and marketing approved products are expensive, we have entered into partnerships, and may seek to enter into additional partnerships, with companies that have more resources and experience than us, and we may become dependent upon the establishment and successful implementation of partnership agreements.

Our partnership and license agreements include those we have announced with Amgen, MorphoSys, Boehringer Ingelheim and others. These partnerships and license agreements also have provided us with important funding for our development programs, and we expect to receive additional funding under these partnerships in the future. Our existing partnerships, and any future partnerships we enter into, may pose a number of risks, including the following:

- collaborators have significant discretion in determining the efforts and resources that they will apply to these partnerships;
- collaborators may not perform their obligations as expected;
- collaborators may not pursue development and commercialization of any product candidates that achieve regulatory approval or may elect not to continue or renew development or commercialization programs 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, 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 be time-consuming and expensive;
- while we have generally retained the right to maintain and defend our intellectual property under our agreements with collaborators, certain collaborators may not properly maintain or defend certain of 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;
- collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability;
- collaborators may learn about our technology and use this knowledge to compete with us in the future;
- results of collaborators' preclinical or clinical studies could produce results that harm or impair other products using our XmAb technology platform;
- there may be conflicts between different collaborators that could negatively affect those partnerships and potentially others; and
- the number and type of our partnerships could adversely affect our attractiveness to future collaborators or acquirers.

If our partnerships and license agreements do not result in the successful development and commercialization of products or if one of our collaborators terminates its agreement with us, or in the case of Amgen, elects not to exercise its option under our agreement, we may not receive any future research and development funding or milestone or royalty payments under the arrangement. If we do not receive the funding we expect under these arrangements, our continued development of our product candidates could be delayed and we may need additional resources to develop additional 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 and there can be no assurance that our partnerships and license agreements will produce positive results or successful products on a timely basis or at all.

Our partnership agreements generally grant our collaborators exclusive rights under certain of our intellectual property, and may therefore preclude us from entering into partnerships with others relating to the same or similar compounds, indications or diseases. In addition, partnership agreements may place restrictions or additional obligations on our ability to license additional compounds in different indications, diseases or geographical locations. If we fail to comply with or breach any provision of a partnership agreement, a collaborator may have the right to terminate, in whole or in part, such agreement or to seek damages. Many of our collaborators also have the right to terminate the partnership agreement for convenience. If a partnership agreement is terminated, in whole or in



part, we may be unable to continue the development and commercialization of the applicable product candidates, and even if we are able to do so, such efforts may be delayed and result in additional costs.

There is no assurance that a collaborator who is acquired by a third party would not attempt to change certain contract provisions that could negatively affect our partnership. The acquiring company may also not accept the terms or assignment of our contracts and may seek to terminate the agreements. Any one of our partners could breach covenants, restrictions and/or sub-license agreement provisions leading us into disputes and potential breaches of our agreements with other partners.

We may in the future determine to partner with additional pharmaceutical and biotechnology companies for development and potential commercialization of therapeutic products. We face significant competition in seeking appropriate collaborators. Our ability to reach a definitive agreement for a partnership will depend, among other things, upon our assessment of the collaborator's resources and expertise, the terms and conditions of the proposed partnership and the proposed collaborator's evaluation of a number of factors. 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 partnerships 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 and our business, prospects, financial condition and results of operations may be materially and adversely affected.

***We rely upon third-party contractors and service providers for the execution of most aspects of our development programs. Failure of these collaborators to provide services of a suitable quality and within acceptable timeframes may cause the delay or failure of our development programs.***

We outsource certain functions, tests and services to contract research organizations (CROs), medical institutions and collaborators as well as outsourcing manufacturing to collaborators and/or contract manufacturers, and we rely on third parties for quality assurance, clinical monitoring, clinical data management and regulatory expertise. We also have engaged, and may in the future engage, a CRO to run all aspects of a clinical trial on our behalf. There is no assurance that such individuals or organizations will be able to provide the functions, tests, biologic supply or services as agreed upon or in a quality fashion and we could suffer significant delays in the development of our products or processes.

In some cases there may be only one or few providers of such services, including clinical data management or manufacturing services. In addition, the cost of such services could be significantly increased over time. We rely on third parties and collaborators as mentioned above to enroll qualified patients and conduct, supervise and monitor our clinical trials. Our reliance on these third parties and collaborators for clinical development activities reduces our control over these activities. Our reliance on these parties, however, does not relieve us of our regulatory responsibilities, including ensuring that our clinical trials are conducted in accordance with GCP regulations and the investigational plan and protocols contained in the regulatory agency applications. In addition, these third parties may not complete activities on schedule or may not manufacture under GMP conditions. Preclinical or clinical studies may not be performed or completed in accordance with Good Laboratory Practices (GLP) regulatory requirements or our trial design. If these third parties or collaborators do not successfully carry out their contractual duties or meet expected deadlines, obtaining regulatory approval for manufacturing and commercialization of our product candidates may be delayed or prevented. We rely substantially on third-party data managers for our clinical trial data. There is no assurance that these third parties will not make errors in the design, management or retention of our data or data systems. There is no assurance these third parties will pass FDA or regulatory audits, which could delay or prohibit regulatory approval.

***We rely on third parties to manufacture supplies of our preclinical and clinical product candidates. The development of such candidates could be stopped or delayed if any such third party fails to provide us with sufficient quantities of product or fails to do so at acceptable quality levels or prices or fails to maintain or achieve satisfactory regulatory compliance.***

We do not currently have nor do we plan to acquire the infrastructure or capability internally to manufacture our clinical drug supplies for use in the conduct of our clinical trials, and we lack the resources and the capability to manufacture any clinical candidates on a clinical scale. Instead, we rely on our third-party manufacturing partners, Catalent Pharma Solutions LLC (Catalent) and Cook Pharmica, LLC (Cook) for the production of XmAb5871 and XmAb7195, respectively, and Cook and third parties for fill and testing services, pursuant to agreements with each. Either Catalent or Cook may not perform as agreed, may be unable to comply with cGMP requirements and with FDA, state and foreign regulatory requirements or may terminate its agreement with us.

In addition, manufacturers are subject to ongoing periodic unannounced inspection by the FDA and other governmental authorities to ensure strict compliance with government regulations. We do not control the manufacturing processes of either Catalent or Cook and are currently completely dependent on each of Catalent and Cook for the production of XmAb5871 and XmAb7195 in accordance with cGMP, which include, among other things, quality control, quality assurance and the maintenance of records and documentation. If we were to experience an unexpected loss of supply, we could experience delays in our planned clinical trials, as Catalent or Cook would need to manufacture additional clinical drug supply and would need sufficient lead time to schedule a manufacturing slot. While there are other potential suppliers of clinical supplies of our biologics, the long transition periods necessary to switch manufacturers for either XmAb5871 and XmAb7195 would significantly delay our clinical trials and the commercialization of such products, if approved.

***We intend to rely on third parties to manufacture commercial supplies of our product candidates, if and when approved. If we are unable to obtain a license agreement from Catalent for the manufacture of XmAb5871, if we are unable to enter into commercial supply agreements with third-party suppliers or if any such third-party supplier fails to provide us with sufficient quantities or fails to comply with regulatory requirements, commercialization of such products could be delayed or stopped.***

We do not currently have nor do we plan to acquire the infrastructure or capability internally to manufacture our products on a commercial scale. Although we have entered into agreements for the manufacture of clinical supplies of XmAb5871 and XmAb7195, we have not entered into a commercial supply agreement with either Catalent or Cook and neither has demonstrated that it will be capable of manufacturing XmAb5871 and XmAb7195 on a large commercial scale. We might be unable to identify manufacturers for commercial supply on acceptable terms or at all. Moreover, our existing license with Catalent to use certain technology and know-how in the production of our XmAb5871 product candidate only applies for so long as manufacturing services are provided by Catalent. We expect to move manufacturing services to another contract manufacturing organization, or to Amgen if they exercise their option for XmAb5871, to support late-stage clinical trials for XmAb5871 as well as commercial supplies which would require negotiation of a license from Catalent. We expect to be able to finalize such a license agreement with Catalent for XmAb5871 in due course. However, we can provide no assurances as to when such a license agreement will be executed or if it will be executed at all. If we, or our collaborator Amgen, are not able to secure a commercial license from Catalent, or not able to obtain a commercial license on acceptable terms, we may be required to change the manufacturing process for XmAb5871. A change to the manufacturing process for XmAb5871 would cause us to incur significant costs and to devote significant efforts to implement such a change. Additionally, the late-stage clinical development and commercialization of XmAb5871 by us or our collaborators may be delayed as a result, which would materially and adversely affect our business.

If our third-party manufacturers cannot successfully manufacture material that conforms to our specifications and the applicable regulatory authorities' strict regulatory requirements, or pass regulatory inspection, they will not be able to secure or maintain regulatory approval for the manufacturing facilities. In addition, we have no control over the ability of any third-party manufacturer to maintain adequate quality control, quality assurance and qualified personnel. The facilities used by our third-party manufacturers to manufacture XmAb5871 and XmAb7195 and any other potential product candidates that we may develop in the future must be approved by the applicable regulatory authorities, including the FDA, pursuant to inspections that will be conducted after we submit our BLA to the FDA. In addition, manufacturers are subject to ongoing periodic unannounced inspection by the FDA and other governmental authorities to ensure strict compliance with government regulations. If the FDA or any other applicable regulatory authorities do not approve these facilities for the manufacture of our products or if they withdraw any such approval in the future, or if our suppliers or third-party manufacturer decide they no longer want to supply our biologics or manufacture our products, we may need to find alternative manufacturing facilities, which would significantly impact our ability to market our products and our business, prospects, financial condition and results of operations may be materially and adversely affected.

### **Risks Relating to Our Intellectual Property**

***If we are unable to obtain, maintain and enforce intellectual property protection covering our products, others may be able to make, use or sell products substantially the same as ours, which could adversely affect our ability to compete in the market.***

Our commercial success depends, in part, on our ability to obtain, maintain and enforce patents, trade secrets, trademarks and other intellectual property rights and to operate without having third parties infringe, misappropriate or circumvent the rights that we own or license. If we are unable to obtain, maintain and enforce intellectual property protection covering our products, others may be able to make, use or sell products that are substantially the same as ours without incurring the sizeable development and licensing costs that we have incurred, which would adversely affect our ability to compete in the market. As of September 30, 2013, we held 21 issued U.S. patents and 44 pending U.S. patent applications related to our XmAb technology platform. We have also filed and are actively pursuing additional patent applications in the United States, Canada, Japan, Europe and other major markets either directly or via the Patent Cooperation Treaty. Our ability to stop third parties from making, using, selling, offering to sell or importing our product candidates is dependent upon the extent to which we have rights under valid and enforceable patents or trade secrets that cover these activities. However, the patent positions of biopharmaceutical companies, including ours, can be highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. No consistent policy regarding the breadth of claims allowed in patents in these fields has emerged to date in the United States. The U.S. patent laws have recently changed, there have been changes regarding how patent laws are interpreted, and the U.S. Patent and Trademark Office (the PTO) has also implemented changes to the patent system. Some of these changes are currently being litigated, and we can not accurately determine the outcome of any such proceedings or predict future changes in the interpretation of patent laws or changes to patent laws which might be enacted into law. Those changes may materially affect our patents, our ability to obtain patents or the patents and applications of our collaborators and licensors. The patent situation in the biopharmaceutical industry outside the United States is even more uncertain. Therefore, there is no assurance that our pending patent applications will result in the issuance of patents or that we will develop additional proprietary products which are patentable. Moreover, patents issued or to be issued to us may not provide us with any competitive advantage. Our patent position is subject to numerous additional risks, including the following:

- we may fail to seek patent protection for inventions that are important to our success;
- our pending patent applications may not result in issued patents;

- we cannot be certain that we are the first to invent the inventions covered by pending patent applications or that we were the first to file such applications and, if we are not, we may be subject to priority disputes;
- we may be required to disclaim part or all of the term of certain patents or all of the term of certain patent applications;
- we may file patent applications but have claims restricted or we may not be able to supply sufficient data to support our claims and, as a result, may not obtain the original claims desired or we may receive restricted claims. Alternatively, it is possible that we may not receive any patent protection from an application;
- we could inadvertently abandon a patent or patent application, resulting in the loss of protection of certain intellectual property rights in a certain country. We, our collaborators or our patent counsel may take action resulting in a patent or patent application becoming abandoned which may not be able to be reinstated or if reinstated, may suffer patent term adjustments;
- the claims of our issued patents or patent applications when issued may not cover our product candidates;
- no assurance can be given that our patents would be declared by a court to be valid or enforceable or that a competitor's technology or product would be found by a court to infringe our patents. Our patents or patent applications may be challenged by third parties in patent litigation or in proceedings before the PTO or its foreign counterparts, and may ultimately be declared invalid or unenforceable, or narrowed in scope;
- there may be prior art of which we are not aware that may affect the validity or enforceability of a patent claim. There also may be prior art of which we are aware, but which we do not believe affects the validity or enforceability of a claim, which may, nonetheless, ultimately be found to affect the validity or enforceability of a claim;
- third parties may develop products which have the same or similar effect as our products without infringing our patents. Such third parties may also intentionally circumvent our patents by means of alternate designs or processes or file applications or be granted patents that would block or hurt our efforts;
- there may be dominating patents relevant to our product candidates of which we are not aware;
- our patent counsel, lawyers or advisors may have given us, or may in the future give us incorrect advice or counsel. Opinions from such patent counsel or lawyers may not be correct or may be based on incomplete facts;
- obtaining regulatory approval for biopharmaceutical products is a lengthy and complex process, and as a result, any patents covering our product candidates may expire before, or shortly after such product candidates are approved and commercialized;
- the patent and patent enforcement laws of some foreign jurisdictions do not protect intellectual property rights to the same extent as laws in the United States, and many companies have encountered significant difficulties in protecting and defending such rights in foreign jurisdictions. If we encounter such difficulties or we are otherwise precluded from effectively protecting our intellectual property rights in foreign jurisdictions, our business prospects could be substantially harmed; and
- we may not develop additional proprietary technologies that are patentable.

Any of these factors could hurt our ability to gain full patent protection for our products. Registered trademarks and trademark applications in the United States and other countries are subject

to similar risks as described above for patents and patent applications, in addition to the risks described below.

Many of our product development partnership agreements are complex and may call for licensing or cross-licensing of potentially blocking patents, know-how or intellectual property. Due to the potential overlap of data, know-how and intellectual property rights there can be no assurance that one of our collaborators will not dispute our right to use, license or distribute data, know-how or other intellectual property rights, and this may potentially lead to disputes, liability or termination of a program. There are no assurances that our actions or the actions of our collaborators would not lead to disputes or cause us to default with other collaborators. For example, we may become involved in disputes with our collaborators relating to the ownership of intellectual property developed in the course of the partnership. We also cannot be certain that a collaborator will not challenge the validity or enforceability of the patents we license.

We cannot be certain that any country's patent and/or trademark office will not implement new rules which could seriously affect how we draft, file, prosecute and/or maintain patents, trademarks and patent and trademark applications. We cannot be certain that increasing costs for drafting, filing, prosecuting and maintaining patents, trademarks and patent and trademark applications will not restrict our ability to file for patent protection. For example, we may elect not to seek patent protection in certain jurisdictions or for certain inventions in order to save costs. We may be forced to abandon or return the rights to specific patents due to a lack of financial resources.

We currently rely, and may in the future rely, on certain intellectual property rights licensed from third parties to protect our technology. In particular, we have licensed and sublicensed certain intellectual property relating to our Xtend technology from a third party. Under our license, we have no right to control patent prosecution of this intellectual property or to enforce the patents, and as such the licensed rights may not be adequately maintained by the licensors. The termination of this or other licenses could also prevent us from commercializing product candidates covered by the licensed intellectual property.

Furthermore, the research resulting in the in-licensed patents was developed in the course of research funded by the U.S. government. As a result, the U.S. government may have certain rights ("march-in rights") to intellectual property embodied in our Xtend products. Government rights in certain inventions developed under a government-funded program include a non-exclusive, non-transferable, irrevocable worldwide license to use inventions for any governmental purpose. Circumstances that trigger march-in rights include, for example, failure to take, within a reasonable time, effective steps to achieve practical application of the invention in a field of use, failure to satisfy the health and safety needs of the public and failure to meet requirements of public use specified by federal regulations. Federal law requires any licensor of an invention that was partially funded by the federal government to obtain a covenant from any exclusive licensee to manufacture products using the invention substantially in the United States. The U.S. government also has the right to use and disclose, without limitation, scientific data relating to licensed technology that was developed in whole or in part at government expense. The government funding agency can elect to exercise these march-in rights on their own initiative or at the request of a third party.

We intend to file applications for trademark registrations in connection with our product candidates in various jurisdictions, including the United States. No assurance can be given that any of our trademark applications will be registered in the United States or elsewhere, or that the use of any registered or unregistered trademarks will confer a competitive advantage in the marketplace. Furthermore, even if we are successful in our trademark registrations, the FDA and regulatory authorities in other countries have their own process for drug nomenclature and their own views concerning appropriate proprietary names. No assurance can be given that the FDA or any other regulatory authority will approve of any of our trademarks or will not request reconsideration of one of

our trademarks at some time in the future. The loss, abandonment, or cancellation of any of our trademarks or trademark applications could negatively affect the success of the product candidates to which they relate.

***If we are not able to prevent disclosure of our trade secrets and other proprietary information, the value of our technology and products could be significantly diminished.***

We rely on trade secret protection to protect our interests in proprietary know-how and in processes for which patents are difficult to obtain or enforce. We may not be able to protect our trade secrets adequately. We have a policy of requiring our consultants, advisors and collaborators to enter into confidentiality agreements and our employees to enter into invention, non-disclosure and non-compete agreements. However, no assurance can be given that we have entered into appropriate agreements with all parties that have had access to our trade secrets, know-how or other proprietary information. There is also no assurance that such agreements will provide for a meaningful protection of our trade secrets, know-how or other proprietary information in the event of any unauthorized use or disclosure of information. Furthermore, we cannot provide assurance that any of our employees, consultants, contract personnel, or collaborators, either accidentally or through willful misconduct, will not cause serious damage to our programs and/or our strategy, for example by disclosing important trade secrets, know-how or proprietary information to our competitors. It is also possible that our trade secrets, know-how or other proprietary information could be obtained by third parties as a result of breaches of our physical or electronic security systems. Any disclosure of confidential data into the public domain or to third parties could allow our competitors to learn our trade secrets and use the information in competition against us. In addition, others may independently discover our trade secrets and proprietary information. Any action to enforce our rights is likely to be time consuming and expensive, and may ultimately be unsuccessful, or may result in a remedy that is not commercially valuable. These risks are accentuated in foreign countries where laws or law enforcement practices may not protect proprietary rights as fully as in the United States or Europe. Any unauthorized disclosure of our trade secrets or proprietary information could harm our competitive position.

***We may be required to reduce the scope of our intellectual property due to third-party intellectual property claims.***

Our competitors may have filed, and may in the future file, patent applications covering technology similar to ours. Any such patent application may have priority over our patent applications, which could further require us to obtain rights to issued patents covering such technologies. If another party has filed a U.S. patent application on inventions similar to ours that claims priority to an application filed prior to March 16, 2013, we may have to participate in an interference proceeding declared by the PTO to determine priority of invention in the United States. The costs of these proceedings could be substantial, and it is possible that such efforts would be unsuccessful if, unbeknownst to us, the other party had independently arrived at the same or similar invention prior to our own invention, resulting in a loss of our U.S. patent position with respect to such inventions. In addition, changes enacted on March 15, 2013 to the U.S. patent laws under the America Invents Act resulted in the United States changing from a "first to invent" country to a "first to file" country. As a result, we may lose the ability to obtain a patent if a third party files with the PTO first and could become involved in proceedings before the PTO to resolve disputes related to inventorship. We may also become involved in similar proceedings in other jurisdictions.

Furthermore, recent changes in U.S. patent law under the America Invents Act allows for post-issuance challenges to U.S. patents, including ex parte reexaminations, inter partes reviews and post-grant oppositions. There is significant uncertainty as to how the new laws will be applied and if our U.S. patents are challenged using such procedures, we may not prevail, possibly resulting in altered or diminished claim scope or loss of patent rights altogether. Similarly, some countries, notably

members of the European Union, also have post grant opposition proceedings that can result in changes in scope and/or cancellation of patent claims.

***Our products could infringe patents and other property rights of others, which may result in costly litigation and, if we are not successful, could cause us to pay substantial damages or limit our ability to commercialize our products, which could have a material adverse effect on 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 patents and other proprietary rights of third parties. There is considerable intellectual property litigation in the biotechnology and pharmaceutical industries. For example, we are aware of issued U.S. patents and patent applications owned by Genentech that may relate to and claim components of certain of our product candidates, including XmA5871, XmA7195 and XmA5574/MOR208 or their manufacture. We believe that these patents and patent applications will expire in the United States in 2020 and 2021, respectively, but it is possible that the terms could be extended, for example, as a result of patent term restoration to compensate for regulatory delays. While we believe that our current development of these candidates currently falls into the "safe harbor" of non-infringement under 35 U.S.C. §271(e)(1), this protection terminates upon commercialization. In addition, there can be no assurance that our interpretation of this statutory exemption would be upheld. Furthermore, while we believe that claims in these patents are either invalid or not infringed, we cannot assure you that if we were sued for infringement of these patents that we would prevail. In order to successfully challenge the validity of any issued U.S. patent, we would need to overcome a presumption of validity. This burden is a high one requiring us to present clear and convincing evidence as to the invalidity of such claims. There is no assurance that a court would find these claims to be invalid or not infringed.

In addition, as the biopharmaceutical industry expands and more patents are issued, the risk increases that there may be patents issued to third parties that relate to our products and technology of which we are not aware or that we must challenge to continue our operations as currently contemplated. Our products may infringe or may be alleged to infringe these patents. Because some patent applications in the United States may be maintained in secrecy until the patents are issued, because patent applications in the United States and many foreign jurisdictions are typically not published until eighteen months after filing and because publications in the scientific literature often lag behind actual discoveries, we cannot be certain that others have not filed patents that may cover our technologies, our product candidates or their use. Additionally, pending patent applications which have been published can, subject to certain limitations, be later amended in a manner that could cover our technologies, our products or the use of our products. We may become party to, or threatened with, future adversarial proceedings or litigation regarding intellectual property rights with respect to our products and technology. Third parties may assert infringement claims against us based on existing patents or patents that may be granted in the future.

If we are sued for patent infringement, we would need to demonstrate that our products or methods either do not infringe the patent claims of the relevant patent or that the patent claims are invalid, and we may not be able to do this. Proving invalidity is difficult. For example, in the United States, proving invalidity requires a showing of clear and convincing evidence to overcome the presumption of validity enjoyed by issued patents. Even if we are successful in these proceedings, we may incur substantial costs and divert management's time and attention in pursuing these proceedings, which could have a material adverse effect on us.

Any such claims are likely to be expensive to defend, and some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources.

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. We may also elect to enter into such a license in order to settle litigation or in order to resolve disputes prior to litigation. 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, and could require us to make substantial royalty payments. We could also 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, which could materially harm our business. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business.

***Our intellectual property may be infringed upon by a third party.***

Third parties may infringe one or more of our issued patents or trademarks. We cannot predict if, when or where a third party may infringe one or more of our issued patents or trademarks. To counter infringement, we may be required to file infringement claims, which can be expensive and time consuming. There is no assurance that we would be successful in a court of law in proving that a third party is infringing one or more of our issued patents or trademarks. Any claims we assert against perceived infringers could also provoke these parties to assert counterclaims against us, alleging that we infringe their intellectual property. 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 and/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, any of which may adversely affect our business. Even if we are successful in proving in a court of law that a third party is infringing one or more of our issued patents or trademarks there can be no assurance that we would be successful in halting their infringing activities, for example, through a permanent injunction, or that we would be fully or even partially financially compensated for any harm to our business. We may be forced to enter into a license or other agreement with the infringing third party at terms less profitable or otherwise commercially acceptable to us than if the license or agreement were negotiated under conditions between those of a willing licensee and a willing licensor. We may not become aware of a third-party infringer within legal timeframes for compensation or at all, thereby possibly losing the ability to be compensated for any harm to our business. Such a third party may be operating in a foreign country where the infringer is difficult to locate and/or the intellectual property laws may be more difficult to enforce. Some third-party infringers may be able to sustain the costs of complex infringement litigation more effectively than we can because they have substantially greater resources. Any inability to stop third-party infringement could result in loss in market share of some of our products or even lead to a delay, reduction and/or inhibition of the development, manufacture or sale of certain products by us. There is no assurance that a product produced and sold by a third-party infringer would meet our or other regulatory standards or would be safe for use. Such third-party infringer products could irreparably harm the reputation of our products thereby resulting in substantial loss in market share and profits.

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

We employ individuals who were previously employed at other biotechnology or pharmaceutical companies. We may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed confidential information of our employees' former employers or other third parties. We may also be subject to claims that former



employers or other third parties have an ownership interest in our patents. Litigation may be necessary to defend against these claims. There is no guarantee of success in defending these claims, and if we do not prevail, we could be required to pay substantial damages and could lose rights to important intellectual property. Even if we are successful, litigation could result in substantial cost and be a distraction to our management and other employees.

### **Risks Related to Employee Matters and Managing Growth and Other Risks Related to Our Business**

*We are subject to competition for our skilled personnel and may experience challenges in identifying and retaining key personnel that could impair our ability to conduct and grow our operations effectively.*

Our future success depends on our ability to retain our executive officers and to attract, retain and motivate qualified personnel. If we are not successful in attracting and retaining highly qualified personnel, we may not be able to successfully implement our business strategy. Although we have not experienced problems attracting and retaining highly qualified personnel in the recent past, our industry has experienced a high rate of turnover of management personnel in recent years. Our ability to compete in the highly competitive biotechnology and pharmaceuticals industries depends upon our ability to attract and retain highly qualified management, scientific and medical personnel. We are highly dependent on our current management team, whose services are critical to the successful implementation of our product candidate development and regulatory strategies. In order to induce valuable employees to continue their employment with us, we have provided stock options that vest over time. The value to employees of stock options that vest over time is significantly affected by movements in our stock price that are beyond our control, and may at any time be insufficient to counteract more lucrative offers from other companies.

Despite our efforts to retain valuable employees, members of our management team may terminate their employment with us at any time, with or without notice. Further, we do not maintain "key person" insurance for any of our executives or other employees. The loss of the services of any of our executive officers and our inability to find suitable replacements could harm our business, financial condition, prospects and ability to achieve the successful development or commercialization of our product candidates. Our success also depends on our ability to continue to attract, retain and motivate highly skilled scientific and medical personnel at all levels.

We may experience growth in the number of our employees and the scope of our operations, especially in clinical development. This growth will place a significant strain on our management, operations and financial resources, and we may have difficulty managing this future potential growth. Moreover, no assurance can be provided that we will be able to attract new employees to assist in our growth. Many of the other biotech and pharmaceutical companies and academic institutions that we compete against for qualified personnel have greater financial and other resources, different risk profiles and a longer history in the industry than we do. We also may employ consultants or part-time and contract employees. There can be no assurance that these individuals are retainable. While we have been able to attract and retain skilled and experienced personnel and consultants in the past, no assurance can be given that we will be able to do so in the future.

*We may become subject to the risk of product liability claims.*

We face an inherent risk of product liability as a result of the clinical testing of our product candidates and will face an even greater risk if we or our partners commercialize any products. Human therapeutic products involve the risk of product liability claims and associated adverse publicity. Currently, the principal risks we face relate to patients in our clinical trials, who may suffer unintended consequences. Claims might be made by patients, healthcare providers or pharmaceutical companies or others. For example, we may be sued if any product we develop allegedly causes injury or is found to be otherwise unsuitable during clinical testing, manufacturing, marketing or sale. Any such product

liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product, negligence, strict liability and a breach of warranties. Claims could also be asserted under state consumer protection acts. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our product candidates, if approved. Even successful defense would require significant financial and management resources. Regardless of the merits or eventual outcome, liability claims may result in:

- decreased demand for our products due to negative public perception;
- injury to our reputation;
- withdrawal of clinical trial participants or difficulties in recruiting new trial participants;
- initiation of investigations by regulators;
- costs to defend or settle the related litigation;
- a diversion of management's time and our resources;
- substantial monetary awards to trial participants or patients;
- product recalls, withdrawals or labeling, marketing or promotional restrictions;
- loss of revenues from product sales; and
- the inability to commercialize any of our product candidates, if approved.

We may not have or be able to obtain or maintain sufficient and affordable insurance coverage to cover product liability claims, and without sufficient coverage any claim brought against us could have a materially adverse effect on our business, financial condition or results of operations. We run clinical trials through investigators that could be negligent through no fault of our own and which could affect patients, cause potential liability claims against us and result in delayed or stopped clinical trials. We are required by contractual obligations to indemnify collaborators, partners, third-party contractors, clinical investigators and institutions. These indemnifications could result in a material impact due to product liability claims against us and/or these groups. We currently carry \$5 million in product liability insurance, which we believe is appropriate for our current clinical trials. Although we maintain such insurance, any claim that may be brought against us could result in a court judgment or settlement in an amount that is not covered, in whole or in part, by our insurance or that is in excess of the limits of our insurance coverage. Our insurance policies also have various exclusions, and we may be subject to a product liability claim for which we have no coverage. We will have to pay any amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, and we may not have, or be able to obtain, sufficient capital to pay such amounts. We may also need to expand our insurance coverage as our business grows or if any of our product candidates is commercialized. We may not be able to maintain or increase insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise.

***Our employees may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements and insider trading.***

We are exposed to the risk of employee fraud or other misconduct. Misconduct by employees could include intentional failures to comply with FDA regulations, to provide accurate information to the FDA, to comply with manufacturing standards we have established, to comply with federal and state healthcare fraud and abuse laws and regulations, or to report financial information or data accurately or disclose unauthorized activities to us. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. These laws and

regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Employee misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. We have adopted a Code of Business Conduct and Ethics, but it is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant fines or other sanctions, and our reputation.

***We may be vulnerable to disruption, damage and financial obligation as a result of system failures.***

Despite the implementation of security measures, any of the internal computer systems belonging to us, our collaborators or our third-party service providers are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failure. Any system failure, accident or security breach that causes interruptions in our own, in collaborators' or in third-party service vendors' operations could result in a material disruption of our drug discovery and development programs. For example, the loss of clinical trial data from completed or future clinical trials could result in delays in our or our partners' regulatory approval efforts and significantly increase our costs in order to recover or reproduce the lost data. To the extent that any disruption or security breach results in a loss or damage to our data or applications, or inappropriate disclosure of confidential or proprietary information, we may incur liability as a result, our drug discovery programs and competitive position may be adversely affected and the further development of our product candidates may be delayed. Furthermore, we may incur additional costs to remedy the damages caused by these disruptions or security breaches.

***Our business involves the controlled use of hazardous materials and as such we are subject to environmental and occupational safety laws. Continued compliance with these laws may incur substantial costs and failure to maintain compliance could result in liability for damages that may exceed our resources.***

Our research, manufacturing and development processes, and those of our third-party contractors and partners, involve the controlled use of hazardous materials. We and our manufacturers are subject to federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of such materials and certain waste products. Our operations involve the use of hazardous and flammable materials, including chemicals and biological materials. Our operations also produce hazardous waste products. The risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of such an accident, we could be held liable for any damages that result, and any such liability could exceed our resources. We are not insured against this type of liability. We may be required to incur significant costs to comply with environmental laws and regulations in the future, and our operations, business or assets may be materially adversely affected by current or future environmental laws or regulations or any liability thereunder.

#### **Risks Related to this Offering and Ownership of Our Common Stock**

***The market price of our common stock may be highly volatile, and you may not be able to resell your shares at or above the initial public offering price.***

The trading price of our common stock is likely to be volatile. Our stock price could be subject to wide fluctuations in response to a variety of factors, including the following:

- adverse results or delays in clinical trials;

- inability to obtain additional funding;
- any delay in filing a BLA for any of our product candidates and any adverse development or perceived adverse development with respect to the FDA's review of that BLA;
- failure to successfully develop and commercialize our product candidates;
- changes in laws or regulations applicable to our products;
- inability to obtain adequate product supply for our product candidates, or the inability to do so at acceptable prices;
- adverse regulatory decisions;
- introduction of new products or technologies by our competitors;
- failure to meet or exceed product development or financial projections we provide to the public;
- the perception of the pharmaceutical industry by the public, legislatures, regulators and the investment community;
- announcements of significant acquisitions, strategic partnerships, joint ventures or capital commitments by us or our competitors;
- disputes or other developments relating to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;
- additions or departures of key scientific or management personnel;
- significant lawsuits, including patent or stockholder litigation;
- changes in the market valuations of similar companies;
- sales of our common stock by us or our stockholders in the future; and
- trading volume of our common stock.

In addition, the stock market in general, and the NASDAQ Global Market in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance.

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

Prior to this offering, there has not been a public market for our common stock. Although we expect that our common stock will be 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, you may not be able to sell your shares quickly or at the market price. The initial public offering price for the shares will be determined by negotiations between us and representatives of the underwriters and may not be indicative of prices that will prevail in the trading market.

***Our principal stockholders, directors and management own a significant percentage of our stock and will be able to exert significant control over matters subject to stockholder approval.***

Our executive officers, directors, 5% stockholders and their affiliates beneficially own, as a group, approximately 81.8% of our voting stock. Based upon the assumed number of shares to be sold in this offering as set forth on the cover page of this prospectus, upon the closing of this offering, that same group will beneficially own approximately 63.9% of our outstanding voting stock, which does not include any effect of these stockholders purchasing additional shares in this offering. Further, John S.

Stafford III, one of our directors, beneficially owns approximately 45.3% of our voting stock and his family members beneficially own approximately an additional 16.3% of our voting stock. Following the offering, and not including any shares of our common stock that Mr. Stafford or his family members or their affiliates may purchase in this offering, Mr. Stafford and his family members will beneficially own approximately 47.4% of our voting stock.

Therefore, even after this offering our officers, directors and 5% stockholders and their affiliates, including Mr. Stafford, will have the ability to influence us through this ownership position and so long as they continue to beneficially own a significant amount of our outstanding voting stock. These stockholders, and Mr. Stafford, in particular, may be able to determine all matters requiring stockholder approval and this concentration of ownership may deprive other stockholders from realizing the true value of our common stock. For example, these stockholders, acting together, may be able to control elections of directors, amendments of our organizational documents, or approval of any merger, sale of assets, or other major corporate transaction. This may prevent or discourage unsolicited acquisition proposals, offers for our common stock or other transactions or arrangements that you may believe are in your best interest as one of our stockholders.

***We are an "emerging growth company," and we cannot be certain if the reduced reporting requirements applicable to emerging growth companies will make our common stock less attractive to investors.***

We are an "emerging growth company," as defined in the JOBS Act. For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not "emerging growth companies," including:

- 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;
- 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 will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following the fifth anniversary of the completion of this offering, (b) in which we have total annual gross revenue of at least \$1 billion, or (c) in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the prior June 30th, and (2) the date on which we have issued more than \$1 billion in non-convertible debt during the prior three-year period.

Under the JOBS Act, emerging growth companies can also delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

***We will incur significant 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.***

As a public 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 Sarbanes-Oxley Act) as well as rules subsequently implemented by the Securities and Exchange Commission (SEC) and the NASDAQ Global Market have imposed various requirements on public companies. Public companies are subject to the requirements of Section 404 of the Sarbanes-Oxley Act. Section 404 requires management to establish and maintain a system of internal control over financial reporting and annual reports on Form 10-K filed under the U.S. Securities Exchange Act of 1934, as amended (Exchange Act) to contain a report from management assessing the effectiveness of a company's internal control over financial reporting. We will be required to comply with Section 404 of the Sarbanes-Oxley Act, although as an emerging growth company, we are not required to comply with Section 404(b) which requires attestation from our external auditors on our internal control over financial reporting. We will, however, be subject to Section 404(a) which requires management to provide a report regarding the effectiveness of internal controls. We will be reviewing all of our control processes to align them to the Section 404 requirements. Failure to provide assurance that our financial controls are effective could lead to lack of confidence by investors which could lead to a lower share price. When and if we are no longer an "emerging growth company," our independent registered public accounting firm will be required to attest to the effectiveness of our internal control over financial reporting. The rules governing the standards that must be met for management to assess our internal control over financial reporting are complex and require significant documentation, testing, and possible remediation. To comply with the requirements of being a reporting company under the Exchange Act, we may need to upgrade our systems including information technology, implement additional financial and management controls, reporting systems, and procedures, and hire additional accounting and finance staff.

In addition, in July 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act (the Dodd-Frank Act) was enacted. There are significant corporate governance and executive compensation related provisions in the Dodd-Frank Act and in rules and regulations subsequently adopted by the SEC in areas such as "say on pay" and proxy access. Stockholder activism, the current political environment and the current high level of government intervention and regulatory reform may lead to substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact (in ways we cannot currently anticipate) the manner in which we operate our business.

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 these rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance and we may be required to incur substantial costs to maintain our current levels of such coverage.

***Raising additional funds through debt or equity financing may be dilutive or restrict our operations and raising funds through licensing may require us to relinquish rights to our technology or product candidates.***

To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of those securities could result in substantial dilution for our current stockholders and the terms may include liquidation or other preferences that adversely affect the rights of our current stockholders. Existing stockholders may not agree with our financing plans or the terms of such financings. Moreover, the incurrence of debt financing could result in a substantial portion of our operating cash flow being dedicated to the payment of principal and interest on such indebtedness and could impose restrictions on our operations. 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.

In addition, if we raise additional funds through product development partnerships and licensing arrangements, it may be necessary to relinquish potentially valuable rights to our products or proprietary technologies, or grant licenses on terms that are not favorable to us. If we are unable to obtain additional funding on required timelines, we may be required to (1) seek collaborators for one or more of our product candidates at an earlier stage than otherwise would be desirable or on terms that are less favorable than might otherwise be available; (2) relinquish or license on unfavorable terms our rights to technologies or product candidates that we otherwise would seek to develop or commercialize ourselves; or (3) significantly curtail one or more of our research or development programs or cease operations altogether. Additional funding may not be available to us on acceptable terms, or at all.

***The clinical development stage of our operations may make it difficult for you to evaluate the success of our business to date and to assess our future viability.***

Our operations to date have been limited to organizing and staffing our company, business planning, raising capital, developing our proprietary XmAb technology platform, identifying potential product candidates, and conducting preclinical studies and clinical trials. We are conducting a Phase 1b/2a clinical trial for XmAb5871, but have not completed any late stage clinical trials for this or any other product candidate. We have not yet demonstrated our ability to successfully complete any Phase 2 or pivotal clinical trials, obtain regulatory approvals, manufacture a commercial scale product, or arrange for a third party to do so on our behalf, or conduct sales and marketing activities necessary for successful product commercialization. Consequently, any predictions you make about our future success or viability may not be as accurate as they could be if we were further advanced in development of our product candidates.

In addition, 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.

***We have identified material weaknesses and a significant deficiency in our internal control over financial reporting. If our internal control over financial reporting is not effective, we may not be able to accurately report our financial results or file our periodic reports in a timely manner, which may cause investors to lose confidence in our reported financial information and may lead to a decline in our stock price.***

Effective internal control over financial reporting is necessary for us to provide reliable financial reports in a timely manner. In connection with the audits of our financial statements for the years ended December 31, 2011 and 2012, we concluded that there were material weaknesses and a significant deficiency in our internal control over financial reporting. A material weakness is a significant deficiency, or a combination of significant deficiencies, in internal control over financial reporting such that it is reasonably possible that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis. A significant deficiency is a deficiency or combination of deficiencies in internal control over financial reporting that is less severe than a material weakness, yet important enough to merit attention by those responsible for oversight of a company's financial reporting.

The material weaknesses our independent registered public accounting firm identified related to (1) a lack of sufficient staff with appropriate training in GAAP and the various rules and regulations

with respect to financial reporting and (2) revenue recognition as it relates to properly recording negotiated terms and conditions in our product development partnerships and license agreements and the misapplication of GAAP with respect to the timing of the recognition of revenue for such agreements. The material weakness in our revenue recognition led to the restatement of our financial statements as of and for the year ended December 31, 2011. The significant deficiency related to adjustments to stock-based compensation and additional paid-in capital, although the amounts were individually and in the aggregate not material.

In an attempt to remediate our resource weakness and the significant deficiency, we have hired and we intend to hire additional finance and accounting personnel to augment our accounting staff and to provide more resources for complex GAAP accounting matters. In an attempt to remediate our revenue recognition weakness, we intend to review our revenue recognition policies and procedures, enhance training of our personnel with respect to such policies and procedures and devote additional resources to our revenue recognition, including by adding additional accounting staff with technical experience in revenue recognition arrangements similar to our product development partnerships and license agreements. However, we cannot assure you that these efforts will remediate our material weaknesses or significant deficiency in a timely manner, or at all, or prevent restatements of our financial statements in the future. If we are unable to successfully remediate our material weaknesses and our significant deficiency, or identify any future significant deficiencies or material weaknesses, the accuracy and timing of our financial reporting may be adversely affected, we may be unable to maintain compliance with securities law requirements regarding timely filing of periodic reports, and our stock price may decline as a result.

In addition, even if we remediate our material weaknesses, following the completion of this offering, we will be required to expend significant time and resources to further improve our internal controls over financial reporting, including by further expanding our finance and accounting staff. If we fail to adequately staff our accounting and finance function to remediate our material weaknesses and our significant deficiency or otherwise to meet the demands that will be placed upon us as a public company, including the requirements of the Sarbanes-Oxley Act of 2002, or fail to maintain adequate internal control over financial reporting, any new or recurring material weakness could prevent our management from concluding our internal control over financial reporting is effective and impair our ability to prevent material misstatements in our financial statements, which could cause our business to suffer.

***If you purchase our common stock in this offering, you will incur immediate and substantial dilution in the book value of your shares.***

Investors purchasing common stock in this offering will pay a price per share that substantially exceeds the pro forma book value (deficit) per share of our tangible assets after subtracting our liabilities. As a result, investors purchasing common stock in this offering will incur immediate dilution of approximately \$12.10 per share, based on an assumed initial public offering price of \$15.00 per share, the mid-point of the price range set forth on the cover page of this prospectus, and our pro forma net tangible book value (deficit) as of September 30, 2013. For more information on the dilution you may suffer as a result of investing in this offering, see "Dilution."

This dilution is due to the substantially lower price paid by our investors who purchased shares prior to this offering as compared to the price offered to the public in this offering. In addition, as of September 30, 2013, options to purchase 1,803,685 shares of our common stock at a weighted-average exercise price of \$1.61 per share were outstanding. The exercise of any of these options would result in additional dilution. As a result of the dilution to investors purchasing shares in this offering, investors may receive significantly less than the purchase price paid in this offering, if anything, in the event of our liquidation.



***Sales of a substantial number of shares of our common stock in the public market by our existing stockholders could cause our stock price to fall.***

Sales of a substantial number of shares of our common stock in the public market or the perception that these sales might occur, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. We are unable to predict the effect that sales may have on the prevailing market price of our common stock.

Substantially all of our existing stockholders are subject to lock-up agreements with the underwriters of this offering that restrict the stockholders' ability to transfer shares of our common stock for 180 days from the date of this prospectus. The lock-up agreements limit the number of shares of common stock that may be sold immediately following the public offering. Subject to certain limitations, including sales volume limitations with respect to shares held by our affiliates, substantially all of our outstanding shares prior to this offering will become eligible for sale upon expiration of the lock-up period, as calculated and described in more detail in the section entitled "Shares Eligible for Future Sale." In addition, shares issued or issuable upon exercise of options and warrants vested as of the expiration of the lock-up period will be eligible for sale at that time. Sales of stock by these stockholders could have a material adverse effect on the trading price of our common stock.

Certain holders of our securities are entitled to rights with respect to the registration of their shares under the Securities Act of 1933, as amended (the Securities Act), subject to the 180-day lock-up arrangement described above. Registration of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act. Any sales of securities by these stockholders could have a material adverse effect on the trading price of our common stock.

***Future sales and issuances of our common stock or rights to purchase common stock, including pursuant to our equity incentive plans, could result in additional dilution of the percentage ownership of our stockholders and could cause our stock price to fall.***

We expect that significant additional capital will be needed in the future to continue our planned operations. To the extent we raise additional capital by issuing equity securities, our stockholders may experience substantial dilution. We may sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time. If we sell common stock, convertible securities or other equity securities in more than one transaction, investors may be materially diluted by subsequent sales. These sales may also result in material dilution to our existing stockholders, and new investors could gain rights superior to our existing stockholders.

Pursuant to our 2013 equity incentive plan (2013 plan), our management is authorized to grant stock options and other equity-based awards to our employees, directors and consultants. The number of shares available for future grant under the 2013 plan will automatically increase each year by 4% of all shares of our capital stock outstanding as of December 31 of the prior calendar year, subject to the ability of our Board of Directors to take action to reduce the size of the increase in any given year. Currently, we plan to register the increased number of shares available for issuance under the 2013 plan each year. If our Board of Directors elects to increase the number of shares available for future grant by the maximum amount each year, our stockholders may experience additional dilution, which could cause our stock price to fall.

***We are at risk of securities class action litigation.***

In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because biopharmaceutical companies have experienced significant stock price volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of management's attention and resources, which could harm our business.

***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, including for any of the purposes described in "Use of Proceeds," and you will not have the opportunity as part of your investment decision to assess whether the net proceeds are being used appropriately. Because of the number and variability of factors that will determine our use of the net proceeds from this offering, their ultimate use may vary substantially from their currently intended use. The failure by our management to apply these funds effectively could harm our business. Pending their use, we may invest the net proceeds from this offering in short-term, investment-grade, interest-bearing securities. These investments may not yield a favorable return to our stockholders.

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

Under Section 382 of the Internal Revenue Code of 1986, as amended, 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 tax credits) to offset its post-change income may be limited. We expect that, with our most recent private placement and other transactions that have occurred over the past three years, we will trigger an "ownership change" limitation and that our net operating losses and tax credit carryforwards will be limited as a result of this initial public offering. The limitation may result in the expiration of our net operating losses and credits before we can use them, which could potentially result in increased future tax liability to us.

We may also experience ownership changes in the future as a result of future offerings and other subsequent shifts in our stock ownership. As a result, if we earn net taxable income, our ability to use our pre-change net operating loss carryforwards to offset United States federal taxable income may be subject to limitations, which could potentially result in increased future tax liability to us.

***We do not intend to pay dividends on our common stock so any returns will be limited to the value of our stock.***

We have never declared or paid any cash dividend on our common stock. We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. Any return to stockholders will therefore be limited to the appreciation of their stock.

***Provisions in our amended and restated certificate of incorporation and bylaws, as well as provisions of Delaware law, could make it more difficult for a third party to acquire us or increase the cost of acquiring us, even if doing so would benefit our stockholders or remove our current management.***

Some provisions of our charter documents and Delaware law may have anti-takeover effects that could discourage an acquisition of us by others, even if an acquisition would be beneficial to our stockholders and may prevent attempts by our stockholders to replace or remove our current management. These provisions include:

- authorizing the issuance of "blank check" preferred stock, the terms of which may be established and shares of which may be issued without stockholder approval;
- prohibiting stockholder action by written consent, thereby requiring all stockholder actions to be taken at a meeting of our stockholders;
- eliminating the ability of stockholders to call a special meeting of stockholders; and
- establishing advance notice requirements for nominations for election to the board of directors or for proposing matters that can be acted upon at stockholder meetings.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our Board of Directors, which is responsible for appointing the members of our management. In addition, we are subject to Section 203 of the Delaware General Corporation Law, which generally prohibits a Delaware corporation from engaging in any of a broad range of business combinations with an interested stockholder for a period of three years following the date on which the stockholder became an interested stockholder, unless such transactions are approved by our Board of Directors. This provision could have the effect of delaying or preventing a change of control, whether or not it is desired by or beneficial to our stockholders. Further, other provisions of Delaware law may also discourage, delay or prevent someone from acquiring us or merging with us.

***If securities or industry analysts do not publish research or reports about our business, or if they issue an adverse or misleading opinion regarding our stock, our stock price and trading volume could decline.***

The trading market for our common stock will be influenced by the research and reports that industry or securities analysts publish about us or our business. We do not currently have and may never obtain research coverage by securities and industry analysts. If no or few securities or industry analysts commence coverage of us, the trading price for our stock would be negatively impacted. In the event we obtain securities or industry analyst coverage, if any of the analysts who cover us issue an adverse or misleading opinion regarding us, our business model, our intellectual property or our stock performance, or if our target animal studies and operating results fail to meet the expectations of analysts, our stock price would likely decline. If one or more of these analysts cease coverage of us or fail to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

## SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements. The forward-looking statements are contained principally in the sections entitled "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business." These statements relate to future events or to our future financial performance and involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Forward-looking statements include, but are not limited to, statements about:

- the success, cost and timing of our or our partners' product development activities and clinical trials;
- our ability to obtain and maintain regulatory approval of our product candidates, and any related restrictions, limitations, and/or warnings in the label of an approved product candidate;
- our ability to obtain funding for our operations, including funding necessary to complete the clinical trials of any of our product candidates;
- our plans to research, develop and commercialize our product candidates;
- our ability to attract and retain collaborators with development, regulatory and commercialization expertise;
- the size and growth potential of the markets for our product candidates, and our ability to serve those markets;
- our ability to successfully commercialize our product candidates;
- the rate and degree of market acceptance of our product candidates;
- our ability to develop sales and marketing capabilities, whether alone or with potential future collaborators;
- regulatory developments in the United States and foreign countries;
- the performance of our third-party suppliers and manufacturers;
- the success of competing therapies that are or become available;
- the loss of key scientific or management personnel;
- our expectations regarding the period during which we qualify as an emerging growth company under the JOBS Act;
- our use of the proceeds from this offering;
- the accuracy of our estimates regarding expenses, future revenues, capital requirements and needs for additional financing; and
- our expectations regarding our ability to obtain and maintain intellectual property protection for our product candidates.

In some cases, you can identify these statements by terms such as "anticipate," "believe," "could," "estimate," "expects," "intend," "may," "plan," "potential," "predict," "project," "should," "will," "would" or the negative of those terms, and similar expressions. These forward-looking statements reflect our management's beliefs and views with respect to future events and are based on estimates and assumptions as of the date of this prospectus and are subject to risks and uncertainties. We discuss many of these risks in greater detail under the heading "Risk Factors." Moreover, we operate in a very

competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. Given these uncertainties, you should not place undue reliance on these forward-looking statements.

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. We qualify all of the forward-looking statements in this prospectus by these cautionary statements.

Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.

## USE OF PROCEEDS

We estimate that we will receive net proceeds of approximately \$67.3 million (or approximately \$77.7 million if the underwriters' over-allotment option is exercised in full) from the sale of the shares of common stock offered by us in this offering, based on an assumed initial public offering price of \$15.00 per share (the mid-point of the price range set forth on the cover page of this prospectus), and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. A \$1.00 increase (decrease) in the assumed initial public offering price of \$15.00 per share would increase (decrease) the net proceeds to us from this offering by approximately \$4.7 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 the estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, a one million share increase (decrease) in the number of shares offered by us, as set forth on the cover of this prospectus, would increase (decrease) the net proceeds to us by approximately \$14.0 million, assuming the assumed initial public offering price of \$15.00 per share (the mid-point of the price range set forth on the cover of this prospectus) remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The principal purposes of this offering are to obtain additional capital to support our operations, to create a public market for our common stock and to facilitate our future access to the public equity markets. We anticipate that we will use the net proceeds of this offering as follows:

- approximately \$19.3 million to fund the continued clinical development of XmAb5871 through a planned Phase 2b clinical trial;
- approximately \$21.7 million to fund initial clinical development of XmAb7195 through a planned Phase 1b clinical trial;
- approximately \$15.8 million to fund product candidate discovery, technology development and patent prosecution activities; and
- the remainder for working capital and other general corporate purposes, including the additional costs associated with being a public company.

We may also use a portion of the net proceeds from this offering to in-license, acquire, or invest in complementary businesses, technologies, products or assets. However we have no current plan, commitments or obligations to do so.

We believe that the net proceeds from this offering and our existing cash and cash equivalents, together with interest thereon, will be sufficient to fund our operations through 2016. Even with the expected net proceeds from this offering, we do not expect to have sufficient cash to complete the clinical development of any of our product candidates or, if applicable, to prepare for commercializing any product candidate that is approved.

Our expected use of net proceeds from this offering represents our current intentions based upon our present plans and business condition. As of the date of this prospectus, we cannot predict with certainty all of the particular uses for the net proceeds to be received upon the completion of this offering, or the amounts that we will actually spend on the uses set forth above. The amounts and timing of our actual use of the net proceeds will vary depending on numerous factors, including our ability to obtain additional financing, the progress, cost and results of our preclinical and clinical development programs, and whether we are able to enter into future product development partnerships and technology license arrangements. As a result, our management will have broad discretion in the application of the net proceeds, and investors will be relying on our judgment regarding the application of the net proceeds from this offering.

Pending their use, we plan to invest the net proceeds from this offering in short- and intermediate-term, interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government.

## **DIVIDEND POLICY**

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain all available funds and any future earnings to support our operations and finance the growth and development of our business. We do not intend to pay cash dividends on our common stock for the foreseeable future. Any future determination related to our dividend policy will be made at the discretion of our Board of Directors and will depend upon, among other factors, our results of operations, financial condition, capital requirements, contractual restrictions, business prospects and other factors our Board of Directors may deem relevant.

## CAPITALIZATION

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

- on an actual basis;
- on a pro forma basis, giving effect to the conversion of all our outstanding convertible preferred stock outstanding as of September 30, 2013 into an aggregate of 16,620,274 shares of our common stock upon the effectiveness of the registration statement of which this prospectus is a part; and
- on a pro forma as adjusted basis, reflecting the pro forma adjustments discussed above and giving further effect to the sale by us of 5,000,000 shares of our common stock at an assumed initial public offering price of \$15.00 per share (the mid-point of the price range set forth on the cover page of this prospectus), and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The pro forma information below is illustrative only and 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 our audited consolidated financial statements and the related notes appearing at the end of this prospectus, the sections entitled "Selected Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and other financial information contained in this prospectus.

	As of September 30, 2013		
	Actual	Pro Forma	Pro Forma as Adjusted(1)
	(in thousands, except share and per share amounts) (unaudited)		
Cash and cash equivalents	\$ 9,621	\$ 9,621	\$ 76,871
Mezzanine equity:			
Convertible preferred stock; \$0.01 par value:			
69,219,264 shares authorized, 51,523,206 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	\$ 79,601	\$ —	\$ —
Stockholders' equity (deficit):			
Preferred stock; \$0.01 par value:			
No shares authorized, issued or outstanding, actual; 10,000,000 shares authorized, no shares issued or outstanding, pro forma and pro forma as adjusted	—	—	—
Common stock and additional paid-in capital; \$0.01 par value:			
77,765,553 shares authorized, 72,302 shares issued and outstanding, actual;			
200,000,000 shares authorized, 16,692,576 shares issued and outstanding, pro			
forma; 200,000,000 shares authorized, 21,692,576 shares issued and			
outstanding, pro forma as adjusted	1	167	217
Additional paid-in capital	148,838	228,273	295,473
Accumulated deficit	(223,868)	(223,868)	(223,868)
Total stockholders' equity (deficit)	(75,029)	4,572	71,822
Total capitalization	\$ 4,572	\$ 4,572	\$ 71,822

- (1) Each \$1.00 increase or decrease in the assumed initial public offering price of \$15.00 per share would increase or decrease, respectively, the amount of cash and cash equivalents, additional paid-in capital and total capitalization by approximately \$4.7 million, assuming the number of shares offered by us, as set forth on the



cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering costs payable by us.

The number of common shares shown as issued and outstanding in the table is based on the number of shares of our common stock outstanding as of September 30, 2013, and excludes:

- 1,803,685 shares of common stock issuable upon the exercise of outstanding stock options as of September 30, 2013, at a weighted-average exercise price of \$1.61 per share;
- 2,390,448 shares of common stock reserved for future issuance under the 2013 plan, which will become effective as of the date of the effectiveness of the registration statement of which this prospectus forms a part (including 880,771 shares of common stock reserved for issuance under our 2010 pre-IPO plan, which shares will be added to the shares reserved under the 2013 plan upon its effectiveness); and
- 267,741 shares of common stock reserved for future issuance under the 2013 purchase plan, which will become effective as of the date of the effectiveness of the registration statement of which this prospectus forms a part.

**DILUTION**

If you invest in our common stock in this offering, your ownership interest will be immediately diluted to the extent of the difference between the initial public offering price per share 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 approximately \$(84.0) million, or \$(1,162.37) per share of common stock. Our historical net tangible book value (deficit) is the amount of our total tangible assets less our liabilities and convertible preferred stock which is not included within equity. Net historical tangible book value (deficit) per share is our historical net tangible book value (deficit) divided by the number of shares of common stock outstanding as of September 30, 2013. Our pro forma net tangible book value (deficit) as of September 30, 2013 was \$(4.4) million, or \$(0.27) per share of common stock. Pro forma net tangible book value (deficit) gives effect to the conversion of all of our outstanding convertible preferred stock as of September 30, 2013, into an aggregate of 16,620,274 shares of our common stock.

Pro forma as adjusted net tangible book value is our pro forma net tangible book value (deficit), plus the effect of the sale of 5,000,000 shares of our common stock in this offering at an assumed initial public offering price of \$15.00 per share (the mid-point of the price range set forth on the cover page of this prospectus), and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. This amount represents an immediate increase in pro forma as adjusted net tangible book value of approximately \$2.90 per share to our existing stockholders, and an immediate dilution of approximately \$12.10 per share to new investors participating in this offering.

The following table illustrates this dilution on a per share basis:

Assumed initial public offering price per share		\$ 15.00
Historical net tangible book value (deficit) per share as of September 30, 2013	\$ (1,162.37)	
Pro forma increase in net tangible book value per share as of September 30, 2013 attributable to the conversion of convertible preferred stock	1,162.10	
Pro forma net tangible book value per share as of September 30, 2013, before giving effect to this offering	(0.27)	
Increase in pro forma net tangible book value per share attributable to new investors participating in this offering	3.17	
Pro forma as adjusted net tangible book value per share after this offering		2.90
Dilution per share to new investors participating in this offering		<u>\$ 12.10</u>

A \$1.00 increase (decrease) in the assumed initial public offering price of \$15.00 per share, the mid-point of the price range set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted net tangible book value (deficit) per share after this offering by approximately \$0.21 per share and the dilution per share to new investors participating in this offering by approximately \$0.79 per share, 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 the estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, a one million share increase (decrease) in the number of shares offered by us, as set forth on the cover of this prospectus, would increase (decrease) the pro forma as adjusted net tangible book value (deficit) per share after this offering by approximately \$0.48 and the dilution in pro forma per share to investors participating in this offering by approximately (\$0.48), assuming the assumed initial public offering price of \$15.00 per share, which is the mid-point of the price range set forth on the cover page of this prospectus, remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

If the underwriters exercise their over-allotment option in full to purchase additional shares of our common stock in this offering, the pro forma as adjusted net tangible book value will increase to \$3.26 per share, representing an immediate dilution of \$11.74 per share to new investors participating in this offering.

The foregoing discussion is based on 72,302 shares of common stock outstanding as of September 30, 2013, and excludes:

- 1,803,685 shares of common stock issuable upon the exercise of outstanding stock options at a weighted-average exercise price of \$1.61 per share;
- 2,390,448 shares of common stock reserved for future issuance under the 2013 plan, which will become effective as of the date of the effectiveness of the registration statement of which this prospectus is a part (including 880,771 shares of common stock reserved for issuance under our 2010 pre-IPO plan, which shares will be added to the shares reserved under the 2013 plan upon its effectiveness); and
- 267,741 shares of common stock reserved for future issuance under our 2013 purchase plan, which will become effective as of the date of the effectiveness of the registration statement of which this prospectus is a part.

Effective as of the date of the effectiveness of the registration statement of which this prospectus forms a part, an aggregate of 2,390,448 and 267,741 shares of our common stock will be reserved for issuance under the 2013 plan (including 880,771 shares of common stock reserved for issuance under our 2010 pre-IPO plan, which shares will be added to the shares reserved under the 2013 plan upon its effectiveness) and the 2013 purchase plan, respectively, and these share reserves will also be subject to automatic annual increases in accordance with the terms of the plans. Furthermore, we may choose to raise additional capital through the sale of equity or convertible debt securities due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that any of these options are exercised, new options are issued under our equity incentive plans or we issue additional shares of common stock or other equity or convertible debt securities in the future, there will be further dilution to investors participating in this offering.

## SELECTED FINANCIAL DATA

The following selected financial data should be read together with our financial statements and related notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations" appearing elsewhere in this prospectus. The selected financial data in this section are not intended to replace our financial statements and the related notes. Our historical results are not necessarily indicative of the results that may be expected in the future and results of interim periods are not necessarily indicative of the results for the entire year.

The selected statement of operations data for the years ended December 31, 2011 and 2012 and the selected balance sheet data as of December 31, 2011 and 2012 are derived from our audited financial statements appearing elsewhere in this prospectus. The selected statement of operations data for the nine months ended September 30, 2012 and 2013 and the selected balance sheet data as of September 30, 2013 are derived from our unaudited financial statements appearing elsewhere in this prospectus. The unaudited financial statements have been prepared on a basis consistent with our audited financial statements included in this prospectus and include, in our opinion, all adjustments, consisting only of normal recurring adjustments, necessary for the fair presentation of the financial information in those statements.

	Year Ended December 31,		Nine Months Ended September 30,	
	2011	2012	2012	2013
	(in thousands, except share and per share data)			
	(Restated)		(unaudited)	
<b>Statement of Operations Data:</b>				
Revenues	\$ 6,849	\$ 9,524	\$ 7,099	\$ 8,428
Operating expenses:				
Research and development	12,663	12,668	8,725	12,857
General and administrative	3,638	3,086	2,081	2,381
Total operating expenses	16,301	15,754	10,806	15,238
Loss from operations	(9,452)	(6,230)	(3,707)	(6,810)
Other income (expenses)				
Interest income	34	11	11	7
Interest expense	(1,850)	(2,461)	(1,811)	(1,212)
Other income (expense)	65	86	24	15
Loss on settlement of notes(1)	—	—	—	(48,556)
Total other income (expenses), net	(1,751)	(2,364)	(1,776)	(49,746)
Net loss	(11,203)	(8,594)	(5,483)	(56,556)
Net deemed contribution on exchange and sale of preferred stock(2)	—	—	—	144,765
Net income (loss) attributable to common stockholders	\$ (11,203)	\$ (8,594)	\$ (5,483)	\$ 88,209
Net income (loss) per share attributable to common stockholders(3):				
Basic	\$ (154.95)	\$ (118.86)	\$ (75.83)	\$ 1,220.01
Diluted	\$ (154.95)	\$ (118.86)	\$ (75.83)	\$ (4.10)
Weighted average shares of common stock used in computing net income (loss) per share attributable to common stockholders:				
Basic	72,302	72,302	72,302	72,302
Diluted	72,302	72,302	72,302	13,794,138
Pro forma net loss per share of common stock, basic and diluted (unaudited)(4)		\$ (0.51)		\$ (0.48)
Weighted average shares used in computing pro forma net loss per share of common stock, basic and diluted (unaudited)(4)		16,692,576		16,692,576

(1) See note 3 to our interim financial statements appearing elsewhere in this prospectus for a description of the adjustment to net loss resulting from exchange of convertible notes for preferred stock.

(2) See notes 8 and 3 to our annual and interim financial statements, respectively, appearing elsewhere in this prospectus for a description of the deemed contribution on exchange and sale of preferred stock.

- (3) See notes 1 and 5 to our annual and interim financial statements, respectively, appearing elsewhere in this prospectus for a description of the method used to calculate basic and diluted loss per common share.
- (4) Pro forma net loss per share attributable to common stockholders excludes the impact of non-recurring items recognized in income attributable to common stockholders for the periods presented. We calculated pro forma weighted average shares outstanding for the nine months ended September 30, 2013 to give effect to the automatic conversion into shares of common stock, on a 3.1:1 basis, of all shares of convertible preferred stock outstanding at September 30, 2013. We calculated pro forma weighted average shares outstanding for the year ended December 31, 2012 to give effect to the automatic conversion into shares of common stock, on a 3.1:1 basis, of all shares of convertible preferred stock outstanding at September 30, 2013, which includes 13,666,071 shares of common stock issuable upon conversion of the shares of preferred stock received in connection with the exchange of our outstanding convertible promissary notes on June 13, 2013. We believe the calculation of pro forma shares described above is the most meaningful to investors, as such calculation represents the actual number of shares of common stock our notes became convertible into, and prior to the exchange of our convertible notes in June 2013, such notes were not convertible at the option of the holders, and the number of shares of common stock such notes were automatically convertible into upon an initial public offering was contingent on the public offering price, which was not known at the time of the conversion of the notes or applicable to the actual number of shares of common stock issued upon conversion of the notes.

*Pro forma net loss attributable to common stockholders (in thousands):*

	<b>Year Ended December 31, 2012</b>	<b>Nine Months Ended September 30, 2013</b>
Net income (loss) attributable to common stockholders	\$ (8,594)	\$ 88,209
Loss on settlement of notes	—	48,556
Net deemed contribution on exchange and sale of preferred stock	—	(144,765)
Pro forma net loss attributable to common stockholders	<u>\$ (8,594)</u>	<u>\$ (8,000)</u>

*Pro forma weighted average shares outstanding, basic and diluted:*

	<b>Year Ended December 31, 2012</b>	<b>Nine Months Ended September 30, 2013</b>
Common stock	72,302	72,302
Preferred Stock	16,620,274	16,620,274
Pro forma weighted average shares outstanding, basic and diluted	<u>16,692,576</u>	<u>16,692,576</u>
Pro forma net loss per share of common stock, basic and diluted (unaudited)	<u>\$ (0.51)</u>	<u>\$ (0.48)</u>

	<u>As of December 31,</u>		<u>As of September 30,</u>
	<u>2011</u>	<u>2012</u>	<u>2013</u>
	(restated)	(in thousands)	(unaudited)
<b>Balance Sheet Data:</b>			
Cash and cash equivalents	\$ 14,537	\$ 2,312	\$ 9,621
Working capital (deficit)	(11,550)	(22,640)	2,127
Patents, licenses, and other intangible assets, net	7,250	8,460	9,013
Total assets	22,374	11,659	20,206
Deferred revenue, less current portion	7,114	5,672	7,000
Convertible preferred stock	146,766	146,766	79,601
Total stockholders' deficit	(157,703)	(166,268)	(75,029)

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

*The following discussion and analysis should be read in conjunction with "Selected Financial Data" and our financial statements and related notes included elsewhere in this prospectus. This discussion and analysis and other parts of this prospectus contain forward-looking statements based upon current beliefs, plans and expectations that involve risks, uncertainties and assumptions, such as statements regarding our plans, objectives, expectations, intentions and projections. Our actual results and the timing of selected events could differ materially from those anticipated in these forward-looking statements as a result of several factors, including those set forth under "Risk Factors" and elsewhere in this prospectus. You should carefully read the "Risk Factors" section of this prospectus to gain an understanding of the important factors that could cause actual results to differ materially from our forward-looking statements. Please also see the section entitled "Special Note Regarding Forward-Looking Statements."*

### Overview

We are a clinical-stage biopharmaceutical company focused on discovering and developing engineered monoclonal antibodies to treat severe and life-threatening diseases with unmet medical needs. We use our proprietary XmAb technology platform to create next-generation antibody product candidates designed to treat autoimmune and allergic diseases, cancer and other conditions. In contrast to conventional approaches to antibody design, which focus on the portion of antibodies that interact with target antigens, we focus on the portion of the antibody that interacts with multiple segments of the immune system. This portion, referred to as the Fc domain, is constant and interchangeable among antibodies. Our engineered Fc domains, the XmAb technology, can be readily substituted for natural Fc domains. We believe our Fc domains enhance antibody performance by, for example, increasing immune inhibitory activity, improving cytotoxicity or extending circulating half-life, while maintaining 99.5% identity in structure and sequence to natural antibodies. By improving over natural antibody function, we believe that our XmAb-engineered antibodies offer innovative approaches to treating disease and potential clinical advantages over other treatments.

Our business strategy is based on the plug-and-play nature of the XmAb technology platform to modify features of natural antibodies and create numerous differentiated antibody product candidates. We have internally generated a pipeline that has allowed us to selectively partner certain development programs while maintaining full ownership of other programs. We also have a number of technology licenses under which we have licensed the XmAb technology platform to pharmaceutical and biotechnology companies for use in a limited number of programs, providing multiple revenue streams that require no further resources from Xencor. There are currently five antibody product candidates in clinical trials that have been engineered with XmAb technology, including four candidates being advanced by licensees and development partners. At present, our XmAb technology platform is protected by 21 issued U.S. patents and 44 U.S. patent applications, in addition to foreign counterparts.

We were founded in 1997 based on protein engineering technology developed by our co-founders Bassil Dahiyat, Ph.D. and Stephen Mayo, Ph.D. at the California Institute of Technology. We began our first therapeutic monoclonal antibody engineering and discovery programs in 2002 and entered into our first XmAb technology license in 2004. Our product development partnerships and technology licenses have provided us with approximately \$60 million in cash during the last five years, and we have the potential to receive an aggregate of approximately \$1.3 billion in milestone payments, in addition to royalties on sales, upon successful development and commercialization of the programs contemplated by our product development partnership and technology license agreements. These potential milestone payments include \$240 million relating to the achievement of clinical development milestones.

We have no products approved for commercial sale and have not generated any revenues from product sales, and we continue to incur significant research and development expenses and other

expenses related to our ongoing operations. To date, we have funded our operations primarily through the sale of our convertible preferred stock, sale of convertible promissory notes and through payments generated from our product development partnership and licensing arrangements.

We have incurred losses in each year since our inception. Our net losses were \$56.6 million for the nine months ended September 30, 2013 and \$11.2 million and \$8.6 million for years ended December 31, 2011 and 2012, respectively. As of September 30, 2013, we had an accumulated deficit of \$223.9 million. Substantially all of our operating losses resulted from expenses incurred in connection with our product candidate development programs, our research activities and general and administrative costs associated with our operations.

We expect to continue to incur significant expenses and increasing operating losses for at least the next several years. In the near term, we anticipate that our expenses will increase as we:

- continue clinical development of our XmAb5871 program pursuant to our collaboration and option agreement with Amgen, Inc. (Amgen), which will require additional expenditures for clinical trials and toxicology studies to support the clinical trials, including the manufacture of additional supply of the product candidate;
- continue development of our XmAb7195 program, which will require expenditures for clinical trials and toxicology studies to support the clinical trials, including the manufacture of additional supply of the product candidate;
- continue research expenditures in developing and advancing our pre-clinical programs and investing in improving our antibody discovery platform and technologies; and
- provide general and administrative support for our operations.

### Key Company Milestones

*XmAb5871.* In December 2010, we entered into a Collaboration and Option Agreement with Amgen for an option for the acquisition by Amgen of exclusive rights to our XmAb5871 product candidate and received an \$11.0 million upfront payment. For more information on our agreement with Amgen, see the section entitled "Business—Product Development Partnerships, Other Commercial Agreements and Technology Licenses" beginning on page 100 of this prospectus. In January 2013, we initiated a Phase 1b/2a clinical trial for XmAb5871 and received a \$2.0 million milestone payment. We expect to have preliminary results from the Phase 1b/2a trial treating patients with rheumatoid arthritis with active disease on stable non-biologic DMARD therapy in the second half of 2014. We expect to initiate the Phase 2b proof-of-concept trial in the first half of 2015 and complete the trial and deliver the clinical trial package to Amgen in 2017, following which Amgen will have 90 days to review the data and exercise its option.

*XmAb7195.* We expect to file an investigational new drug application (IND) with the FDA for our XmAb7195 program in the first half of 2014 and to begin dosing subjects in a Phase 1a clinical trial. We expect to complete the initial Phase 1a clinical trial at the end of 2014. Further, we plan on initiating a Phase 1b clinical trial of XmAb7195 in healthy volunteers and in patients with mild-to-moderate asthma in early 2015.

*XmAb5574/MOR208.* In June 2010, we entered into a Collaboration and License Agreement with MorphoSys AG (MorphoSys) for the worldwide rights to our XmAb5574/MOR208 product candidate, for which we received an upfront payment of \$13.0 million in July 2010. MorphoSys initiated a Phase 2 clinical trial with XmAb5574/MOR208 in May 2013, treating patients with non-Hodgkin lymphoma (NHL) and a second Phase 2 clinical trial in April 2013 to treat patients with acute lymphoblastic leukemia (ALL). In conjunction with the initiation of these trials, we received two milestone payments totaling \$3.0 million. For more information on our agreement with MorphoSys, see the section entitled



"Business—Product Development Partnerships, Other Commercial Agreements and Technology Licenses" beginning on page 100 of this prospectus.

*Preferred Stock Financing and Note Conversion Agreement*

From our inception in 1998 through 2007, we completed the sale of five rounds of convertible preferred stock: Series A, Series B, Series C, Series D and Series E convertible preferred stock (Preferred Series A – E) for total proceeds of \$146.8 million, which amount is classified as mezzanine equity as of December 31, 2012 and September 30, 2012. In 2009 and 2010, we sold a total of \$15.1 million of convertible promissory notes (the Notes) to our existing preferred stockholders. The Notes originally carried an interest rate of 10.0% per annum and originally matured within 12 months of issuance. In 2011, the Notes were amended to extend the maturity date to December 31, 2012 and to increase the interest rate on the Notes to 12.5% per annum. In 2012 and 2013, the Notes were amended on multiple occasions to subsequently extend the maturity date to March 31, 2013, April 15, 2013 and finally to June 15, 2013. The Notes provided that, upon a change of control or other liquidation event, the outstanding principal and accrued interest of the Notes would be converted into shares of our Series E-1 convertible preferred stock, at a per share price of \$2.41, which would be entitled to payment of a liquidation preference equal to three times such per share price in priority to any liquidation payments to be made to any other series of convertible preferred stock or common stock. The principal amount of the Notes, together with accrued and unpaid interest, was \$18.5 million and \$20.9 million as of December 31, 2011 and 2012, respectively, and was shown as a current liability on our balance sheet for each such date.

In June 2013, our Board of Directors and the requisite holders of the Notes and requisite preferred stockholders agreed to a series of transactions to exchange the Notes and existing Preferred Series A – E for a new class of preferred stock, the Series A-1 convertible preferred stock, and also authorized the sale of up to \$10.0 million of Series A-1 convertible preferred stock to existing stockholders. The transaction was completed in the following steps:

- an exchange of the outstanding principal due on the Notes for shares of Series A-1 convertible preferred stock and cancellation of the accrued and unpaid interest thereon, pursuant to a Note Conversion Agreement;
- an exchange of the current outstanding shares of Preferred Series A – E for Series A-1 convertible preferred stock pursuant to the operation of provisions in our certificate of incorporation, which was amended and restated in connection with this series of transactions;
- the sale of an additional \$7.6 million in Series A-1 convertible preferred stock to existing stockholders that closed in June 2013;
- the conversion of certain shares of Series A-1 convertible preferred stock into shares of Series A-2 convertible preferred stock at a conversion rate of 1 for 3, pursuant to a mandatory conversion provision in our amended and restated certificate of incorporation; and
- the sale of an additional \$2.4 million in Series A-1 convertible preferred stock to existing stockholders that closed in September 2013.

The primary business purpose for this series of transactions was to raise an additional \$10.0 million of capital from the sale of shares of our Series A-1 convertible preferred stock (the Financing). The exchange of Notes, cancellation of interest, restatement of our certificate of incorporation to effect the exchange of Preferred Series A – E for Series A-1 convertible preferred stock and the conversion of certain shares of Series A-1 convertible preferred stock for shares of Series A-2 convertible preferred stock were each negotiated aspects of, and conditions to, the Financing. When considering the terms for the Financing, our Board of Directors took these conditions into account and, ultimately, determined that the Financing was in the best interests of the Company and our stockholders.

Subsequent to approval of the Financing by our Board of Directors, the requisite stockholders and holders of the Notes also approved this series of transactions.

Under the terms of the Note Conversion Agreement, the total outstanding principal due on the Notes as of June 13, 2013 was exchanged for 45,902,321 shares of Series A-1 convertible preferred stock, 5,303,597 of which were subsequently converted into 1,766,097 shares of Series A-2 convertible preferred stock. We determined that the per share fair value of the shares of Series A-1 convertible preferred stock issued under the Note Conversion Agreement was \$1.54 and the total fair value of the shares of Series A-1 convertible preferred stock was \$70.7 million and we recognized a loss on the exchange of \$48.6 million for the difference in the fair value of the shares of Series A-1 convertible preferred stock and the carrying value of the Notes as of June 13, 2013. The \$48.6 million loss is reported on our Statement of Operations as a Loss on Settlement of Notes as an Other Expense for the nine months ended September 30, 2013. Associated transaction costs of \$41,000 related to the exchange were expensed.

After the exchange of the Notes, the outstanding shares of Preferred Series A – E were exchanged for 1,977,137 shares of Series A-1 convertible preferred stock, 257,409 of which were subsequently converted into 85,717 shares of Series A-2 convertible preferred stock. We determined the fair value of the shares of Series A-1 convertible preferred stock issued to be \$3.0 million and we recorded a deemed contribution to equity of \$140.6 million (net of original issuance costs of \$3.0 million) equal to the difference in the fair value of the shares issued and the carrying value of the existing shares of Preferred Series A – E.

On June 26, 2013 we sold 5,586,510 additional shares of Series A-1 convertible preferred stock to existing stockholders for gross proceeds of \$7.6 million at a purchase price of \$1.36 per share. We determined that the fair value of the shares sold to be \$8.6 million and we recorded a deemed dividend of \$1.0 million for the difference in the sales price of the Series A-1 convertible preferred stock and the fair value of the shares. The \$41,000 of transaction costs related to the sale were recorded against Additional Paid-in Capital and the shares of Series A-1 convertible preferred stock issued were recorded at their fair value on our balance sheet as of September 30, 2013.

We determined that the fair value of the Series A-1 and Series A-2 convertible preferred stock as of June 26, 2013 was \$1.54 and \$0.58, respectively. We used the probability-weighted expected return method (PWERM) to determine the fair value of the shares of the Series A-1 and Series A-2 convertible preferred stock. PWERM is a scenario-based analysis that estimates the value per share based on the probability-weighted present value of expected future investment returns, considering each of the possible outcomes available to us, as well as the economic and control rights of each share class.

On September 23, 2013 we sold 1,766,430 additional shares of Series A-1 convertible preferred stock for gross proceeds of \$2.4 million at a purchase price of \$1.36 per share. We determined the fair value of the shares of Series A-1 convertible preferred stock sold to be \$4.7 million, based on a per share fair value of \$2.69, and we recorded a deemed dividend of \$2.3 million for the difference in the sales price of the Series A-1 convertible preferred stock and the fair value of the shares. We determined the fair value of the Series A-1 convertible preferred stock as of September 23, 2013 by estimating the enterprise value of the Company based on a projected offering price in an initial public offering. The Company filed a confidential registration on September 11, 2013 and estimated a per share price as of September 23, 2013 of \$2.69 per share. Transaction costs of \$34,000 related to the sale were recorded against Additional Paid-in Capital and the shares of Series A-1 convertible preferred stock were recorded at their fair value on our balance sheet as of September 30, 2013.

The outstanding shares of Series A-1 convertible preferred stock and Series A-2 convertible preferred stock have an aggregate liquidation preference of \$150.0 million that will increase at 6% per annum and is payable to the holders of Series A-1 convertible preferred stock and Series A-2

convertible preferred stock upon a sale or other liquidation of the Company. The aggregate liquidation preference of our convertible preferred stock at September 30, 2013 was \$152.3 million.

The Series A-1 convertible preferred stock and Series A-2 convertible preferred stock are currently convertible into shares of common stock on a 3.1 for 1 basis, subject to adjustment if we issue additional equity at a price per share that is less than the per share price of the Series A-1 convertible preferred stock and Series A-2 convertible preferred stock, as applicable. All of the outstanding Series A-1 convertible preferred stock and Series A-2 convertible preferred stock will automatically convert into common stock effective as of the effectiveness of the registration statement of which this prospectus forms a part.

We have not adjusted the original fair values to the current liquidation preferences as of September 30, 2013 of the shares of the Series A-1 convertible preferred stock and Series A-2 convertible preferred stock because it is uncertain whether or not an event would occur that would obligate us to pay the preferred stock liquidation preferences to the holders of the Series A-1 convertible preferred stock and Series A-2 convertible preferred stock.

Because a deemed liquidation event and payment of the preferred stock liquidation preferences could occur outside the control of our management, we have classified all convertible preferred stock outside of stockholders' deficit for all periods presented.

## **Financial Operations Overview**

### ***Revenues***

To date, we have not generated any revenues from product sales and do not expect to do so for the foreseeable future. Revenues to date have been generated primarily from our research and product development partnerships and technology licensing agreements. Since our inception through September 30, 2013, we have generated \$63.4 million in revenues under our various product development partnership and technology license arrangements. Several of our product development partnership and technology license agreements provide us the opportunity to earn future milestone payments, royalties on product sales and option exercise payments. However, receipt of future milestone payments and royalties from our collaborators and receipt of the Amgen option payment are not wholly within our control, and the parties to our product development partnerships and license agreements have the right to cancel their programs without any future payments to us. Even if we receive future milestones, royalties and option payments, these payments will not be sufficient to fund our operations in the near term and there is no assurance that we will generate any future revenues from our existing product development partnerships and license agreements. We may also not generate any product revenue from our existing clinical development programs or any of our preclinical development programs, as we may never succeed in obtaining regulatory approval or commercializing any of these programs.

**Summary of Collaboration and Licensing Revenue by Partner**

The following is a comparison of collaboration and licensing revenue for the years ended December 31, 2011 and 2012 and the nine months ended September 30, 2012 and 2013 (unaudited) (in millions):

	Years Ended December 31,		Nine Months Ended September 30,	
	2011	2012	2012	2013
Amgen	\$ 2.0	\$ 1.8	\$ 1.4	\$ 1.7
MorphoSys	2.2	2.0	1.5	3.0
CSL	1.3	1.8	1.8	2.0
Janssen	1.0	1.4	—	—
BI	—	1.2	1.3	—
Merck	—	—	—	1.0
Other	0.3	1.3	1.1	0.7
<b>Total</b>	<u>\$ 6.8</u>	<u>\$ 9.5</u>	<u>\$ 7.1</u>	<u>\$ 8.4</u>

**Research and Development Expenses**

Research and development expenses consist primarily of salaries, benefits, stock-based compensation and related personnel costs, supplies, facility costs and preclinical testing costs and fees paid to external service providers. External service providers include contract research organizations (CRO) and contract manufacturing organizations (CMO) to conduct clinical trials, manufacturing and process development, IND-enabling toxicology testing and formulation of clinical drug supplies. We expense research and development expenses as incurred. We account for nonrefundable advance payments for goods and services that will be used in future research and development activities as expense when the service has been performed or when the goods have been received. We estimate preclinical study and clinical trial expenses based on the services performed pursuant to the contracts with research institutions and clinical research organizations that conduct and manage preclinical studies and clinical trials on our behalf based on the actual time and expenses incurred by them. We accrue expenses related to clinical trials based on the level of patient enrollment and activity according to the related agreement. We monitor patient enrollment levels and related activity to the extent reasonably possible and adjust estimates accordingly. Our estimates of clinical trial expense have fluctuated on a period-to-period basis due to changes in the stage of the clinical trials and patient enrollment levels. We expect to experience a continuing pattern of fluctuations in clinical trial expenses as current clinical trials are completed and as we initiate the next stage of clinical trials. To date, we have not experienced significant differences between our periodic estimates of clinical trial expense and the actual costs incurred. We expect changes in future clinical trial expenses to be driven by changes in service provider costs and changes in clinical stage and patient enrollment. We have incurred a total of \$188.2 million in research and development expenses from inception through September 30, 2013.

At this time, due to the risks inherent in the clinical development process and the early stage of our development programs, we are unable to estimate with any certainty the costs we will incur in the continued development of XmAb5871, XmAb7195 or any of our preclinical development programs. We expect that our research and development expenses may increase over spending levels in recent years if we are successful in advancing XmAb5871, XmAb7195 or any of our preclinical programs into advanced stages of clinical development. The process of conducting preclinical studies and clinical trials necessary to obtain regulatory approval is costly and time-consuming. We or our partners may never succeed in achieving marketing approval for any of our product candidates. Numerous factors may affect the probability of success for each product candidate, including preclinical data, clinical data, competition, manufacturing capability, approval by regulatory authorities and commercial viability.

Our research and development operations are conducted such that design, management and evaluation of results of all of our research and development is performed internally, while the execution of certain phases of our research and development programs, such as toxicology studies in accordance with Good Laboratory Practices (GLP), and manufacturing in accordance with current Good Manufacturing Practices (cGMP), is accomplished using CROs and CMOs. We account for research and development costs on a program-by-program basis except in the early stages of research and discovery, when costs are often devoted to identifying preclinical candidates and improving our discovery platform and technologies, which are not necessarily allocable to a specific development program. We assign costs for such activities to distinct projects for preclinical pipeline development and new technologies. We allocate research management, overhead, commonly used laboratory supplies and equipment, and facility costs based on the number of full-time research personnel allocated to each program.

The following is a comparison of research and development expenses for the years ended December 31, 2011 and 2012 and the nine months ended September 30, 2012 and 2013 (unaudited) (in millions):

	Years Ended December 31,		Nine Months Ended September 30,	
	2011	2012	2012	2013
<b>Product programs:</b>				
XmAb5871	\$ 4.3	\$ 5.1	\$ 3.3	\$ 5.7
XmAb7195	1.8	2.6	1.8	4.3
XmAb5574/MOR208	2.2	1.5	1.3	0.4
Other	4.4	3.5	2.3	2.5
<b>Total research and development expenses</b>	<u>\$ 12.7</u>	<u>\$ 12.7</u>	<u>\$ 8.7</u>	<u>\$ 12.9</u>

We initiated a Phase 1b/2a clinical trial of XmAb5871 in January 2013 and expect to initiate a Phase 1a clinical trial of XmAb7195 in the first half of 2014. All of our other programs are in preclinical development or are being developed by licensees or collaborators. The successful development of our current and future product candidates is highly uncertain and may not result in approved products. Completion dates and completion costs can vary significantly for each product candidate and are difficult to predict for each candidate. Given the uncertainty associated with clinical trial enrollment rates and the risks inherent in the development process, we are unable to determine the duration and completion costs of the current or future clinical trials of our product candidates or if, or to what extent, we will generate revenues from the commercialization and sale of any of our product candidates. We anticipate we will need to raise additional capital or may seek additional partnerships in the future in order to complete the development and commercialization of our product candidates.

#### **General and Administrative Expenses**

General and administrative expenses consist primarily of salaries and related benefits, including stock-based compensation related to our executive, finance, business development and support functions. Other general and administrative expenses include rent and utilities, travel expenses and professional fees for auditing, tax and legal services. We expect that general and administrative expenses may increase in the future as we advance our development programs further. In addition, general and administrative costs are expected to reflect increased costs associated with our becoming a public reporting company. We anticipate incurring one-time costs in 2013 associated with our initial public offering, consisting primarily of legal and accounting fees.

### ***Other Income (Expense), Net***

Other income (expense), net, consists primarily of interest expense incurred on our convertible promissory notes issued in 2009 and 2010, interest income and miscellaneous gains and losses on the sale of excess equipment. Other income (expense), net, for the period ended September 30, 2013 also reflects the loss of \$48.6 million we recognized on the exchange of the convertible notes for preferred stock as described further in Note 8 to our audited financial statements and Note 3 to our interim unaudited financial statements included in this prospectus.

### **Critical Accounting Policies and Significant Judgments and Estimates**

Our 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 (GAAP). In preparing our financial statements, we are required to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. We have identified the following accounting policies that we believe require application of management's most subjective judgments, often requiring the need to make estimates about the effect of matters that are inherently uncertain and may change in subsequent periods. Our actual results could differ from these estimates and such differences could be material.

While our significant accounting policies are described in more detail in Note 1 of our audited financial statements included elsewhere in this prospectus, we believe the following accounting policies to be critical to the judgments and estimates used in the preparation of our financial statements.

#### ***Revenue Recognition***

We have, to date, earned revenue from research collaborations, which may include research and development services, licenses of our internally-developed technologies, or a combination of both. We recognize revenue when all of the following criteria are met: persuasive evidence of an arrangement exists, transfer of or access to technology has been completed or services have been rendered, our price to the customer is fixed or determinable, and collectability is reasonably assured. The terms of our license and research and development agreements include nonrefundable upfront payments and license fees, milestone and other contingent payments to us for the achievement of defined collaboration objectives, and certain clinical, regulatory and sales-based events, as well as royalties on sales of any commercialized products. The terms of our licensing agreements include non-refundable upfront fees, annual licensing fees and contingent payments and milestones for the achievement of pre-defined preclinical, clinical, regulatory and sales-based events by our partners. The licensing agreements also include royalties on sales of any commercialized products by our partners.

#### ***Multiple-Element Revenue Arrangements***

Certain of our product development partnership and technology license agreements represent multiple-element revenue arrangements. To account for such transactions, we determine the elements, or deliverables, included in the arrangement and determine which deliverables are separate units for accounting purposes. We consider delivered items to be separate units of accounting if the delivered items have stand-alone value to the customer. If the delivered items are separate units we allocate the consideration received or due under the arrangement to the various elements based on each element's relative selling price. The identification of individual elements in a multiple-element arrangement and the estimation of the selling price of each element involve significant judgment, including consideration as to whether each delivered element has standalone value to the customer. We determine the estimated selling price for deliverables within each arrangement using vendor-specific objective evidence

(VSOE) of selling price, if available, or third-party evidence of selling price if VSOE is not available, or our best evidence of selling price if neither VSOE nor third-party evidence is available. Determining the best estimate of selling price for a deliverable requires significant judgment. The basis of our estimate of selling price is the arm's length negotiation with the licensee that occurs in each transaction. The potential value of our technology to a licensee in a transaction depends on a variety of factors unique to each transaction. Factors that impact the negotiation and hence that we consider in our estimates center on the specific product candidate and include: the product candidate's potential market size, the product candidate's stage of development, the existence of competitive technologies that could be substituted for ours by the licensee and the scientific assessment of the product candidate's likelihood of success at various development stages. The most common deliverable is the commercial license for our technology in the product candidate, and frequently a research license with an option for commercial license. The upfront payments, annual license fees, milestones and royalties relate to these licenses and/or options and depend on the product-specific factors described above. The other significant deliverable is research and development services and the price for these depends on estimates for our personnel and supply costs and the costs of third-party contract research organizations necessary to support the services.

We use our best estimate of selling price to estimate the selling price for licenses to our technologies and product candidates and our research and development services, since we do not have VSOE or third-party evidence of selling for these deliverables. We recognize consideration allocated to an individual element when all other revenue recognition criteria are met for that element. Our multiple-element revenue arrangements generally include the following:

- *License Arrangements:* The deliverables under our product development partnership and technology license agreements generally include exclusive or non-exclusive licenses to one or more of our technologies. The technologies can be applied to a collaborator's product candidates for discovery, development, manufacturing and commercialization. We will also enter into agreements for the exclusive or non-exclusive licenses to our internally developed product candidates. To account for this element of the arrangement, we evaluate whether the exclusive or non-exclusive license has standalone value apart from the undelivered elements to the collaborator, which generally include research and development services or options for commercial licenses, based on the consideration of the facts and circumstances of each arrangement, including the research and development capabilities of the collaborator and other market participants. We recognize arrangement consideration allocated to licenses upon delivery of the license, if the facts and circumstances indicate the license has standalone value apart from the undelivered elements. If facts and circumstances indicate that the delivered license does not have standalone value from the undelivered elements, we recognize the revenue as a combined unit of accounting. In those circumstances we recognize revenue from non-refundable upfront fees in the same manner as the undelivered item(s), which is generally the period over which we provide research and development services.
- *Research and Development Services:* The deliverables under our product development partnership and technology license arrangements may include deliverables related to research and development services we perform on behalf of the collaborator. As the provision of research and development services is an integral part of our operations and we may be principally responsible for the performance of these services under the agreements, we recognize revenue on a gross basis for research and development services as we perform those services. Additionally, we recognize research related funding under collaboration research and development efforts as revenue as we perform or deliver the related services in accordance with contract terms.

*Milestone Revenue:* Our product development partnership and technology license agreements generally include contingent payments and milestone payments related to specific research, development and regulatory milestones and sales-based milestones. Research, development and

regulatory contingent payments and milestone payments are typically payable under our collaborations when our collaborator selects a compound, or initiates or advances a covered product candidate in preclinical or clinical development, upon submission for marketing approval of a covered product with regulatory authorities, upon receipt of actual marketing approvals of a covered product or for additional indications, or upon the first commercial sale of a covered product. Sales-based milestones are typically payable when annual sales of a covered product reach specific levels. At the inception of each arrangement that includes milestone payments, we evaluate whether each milestone is substantive and at risk to both parties based on the basis of the contingent nature of the milestone. We evaluate factors such as scientific, regulatory, commercial and other risks that we must overcome to achieve the respective milestone, whether the milestone consideration is reasonable relative to all deliverables and payment terms in the arrangement in making this assessment and whether the milestone payment relates solely to past performance.

We have elected to adopt the Financial Accounting Standards Board (FASB) Accounting Standards Update 2010-17, *Revenue Recognition—Milestone Method*, such that we recognize any payment that is contingent upon the achievement of a substantive milestone entirely in the period in which the milestone is achieved. A milestone is defined as an event that can only be achieved based in whole or in part on either on our performance, or the performance of our collaborators, or the occurrence of a specific outcome resulting from our past performance for which there is a substantive uncertainty at the date the arrangement is entered into that the event will be achieved.

#### ***Capitalized Intellectual Property Costs***

We capitalize and amortize third-party intellectual property costs such as amounts paid to outside patent counsel for filing, prosecuting and obtaining patents for our internally developed technologies and product candidates, to the extent such patents are deemed to have probable future economic benefit. We also capitalize amounts paid to third parties for licenses that we acquire for intellectual property or for research and development purposes. The total capitalized patents, licenses and other intangible assets as of December 31, 2011 and 2012 was \$7.3 and \$8.5 million, respectively. The total capitalized patents, licenses and other intangible assets as of September 30, 2013 was \$9.0 million. We believe that these costs should be capitalized as the intellectual property portfolio is the underlying property right to our technologies and product candidates and supports the upfront payments, licensing fees, and milestone payments made by our collaboration partners for licensing our technologies and product candidates.

We begin amortization of capitalized patent costs during the period that we obtain a patent relating to the capitalized cost over the shorter of the patent life or the estimated economic useful life. Capitalized licensing costs are amortized beginning in the period that access to the license or technology is available and is amortized over the shorter of the license term or the estimated economic useful life of the licensed asset. Such amortization is reflected in the General and Administrative section of our Statement of Operations.

On a regular basis we review the capitalized intellectual property portfolio and determine if there have been changes in the scientific or patent landscape that leads us to decide to abandon an in-process patent application or abandon a previously issued patent. While we confer with outside patent counsel, the decision to continue prosecuting certain patent claims or abandon other claims are made by us based on our judgment and existing knowledge of our technology, current U.S. and foreign patent authority rulings and expected rulings, and scientific advances and patent filings by competitors operating in our technology or drug development field. We record an expense for previously capitalized intangible assets in the period that the decision to abandon a claim or license is made. We also review the carrying value of capitalized licensing costs on a regular basis to determine if there have been any changes to the useful life or estimated amortization period over which the costs are being amortized. We recorded a charge for previously abandoned intangible assets of \$1.2 million and \$0.4 million for



the years ended December 31, 2011 and 2012, respectively, and recorded a charge for previously abandoned intangible assets of \$0.2 million for the nine months ended September 30, 2013. Such charges are reflected in the General and Administrative section of our Statement of Operations.

ASC 360 requires us to determine if there has been an impairment of our intangible assets which include the capitalized patent and licensing costs whenever events such as recurring operating losses or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. We evaluated the undiscounted cash flows related to the patent portfolio and determined that the future undiscounted cash flows exceeded the carrying value of the assets as of December 31, 2012. We individually evaluated the undiscounted cash flows and the potential for impairment for the three technology categories of our patent assets (IIb, ADCC and Xtend) by modeling the cash flows from our lead internal product development programs, XmAb5871 and XmAb7195, and licensed programs that use each particular category of patent asset. We used multiple published sources of pharmaceutical development-stage product failure rates to estimate failure rates at each stage of clinical development in order to apply a probability weighting to cash flows for each internal and licensed program.

#### ***Preferred Stock Financing and Note Conversion Agreement***

In June 2013, our Board of Directors and the requisite holders of the Notes and requisite holders of our preferred stock, agreed to exchange the Notes and their shares of Preferred Series A – E for shares of Series A-1 convertible preferred stock. Our Board of Directors and stockholders also authorized a sale of up to \$10.0 million in shares of Series A-1 convertible preferred stock to our existing stockholders at a purchase price of \$1.36 per share.

This series of transactions, as described further above, was between the company and our existing stockholders. Under ASC 470-50-40, the exchange of Notes for shares of preferred stock was treated as an extinguishment of debt and we recognized a loss on the Note exchange of \$48.6 million for the nine months ended September 30, 2013. The exchange of shares of Preferred Series A – E for shares of Series A-1 convertible Preferred stock was treated as a redemption of the shares of Preferred Series A – E and we recognized a deemed contribution to equity of \$140.6 million (net of original issuance costs of \$3.0 million related to shares of Preferred Series A – E) for the nine months ended September 30, 2013.

Both the loss on the exchange of the Notes and the deemed contribution from the exchange of Preferred Series A – E were based on our estimate of the per share fair value of the shares of Series A-1 convertible preferred stock of \$1.54. This estimate was determined in accordance with the guidelines under FASB ASC 718 and ASC 820. We used the valuation in determining our enterprise value for us and the probability weighted expected exit scenarios of the Company as of the date of the exchange. The assumptions for the valuation are based on our judgment and understanding of our business and our probability to have a successful exit in an initial public offering or through a sale of the Company.

On September 23, 2013 we sold 1,766,430 additional shares of Series A-1 convertible preferred stock for gross proceeds of \$2.4 million at a purchase price of \$1.36 per share. We determined the fair value of the shares of Series A-1 convertible preferred stock to be \$4.7 million based on a per share fair value of \$2.69, which was based upon an estimate of the enterprise value of the Company using a projected offering price in an initial public offering, and we recorded a deemed dividend of \$2.3 million for the difference in the sales price of the Series A-1 convertible preferred stock and the fair value of the shares. We determined the fair value of the Series A-1 convertible preferred stock as of September 23, 2013 taking into account all material facts and circumstances known to us as of the date of the sale of Series A-1 preferred stock on September 23, 2013 including the independent third party valuation of August 15, 2013 and subsequent changes in our operations, prospects and expected operating results.

**Cross License with Related Party**

In December 2012, we entered into a Cross-License Agreement with MedImmune, LLC (MedImmune), an affiliate of MedImmune Ventures, Inc., one of our 5% or greater stockholders. We provided MedImmune with a research license to one of our technologies and options to a limited number of worldwide, royalty-free exclusive licenses, subject to review and approval by us. In exchange, MedImmune provided us with a worldwide, non-exclusive, royalty-free license to certain patent rights. The transaction is a non-monetary transaction as provided under ASC 845-10.

We could not determine a fair value of the MedImmune patent rights received by us with reasonable certainty and established a fair value for the transaction by estimating the fair value of the license and options provided by us to MedImmune. We estimated the fair value of the license and options transferred to be approximately \$0.8 million. This amount was recognized as licensing revenue for the year ended December 31, 2012 and was capitalized and will be amortized over the remaining life of the MedImmune patent rights. Our estimate was based on a risk adjusted discounted cash flow analysis that is associated with the rights and options transferred to MedImmune. In determining this estimate, we compared the license and options rights transferred to MedImmune with comparable arms-length licensing and option transactions we have entered into with third parties in recent years. The calculation of the fair value is based on our experience and judgment with similar transactions. However, as each license and option is unique to the licensee and depends on the target, the potential market and the ability of the licensee to successfully advance a compound into clinical development, the actual value of the licenses and options could differ from the amount we estimated to be the fair value.

**Accrued Research and Development Expenses**

As a result of contractual and timing differences in payment terms, we are required to make estimates of our accrued expenses as of each balance sheet date in our financial statements based on the facts and circumstances known to us at that time. Our expense accruals for clinical trials are based on estimates of the fees associated with services provided by clinical trial investigational sites and CROs. Payments under some of the contracts we have with such parties depend on factors such as successful enrollment of patients, site initiation and the completion of clinical trial milestones.

**Stock-Based Compensation**

We account for stock-based compensation expense related to stock options granted to employees and members of our Board of Directors by estimating the fair value of each stock option at the date of the grant using the Black-Scholes option-pricing model. For awards subject to time-based vesting conditions, we recognize stock-based compensation expense ratably over the vesting period of the options.

We recognized insignificant stock-based compensation expense as follows for the period indicated:

	<b>Year Ended</b>		<b>Nine Months</b>	
	<b>December 31,</b>		<b>Ended September 30,</b>	
	<b>2011</b>	<b>2012</b>	<b>2012</b>	<b>2013</b>
Research and development	\$ (33,600)	\$ 10,000	\$ 8,000	\$ 28,100
General and administrative	(23,500)	19,000	14,200	26,300
<b>Total stock-based compensation</b>	<b>\$ (57,100)</b>	<b>\$ 29,000</b>	<b>\$ 22,200</b>	<b>\$ 54,400</b>

Stock-based compensation expense for 2011 was negative because we recorded a reversal in 2011 of a previous stock compensation charge for an award issued to one of our executives prior to 2011.

**Key Assumptions**

We utilize the Black-Scholes option-pricing model, which requires the input of highly subjective assumptions, including the risk-free interest rate, the expected dividend yield of our common stock, the expected volatility of the price of our common stock and the expected life of the option. These estimates involve inherent risk and uncertainties and the application of management's judgment. If factors change and different assumptions are used, our stock-based compensation expense could be materially different in the future.

The fair value of options granted is estimated at the date of grant using the Black-Scholes option pricing model and the following assumptions:

	Year Ended December 31,		Nine Months Ended September 30,	
	2011	2012	2012	2013
Expected volatility	63.7%	63.7%	63.7%	56.8%
Risk-free interest rate	2.7	2.7	2.7	1.96
Expected term (in years)	6.0	6.0	6.0	5.4
Expected dividend yield	0.0	0.0	0.0	0.0

- *Risk-free interest rate:* The risk-free interest rate assumption is based on the U.S. Treasury instruments whose term was consistent with the expected option term of our stock options.
- *Expected Dividend Yield:* The expected dividend yield assumption is based on the fact that we have never paid cash dividends and have no present intention to pay cash dividends. Consequently, we used an expected dividend of zero.
- *Expected Volatility:* The expected stock price volatility is estimated by taking the average historic price volatility of industry peers and adjusting for differences in our life cycle and financing leverage. Our industry peers consist of several public companies in the biopharmaceutical industry.
- *Expected life:* We determine the average expected life of stock options based on the simplified method in accordance with SEC Staff Accounting Bulletin Nos. 107 and 110, as our common stock to date has not been publicly traded. We expect to continue to use the simplified method until we have sufficient historical exercise data to provide a reasonable basis upon which to estimate expected term.

**Valuation of Stock-Based Compensation**

We record the fair value of stock options issued to employees as of the grant date as compensation expense over the service period. We recognize compensation expense over the requisite service period, which is equal to the vesting period. For non-employees, we also record the fair value of stock options as of the grant date as compensation expense over the service period. We then periodically re-measure the awards to reflect the current fair value at each reporting period until the non-employee completes the performance obligation or the date on which a performance commitment is reached. Expense is recognized over the related service period.

We calculate the fair value of stock-based compensation awards using the Black-Scholes option-pricing model. The Black-Scholes option-pricing model requires the use of subjective assumptions, including 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 the fair value of the

underlying common stock on the date of grant. In applying these assumptions, we considered the following factors:

- We do not have sufficient history to estimate the volatility of our common stock price. We calculate expected volatility based on reported data for selected reasonably similar publicly traded companies for which the historical information is available. For the purpose of identifying peer companies, we consider characteristics such as industry, length of trading history, similar vesting terms and in-the-money option status. We plan to continue to use the guideline peer group volatility information until the historical volatility of our common stock is relevant to measure expected volatility for future option grants.
- The assumed dividend yield is based on our expectation of not paying dividends for the foreseeable future.
- We determine the average expected life of stock options based on the simplified method in accordance with SEC Staff Accounting Bulletin Nos. 107 and 110, as our common stock to date has not been publicly traded. We expect to continue to use the simplified method until we have sufficient historical exercise data to provide a reasonable basis upon which to estimate expected term.
- We determine the risk-free interest rate by reference to implied yields available from U.S. Treasury securities with a remaining term equal to the expected life assumed at the date of grant.
- We estimate forfeitures based on our historical analysis of actual stock option forfeitures.

#### *Common Stock Fair Value*

The following table lists outstanding stock options previously granted by our Board of Directors, together with the intrinsic value of such outstanding options based on an assumed initial offering price of \$15.00 (the mid-point of the price range set forth on the cover page of this prospectus):

<u>Grant Date</u>	<u>Number of Common Shares Underlying Options Granted</u>	<u>Option Exercise Price per Common Share</u>	<u>Fair Value per Common Share</u>	<u>Intrinsic Value per Common Share</u>
January 2010—February 2010	201,684	\$ 0.59	\$ 0.59	\$ 14.41
July 2010*	896,887	\$ 0.59	\$ 0.59	\$ 14.41
August 2010—November 2010	206,352	\$ 0.59	\$ 0.59	\$ 14.41
February 2011—April 2012	3,995	\$ 0.59	\$ 0.59	\$ 14.41
September 2012	58,289	\$ 0.59	\$ 0.59	\$ 14.41
September 2013	502,062	\$ 4.25	\$ 4.25	\$ 10.75

\* Our Board of Directors approved an exchange of all then-outstanding options that had exercise prices in excess of \$0.59 per share for new options, priced at \$0.59 per share on July 28, 2010. Prior to 2010, options had been granted at strike prices ranging from \$2.33 per share to \$91.82 per share; the total number of options issued in the exchange was 896,887 shares.

The fair value of our common stock for purposes of determining the exercise price for stock option grants was determined on each grant date by our Board of Directors, with input from management. All options to purchase shares of our common stock were intended to be granted with an exercise price per share not less than the fair value per share of our common stock underlying those options on the date of grant, determined in good faith and 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, our Board of Directors, or a committee of our Board of Directors acting under delegated authority,

considered various objective and subjective factors, along with input from management, to determine the fair value of our common stock, including:

- external market conditions affecting the biotechnology industry;
- trends within the biotechnology industry including the state of the initial public offering market for similarly situated privately held biotechnology companies;
- the valuation of publicly traded companies in the life sciences and biotechnology sectors, as well as recently completed mergers and acquisitions of peer companies;
- our stage of development and business strategy and the material risks related to our business and industry;
- the achievement of enterprise milestones, including entering into product development partnerships and license agreements, and the likelihood of entering into such agreements;
- the prices at which we sold shares of preferred stock to third-party investors;
- the superior rights and preferences of the preferred stock relative to our common stock at the time of each grant;
- our results of operations, financial position, status of our research and development efforts, stage of development and business strategy;
- the lack of liquidity of our common stock as a private company; and
- the likelihood of achieving a liquidity event in light of prevailing market conditions, such as an initial public offering or sale of the Company.

#### *Common Stock Valuation Methodologies*

We utilized unrelated third-party valuation specialists to assist us in preparing the December 18, 2009, December 31, 2012, June 26, 2013 and August 15, 2013 valuations in accordance with the guidelines in 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 AICPA Practice Guide (the Practice Aid) which prescribes several valuation methodologies for setting 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 common stock.

#### *Methods Used to Determine Enterprise Value*

We used the following methods to determine our enterprise value:

- *December 18, 2009:* In 2007, we determined our enterprise value based upon the sale of shares of our Series E convertible preferred stock primarily to unrelated investors. We determined our 2009 enterprise value by updating the 2007 valuation for interim changes in the marketplace and the Company's performance, the issuance by us of convertible debt and the then-current public market for shares of early clinical-stage biopharmaceutical companies. We viewed this approach as appropriate for estimating the enterprise value as of December 18, 2009 because our operations had not substantially changed since 2007 and were not expected to change in the near future, as well as the fact that alternative options to continue funding our operations were not readily available.
- *December 31, 2012, June 26, 2013 and August 15, 2013:* For these valuations, we determined the enterprise value using two methods. We used an initial public offering exit scenario in which the median total invested capital of comparable publicly traded companies was utilized for estimating our enterprise value. We also used an alternative exit strategy scenario under which

the discounted cash flow approach was utilized for estimating the enterprise value. These two approaches to establishing the enterprise value were then weighted as described more fully below.

The significant assumption used in the initial public offering exit scenario was the composition of comparable biotechnology public companies whose technologies and lead clinical candidates were primarily in Phase 1 and Phase 2 clinical development. The significant assumptions used in the discounted cash flow scenario were:

- the likelihood of success or failure of key clinical developments and milestone payments related to those developments;
- a discount rate of 20% which reflects the expected rates of returns for observed comparable public companies adjusted for Company-specific risk; and
- the expected economic life of the Company-developed technologies and related intellectual property.

We viewed these two approaches as appropriate because our results of operations since the 2009 valuation, which included significant new licensing transactions and scientific developments, when combined with changes in the public markets for comparable companies, indicated that our potential exit strategies had changed.

We then considered the likelihood of the two scenarios at each valuation date, and applied a probability weighting to the applicable enterprise value to determine one enterprise value at each valuation date.

- For the valuation dated December 31, 2012, we determined the probability of an initial public offering to be 10% and an alternative exit to be 90%. During 2012, we discussed the possibility of an initial public offering with underwriters and were advised that, based on the stage of the Company and its development programs, an initial public offering within the next 12-18 months was unlikely given current market conditions. Based on our financial position and financing needs, an alternative exit was considered. We explored alternative exit strategies over the next few months including possible strategic sales or mergers.
- For the valuation dated June 28, 2013, we determined the probability of an initial public offering to be 10% and alternative exit strategies to be 90%. In the first half of 2013 we held discussions with strategic partners to consider alternative exit strategies including a sale or merger. We also continued discussions with investment bankers on the possibility of an initial public offering but the probability of an initial public offering as of the valuation date did not change from the December 31, 2012 valuation. During the first half of 2013, the Company completed a recapitalization of its capital structure and sold additional preferred shares to existing shareholders and our Board of Directors approved a plan to have the Company file a Form 10 Registration Statement to become a public reporting company.
- For the valuation dated August 15, 2013, we determined the probability of an initial public offering to be 50% and the probability of an alternative exit to be 50%. The changes that caused the increase in the probability from June 2013 were the new business development agreements that the Company entered into in the first half of 2013 and the continued progress that a collaborative partner made with its development program. This transaction generated cash proceeds to the Company, expanded the Company's business portfolio by way of advancing the development of a key program and therefore increased the potential value of our technology. This growth in our business corresponded with a change in the public markets' willingness to invest in earlier stage biotechnology development companies, which when combined, provided us with an opportunity to engage investment bankers to explore an initial public offering for 2013.

*Methods Used to Allocate Our Enterprise Value to Classes of Securities*

In accordance with the Practice Aid, we considered the various 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. The methods we utilized consisted of the following:

- *Option Pricing Method:* Under the option pricing method (OPM), shares are valued by creating a series of call options with exercise prices based on the liquidation preferences and conversion terms of each equity class. The values of the preferred and common stock are inferred by analyzing these options.
- *Probability-Weighted Expected Return Method:* The probability-weighted expected return method (PWERM), is a scenario-based analysis that estimates the value per share based on the probability-weighted present value of expected future investment returns, considering each of the possible outcomes available to us, as well as the economic and control rights of each share class.

We estimated the per share common stock fair value by allocating the enterprise value using the OPM for the December 18, 2009 valuation and using the PWERM for the December 31, 2012, June 26, 2013 and August 15, 2013 valuations.

***December 18, 2009 Valuation***

The valuation analysis as of December 18, 2009 identified two primary components of our business: development of our proprietary technologies for developing our therapeutic antibody candidates and the arrangements with our collaborators. The valuation was conducted using the OPM recommended in the Practice Aid. In this method, the fair value of our Company and our equity interests is based on the Capital Option Method, which allocates the fair value of our enterprise between our various sources of capital, including our common stock, the five classes of preferred stock, convertible promissory notes and, options to purchase common stock, using option pricing theory. Financial theory supports the notion that interests in the capital of an enterprise can be viewed as a basket of puts and calls on the firm's capital. In short, the expected payouts on each component of a firm's capital structure can be replicated or synthesized by a basket of options whose payout mimics that of the capital instrument. The key to this method is the creation of a synthetic version of each class of capital instruments issued by us, using a series of call options on the Company's equity value. Based on the OPM calculated as of December 31, 2009, we estimated the value of our common stock to be \$0.59 per share.

Following December 18, 2009, our Board of Directors made the grants set forth in the following table, in each case at a price of \$0.59 per share, which our Board of Directors determined was equal to or greater than the fair market value of our common stock as of the respective date of grant. In determining the fair market value of our common stock, our Board of Directors took into account all material facts and circumstances known to our Board of Directors as of the date of the grant, including but not limited to (a) our earnings/loss history and financial performance, (b) our current prospects and expected operating results (including but not limited to the present value of our anticipated future cash flows), (c) the value of our tangible and intangible assets, (d) recent material events in our operations, (e) the market value of stock or equity interests in similar corporations and other entities engaged in trades or businesses substantially similar to those engaged in by us and whose stock or equity interests can be valued through nondiscretionary, objective means (such as through trading prices on an

established securities market or an amount paid in an arm's length private transaction) and (f) such other items as our Board of Directors deemed material as of the date of its determination.

<u>Grant Date</u>	<u>Number of Common Shares Underlying Options Granted</u>	<u>Option Exercise Price Per Common Share</u>
January 2010 – February 2010	201,684	\$ 0.59
July 2010*	896,887	\$ 0.59
August 2010 – November 2010	206,352	\$ 0.59
February 2011 – April 2012	3,995	\$ 0.59
September 2012	58,289	\$ 0.59

\* Our Board of Directors approved an exchange of all then-outstanding options that had exercise prices in excess of \$0.59 per share for new options, priced at \$0.59 per share on July 28, 2010. Prior to 2010, options had been granted at strike prices ranging from \$2.33 per share to \$91.82 per share; the total number of options issued in the exchange was 896,887 shares.

#### ***December 31, 2012 Valuation***

We estimated that a share of our common stock had a value of \$0.34 per share at December 31, 2012, a decrease of \$0.25 per share from the December 18, 2009 valuation. In 2012, we changed our methodology from the OPM to the PWERM to account for different potential exit strategies for the Company. As of December 31, 2012 we estimated the probability of a successful initial public offering to be 10% and alternative exit strategies to be 90%. At that time, our board had not made a decision to explore accessing the public markets and our existing capital structure, including the seniority and liquidation preferences of the 2009 and 2010 convertible promissory notes, restricted our ability to consider alternative financing options. The issuance of \$7.5 million in Notes in December 2010 is the primary difference accounting for the decrease in the per share value of our common stock from December 2009 to December 31, 2012. We estimated the fair value of the common stock under the PWERM assumptions at December 31, 2012 to be \$0.47 per share. This value was reduced by 30% to account for a lack of marketability for our common stock resulting in the \$0.34 value per share for the common stock.

#### ***June 26, 2013 Valuation***

We estimated that a share of our common stock had a value of \$0.68 per share at June 26, 2013, an increase of \$0.34 per share from the December 31, 2012 valuation. We used the PWERM to account for different potential exit strategies for the Company and we estimated the probability of a successful initial public offering to be 10% and alternative exit strategies to be 90%. At that time, our board had not made a decision to explore accessing the public markets. The increase in the estimated per share value of our common stock from \$0.34 at December 31, 2012 is due to the Series A-1 preferred stock financing transaction and the progress of our clinical development programs. The exchange of Notes and the sale of additional Series A-1 convertible preferred stock made alternative financing options more readily available to us as of June 26, 2013. The estimated fair value of the common stock under the PWERM assumptions at June 26, 2013 was \$0.96 per share. We reduced that value by 30% to account for a lack of marketability of our common stock, which resulted in the \$0.68 value per share for the common stock.

We did not grant stock options from October 2012 through July 2013 and thus we did not use the December 31, 2012 or June 26, 2013 valuations for purposes of our stock option accounting.



### *August 15, 2013 Valuation*

We estimated that a share of our common stock had a value of \$4.25 per share at August 15, 2013, an increase of \$3.57 per share from the June 26, 2013 valuation. The increase in the value of our common stock as of such date from our last valuation date related primarily to our reassessment of potential exit strategies available to us in accordance with PWERM. Following June 26, 2013 and prior to August 15, 2013, we had extensive discussions with several investment bankers who advised us that we would be a potential candidate for an initial public offering. Following those discussions, we selected an underwriting syndicate and conducted an organizational meeting in early August 2013. Based primarily on those facts, as well as the overall market environment, we reassessed the assignment of weights for the PWERM to reflect the probability of a successful initial public offering to be 50% and alternative exit strategies to be 50% as of August 15, 2013. The alternative exit strategy considered was a potential sale of the Company or its assets to a strategic investor. We reduced the alternative exit strategy value by 20% to account for a lack of marketability. This discount was determined based on liquidity discounts observed in private investments with one- or two-year illiquidity periods principally through observations of restricted stock discounts. We did not reduce the initial public offering probability-weighted value for lack of marketability. The net impact of applied marketability discounts in the August 15, 2013 valuation was immaterial.

On September 4, 2013, our Board of Directors authorized the issuance of 502,062 stock options to employees and consultants at an exercise price of \$4.25 per share, which our Board of Directors determined was equal to or greater than the fair market value of our common stock as of the date of grant. In determining the fair market value of our common stock as of September 4, 2013, our Board of Directors took into account all material facts and circumstances known to our Board of Directors as of the date of the grants including: the independent third party valuation of the common stock performed as of August 15, 2013, changes in operations, prospects and expected operating results, recent material events in our operations and such other items that our Board of Directors deemed material as of the date of the grants.

We believe that the difference between the fair value of our common stock as of September 4, 2013 and \$15.00 (the mid-point of the price range set forth on the cover page of this prospectus) is justified by and related to additional events occurring between September 4, 2013 and the date of this prospectus which contributed to this increase. Specifically:

- In late September 2013 we commenced enrolling patients in the Phase 2a portion of our Phase 1b/2a clinical trial for XmAb5871 to begin dosing patients with moderate to severe rheumatoid arthritis. XmAb5871 is our lead program for the treatment of autoimmune diseases and we determined that initiation of this trial significantly increased the value of this product candidate and our Fc technology and also increased our public exposure and opportunities.
- Subsequent to our confidential submission of a registration statement with the Securities and Exchange Commission on September 11, 2013, we engaged in discussions with potential investors in reliance on Section 5(d) of the Securities Act of 1933, as amended (testing the waters meetings). In connection with such testing the waters meetings we received feedback from potential investors regarding our enterprise value which caused us to increase our expectations regarding the anticipated price range of an initial public offering of our common stock.
- Since September 4, 2013, several technology platform biotechnology companies with early stage clinical candidates that we consider to be comparable to us in terms of valuation were successful in accessing the public markets, including Five Prime Therapeutics, Inc., Bind Therapeutics, Inc. and MacroGenics, Inc. Each of these offerings has been favorably received by investors. Of these examples, MacroGenics, the company which we consider to be most comparable to us of those that recently completed a successful initial public offering, conducted its offering in October 2013 with an approximate \$320 million pre-money valuation and, following the offering, has

recently had a market capitalization as high as approximately \$700 million. In addition, Prothena Corporation plc filed a registration statement for a successful follow-on offering which was declared effective on October 2, 2013. The success of these comparable companies and the valuations that they were able to achieve has caused us to revise upward our expectations regarding the value of our common stock.

- The valuation of our common stock by our Board of Directors on September 4, 2013 reflected the illiquidity of our common stock on that date. On the other hand, the mid-point of the price range set forth on the cover page of this prospectus necessarily assumes that a successful initial public offering will ultimately occur and represents an estimate of the fair value of the unrestricted and freely tradeable stock that would be sold in the initial public offering market without any illiquidity discount.
- The valuation of our common stock by our Board of Directors on September 4, 2013 reflected the potential for outcomes other than an initial public offering, which in the aggregate had lower values than the initial public offering scenario. However, the mid-point of the price range set forth on the cover page of this prospectus necessarily assumes a successful initial public offering with no weighting attributed to any other outcome for our business and without a marketability discount, resulting in a higher valuation.
- The holders of our convertible preferred stock currently enjoy substantial economic rights and preferences over the holders of our common stock. In particular, holders of our outstanding preferred stock are entitled to receive dividends prior to any dividends declared or paid on any shares of our common stock. In addition, holders of outstanding preferred stock are entitled to receive liquidation payments in preference to holders of common stock. The mid-point of the price range set forth on the cover page of this prospectus assumes the conversion of all of our convertible preferred stock upon the effective date of the registration statement to which this prospectus forms a part. The corresponding elimination of the preferences and rights enjoyed by the holders of such preferred stock results in a higher valuation.
- The mid-point of the price range set forth on the cover page of this prospectus assumes the completion of a successful initial public offering. A successful offering would provide us with significant additional cash proceeds, which would substantially strengthen our balance sheet. This is reflected in the mid-point of the price range set forth on the cover page of this prospectus but is not reflected in the September 4, 2013 valuation set by our Board of Directors.
- A successful offering will also provide us with access to the public company debt and equity markets, and a "currency" of publicly tradeable securities to enable us to make strategic acquisitions as we may deem appropriate, which are all reflected in the mid-point of the price range set forth on the cover page of this prospectus, and which were not reflected in the September 4, 2013 valuation set by our Board of Directors.
- As a result of general economic conditions, there were notable increases in the value of the common stock since September 2013 of many of the comparable public companies utilized in the September 4, 2013 valuation set by our Board of Directors.
- There were market increases in value of the New York Stock Exchange, S&P 500 and Dow Jones Industrial Average since September 4, 2013.

At September 4, 2013, our Board of Directors consisted of individuals with significant experience in business, finance, venture capital and/or private equity and significant experience in valuing technology companies, including determining the fair values of the common stock of such companies. Our Board of Directors reached its determination of the estimated fair value of our common stock after thorough discussions and made its determination in good faith, based on the information available at that time.

We believe that the fair value determined by our Board of Directors on September 4, 2013 is appropriate and demonstrates the diligent efforts of our Board of Directors in considering all relevant factors in determining the fair value and that the actions of our Board of Directors to estimate the fair value of our common stock complied with all applicable rules and regulations for the determination of fair value.

### Net Operating Loss Carryforwards and Investment Tax Credits

As of December 31, 2012, we had cumulative net operating loss carryforwards for federal and state income tax purposes of approximately \$146.7 million and \$131.6 million respectively, and available tax credit carryforwards of approximately \$12.9 million for federal income tax purposes and \$9.6 million for state income tax purposes, which can be carried forward to offset future taxable income, if any.

Our federal net operating loss carryforwards expire starting in 2018 and state net operating losses expire starting in 2013. Federal tax credit carryforwards expire starting in 2018 and state tax credit carryforwards began expiring in 2013. Utilization of the net operating losses and tax credits may be subject to a substantial annual limitation due to the ownership change limitations provided by the Internal Revenue Code of 1986 under Section 382 and similar state provisions. We expect that the limitations under Section 382 will be triggered and our net operating losses and tax credit carryforwards will be limited as a result of the shares sold in this offering. The limitation may result in the expiration of our net operating losses and credits before we can use them, which could potentially result in increased future tax liability to us.

### Results of Operations

#### Comparison of the Nine Months Ended September 30, 2012 and 2013

The following table summarizes our results of operations for the nine months ended September 30, 2012 and 2013 (in millions) (unaudited):

	Nine Months Ended September 30,		Change
	2012	2013	
Revenues:			
Research collaboration	\$ 2.9	\$ 1.7	\$ (1.2)
Licensing	1.1	2.0	0.9
Milestone	3.1	4.7	1.6
Total revenues	<u>7.1</u>	<u>8.4</u>	<u>1.3</u>
Operating expenses:			
Research and development	8.7	12.9	4.2
General and administrative	2.1	2.4	0.3
Total operating expenses	<u>10.8</u>	<u>15.3</u>	<u>4.5</u>
Other income (expense), net	(1.8)	(49.7)	(47.9)
Net loss	<u>\$ (5.5)</u>	<u>\$ (56.6)</u>	<u>\$ (51.1)</u>

#### Research Collaboration Revenues

Research collaboration revenues decreased by \$1.2 million for the nine months ended September 30, 2013 compared to the same period in 2012. The decrease is primarily due to revenue earned from the research services we provided in connection with our partnership with MorphoSys

which was \$1.5 million for the nine months ended September 30, 2012 and \$0.0 for the same period in 2013. A majority of the services for the clinical trial we were conducting were completed during 2012.

#### *Licensing Revenues*

Licensing revenues of \$2.0 million for the nine months ended September 30, 2013 increased by \$0.9 million in 2012 as a result of additional licensing transactions in 2013.

#### *Milestone Revenues*

Milestone and contingent payments received from partners for the nine months ended September 30, 2013 were \$4.7 million compared to \$3.1 million for the same period in 2012, an increase of \$1.6 million, which reflects the receipt of additional milestone payments from our collaborators and licensees, including a \$3.0 million payment from MorphoSys in January 2013 for the initiation of Phase 2 clinical trials in NHL and ALL.

#### *Research and Development Expenses*

The following table summarizes our research and development expenses for the periods ended September 30, 2013 and 2012, (in millions) (unaudited):

	Nine Months Ended September 30,	
	2012	2013
<b>Product programs:</b>		
XmAb5871	\$ 3.3	\$ 5.7
XmAb7195	1.8	4.3
XmAb5574/MOR208	1.3	0.4
Other	2.3	2.5
<b>Total research and development expense</b>	<u>\$ 8.7</u>	<u>\$ 12.9</u>

Research and development expenses were \$12.9 million for the nine months ended September 30, 2013 compared to \$8.7 million for the same period in 2012, an increase of \$4.2 million. The increase is primarily due to a \$2.4 million increase in costs associated with the XmAb5871 program, primarily due to increases in clinical trial costs for CROs and site costs and manufacturing of drug product, which reflects the advancing stage of development of the program from Phase 1a to initiation of the Phase 1b portion of a Phase 1b/2a clinical trial in 2013. Approximately \$2.5 million of the increased costs are associated with the XmAb7195 program, including manufacturing drug product and IND-enabling toxicology studies, resulting from the advancement of the program as we plan to file an IND and begin clinical trials in the first half of 2014. The costs for the XmAb5574/MOR208 program, which is conducted under our MorphoSys collaboration, declined by \$0.9 million as we neared completion of the Phase 1 clinical trial at the end of 2012, which completed our development obligations under the MorphoSys agreement.

#### *General and Administrative Expenses*

General and administrative expenses were comparable at \$2.1 million and \$2.4 million for the nine months ended September 30, 2012 and 2013, respectively; spending in this area was consistent between periods.

*Other Income (Expense), Net*

Other income (expense), net was \$(49.7) million for the nine months ended September 30, 2013 compared to \$(1.8) million for the same period in 2012, an increase of \$47.9 million. The increase reflects a loss of \$48.6 million reported on the exchange of our convertible promissory notes for preferred stock in June 2013.

*Comparison of the Years Ended December 31, 2011 and 2012*

The following table summarizes the results of our operations for the years ended December 31, 2012 and 2011 (in millions):

	Years Ended December 31,		Change
	2011	2012	
<b>Revenues:</b>			
Research collaboration	\$ 4.3	\$ 3.8	\$ (0.5)
Licensing	1.5	2.1	0.6
Milestone	1.0	3.6	2.6
<b>Total revenues</b>	<b>6.8</b>	<b>9.5</b>	<b>2.7</b>
<b>Operating expenses:</b>			
Research and development	12.7	12.7	—
General and administrative	3.6	3.1	(0.5)
<b>Total operating expenses</b>	<b>16.3</b>	<b>15.8</b>	<b>(0.5)</b>
Other income (expense), net	(1.7)	(2.3)	(0.6)
<b>Net loss</b>	<b>\$ (11.2)</b>	<b>\$ (8.6)</b>	<b>\$ 2.6</b>

*Research Collaboration Revenues*

Research collaboration revenues were \$4.3 million in 2011, compared to \$3.8 million in 2012, a decrease of \$0.5 million. The decrease in collaboration revenue in 2012 compared to 2011 is due primarily to lower revenue earned under our collaboration agreement with MorphoSys in 2012.

*Licensing Revenues*

Licensing revenues were \$1.5 million in 2011 compared to \$2.1 million in 2012, an increase of \$0.6 million. The increase in licensing revenue is primarily due to license revenue recognized under the MedImmune transaction which is reported as a non-monetary exchange in 2012.

*Milestone and Contingent Payments*

Milestone and contingent payments were \$1.0 million in 2011 compared to \$3.6 million in 2012, an increase of \$2.6 million. The increase is primarily due to a milestone payment of \$1.2 million received from Boehringer Ingelheim International GmbH and \$1.4 million milestone from another licensee during 2012 for advancing a compound that includes our licensed technologies into clinical development.

*Research and Development Expenses*

Research and development expenses were \$12.7 million in 2011 and \$12.7 million in 2012. There were changes within the program spending but overall spending was consistent between the two years. Total research spending in 2012 on the XmAb5871 program and the XmAb7195 program increased by

\$0.8 million and \$0.7 million, respectively, from the year ended 2011 due to advancement of both programs into later stages of development including larger clinical trials and additional toxicology studies. This increase in spending was offset by decreased spending on XmAb5574 program and other programs of \$1.5 million as we began winding down the XmAb5574 Phase 1 clinical trial in 2012.

#### *General and Administrative Expenses*

General and administrative expenses were \$3.6 million in 2011 compared to \$3.1 million in 2012. The decrease of \$0.5 million primarily reflects increased abandonment of intangible costs of \$0.8 million in 2011 and lower marketing and business development expenses in 2011 of \$0.2 million.

#### *Other Income (Expense), Net*

Other income (expense), net, was \$(1.7) million in 2011 compared to \$(2.3) million in 2012. The increase of \$0.6 million primarily reflects additional accrued interest expense on our convertible promissory notes. In connection with amendment of the 2009 and 2010 Notes in August 2011 and December 2011, the interest rate on the notes was increased from 10.0% to 12.5% per annum.

#### **Liquidity and Capital Resources**

Since our inception, our operations have been primarily financed through private sales of our equity, convertible notes and payments received under our product development partnerships and licensing arrangements. We have devoted our resources to funding research and development programs, including discovery research, preclinical and clinical development activities.

We have incurred operating losses in each year since our inception and we expect to continue to incur operating losses into the foreseeable future as we advance the ongoing development of our lead product candidates XmAb5871 and XmAb7195, evaluate opportunities for the potential clinical development of our pre-clinical programs, and continue our research efforts.

At September 30, 2013, we had \$9.6 million of cash and cash equivalents compared to \$2.3 million at December 31, 2012. While we believe that our current cash and cash equivalents are sufficient to carry out our currently planned clinical development and operating plans into the second quarter of 2014, there remains uncertainty.

As of and for the year-ended December 31, 2012, the report on our financial statements included explanatory language describing the substantial doubt about our ability to continue as a going concern. This uncertainty arose from our results of operations and financial condition and the conclusion that we did not have sufficient cash to operate for 12 months from year-end. We had plans to operate as of December 31, 2012 that included projections of cash to be received from licensing and milestone payments and sales of preferred stock. Since December 31, 2012, and through September 30, 2013, we have generated cash from the receipt of licensing and milestone payments and the sale of preferred stock as more fully described below. As of September 30, 2013, there still exists substantial doubt about our ability to continue as a going concern. Such substantial doubt does not give effect to the receipt of any proceeds from this offering.

#### **Plan of Operations and Future Funding Requirements**

Our primary uses of capital are, and we expect will continue to be, compensation and related expenses, third-party manufacturing services, third-party clinical research and development services, laboratory and related supplies, clinical costs, legal and other regulatory expenses and general overhead costs.

To fund future operations, we will need to raise additional capital. The amount and timing of future funding requirements will depend on many factors, including the timing and results of our

ongoing development efforts, the potential expansion of our current development programs, potential new development programs and related general and administrative support. We anticipate that we will seek to fund our operations through equity or debt financings or through research collaborations and licensing agreements with third parties. We cannot assure you that such additional financing will be available to us on favorable terms, or at all. Although we have previously been successful in obtaining financing through our private securities offerings, there can be no assurance that we will be able to do so in the future. To the extent that we raise additional capital through the future sale of equity or debt, the ownership interest of our stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our existing common stockholders. If we raise additional funds through collaboration arrangements in the future, we may have to relinquish valuable rights to our technologies, future revenue streams or product candidates or grant licenses on terms that may not be favorable to us.

We expect that the net proceeds from this offering, together with our existing cash and certain potential milestone payments, will fund our operating expenses and capital expenditure requirements through 2016. We have based these estimates on assumptions that may prove to be wrong, and we could use our capital resources sooner than we currently expect. Additionally, the process of testing product candidates in clinical trials is costly, and the timing of progress in these trials is uncertain. Because our product candidates are in various stages of development and the outcome of these efforts is uncertain, we cannot estimate the actual amounts necessary to successfully complete the development and commercialization of our product candidates or whether, or when, we may achieve profitability.

***Cash Flows for the Nine Months Ended September 30, 2013 and 2012 and the Years Ended December 31, 2012 and 2011***

*Operating Activities*

Cash used in operating activities for the nine months ended September 30, 2013 was \$1.3 million compared to cash used in operations of \$7.1 million for the nine months ended September 30, 2012, a net decrease in cash used of \$5.8 million. The decrease in cash used is primarily due to a net increase in the deferred revenue accounts for the period ended September 30, 2013. During the nine months ended September 30, 2013, we received upfront payments on certain licensing agreements in which the revenue will be earned over the expected term of the licensing contract. Accordingly, a significant portion of the upfront payments were recorded into the deferred revenue accounts.

Cash used for operating activities for 2011 was \$1.1 million, compared to \$11.1 million in 2012, an increase of \$10.0 million. This increase relates primarily to upfront collaboration payments received in 2011, which are being recognized over the expected term that services will be provided under the collaboration agreement. This difference is reflected in the deferred revenue accounts for the 2011 and 2012 periods.

*Investing Activities*

Investing activities consist primarily of purchases of intangible assets, capitalization of patent and licensing costs, purchases of property and equipment and proceeds on the sales of used equipment. Investing activities used cash of \$1.3 million for the nine months ended September 30, 2013 and used cash of \$0.9 million for the nine months ended September 30, 2012. We acquired \$1.1 million of intangible assets in the nine months ended September 30, 2013 compared to \$0.9 million in the nine months ended September 30, 2012. This increase reflects higher expenditures for our patent portfolio due to changes in U.S. patent filing procedures which became effective in the first half of 2013. We acquired \$136,000 of capital equipment for the nine months ended September 30, 2013 compared to \$37,000 for the same period in 2012. This increase is related to additional capital spending on laboratory equipment.

Investing activities used cash of \$1.3 million for 2011 and \$1.2 million for 2012. We acquired \$1.4 million of intangible assets during 2011 compared to \$1.2 million for 2012, a decrease of \$0.2 million. The decrease relates primarily to the acquisition of certain manufacturing rights from Catalent for the manufacture of our XmAb7195 candidate. We acquired \$55,000 of property and equipment during 2011 compared to \$41,000 in 2012. We received cash proceeds on the sale of equipment in 2011 of \$133,000 compared to \$97,000 in 2012, a decrease of \$36,000.

#### *Financing Activities*

Financing activities consist primarily of net proceeds from the sale of convertible preferred stock and payments on capital lease obligations. We received proceeds of \$10.0 million from the proceeds on the sale of convertible preferred stock in the nine months ended September 30, 2013. There was no comparable sale of stock for the period ended September 30, 2012. We made payments on capital lease obligations of \$3,000 for the nine months ended September 30, 2013 compared to capital lease obligation payments of \$12,000 for the nine months ended September 30, 2012.

Financing activities used cash flows of \$11,000 in 2011 compared to \$12,000 in 2012, an increase of \$1,000. The increase relates primarily to a second capital lease agreement for certain technology equipment entered into during 2012.

#### **Contractual Obligations and Commitments**

The following table summarizes our contractual obligations at December 31, 2012 (in thousands):

	Payments due by period				
	Total	Less than 1 year	1 - 3 Years	3 - 5 Years	More than 5 years
Operating lease obligation relating to facility(1)	\$ 1,382	\$ 550	\$ 832	\$ —	\$ —
Capital lease obligations	17	7	10	—	—
Purchase obligations(2)	7,806	4,231	825	—	2,750
Convertible promissory notes(3)	20,923	20,923	—	—	—
<b>Total</b>	<b>\$ 30,128</b>	<b>\$ 25,711</b>	<b>\$ 1,667</b>	<b>\$ —</b>	<b>\$ 2,750</b>

(1) Consists of our corporate headquarters lease encompassing 24,000 square feet of office space that expires in April 2015.

(2) Purchase obligations include the amounts that are expected to become due from existing agreements for current and ongoing services that are related to the conduct of our preclinical and clinical development activities. These amounts are estimated as due by period based upon our expectation for the delivery of service and payment pursuant to contractual payment terms. These amounts could be increased, accelerated, deferred or decreased depending upon the actual level of preclinical and clinical development activities.

(3) In June 2013, 100% of the outstanding principal due on our convertible promissory notes was exchanged for shares of Series A-1 convertible preferred stock and the accrued and unpaid interest thereon was cancelled.

#### **Off-Balance Sheet Arrangements**

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements.

#### **Related Party Transactions**

For a description of our related party transactions, see "Certain Relationships and Related Party Transactions" beginning on page 148.



## **JOBS Act**

In April 2012, the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, was enacted. Section 107 of the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. Thus, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of this extended transition period, and, as a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for other public companies.

## **Quantitative and Qualitative Disclosure About Market Risk**

Our primary exposure to market risk is interest income sensitivity, which is affected by changes in the general level of U.S. interest rates. Due to the short-term duration of our investment portfolio and the low risk profile of our investments, an immediate 10.0% change in interest rates would not have a material effect on the fair market value of our portfolio. Accordingly, we would not expect our operating results or cash flows to be affected to any significant degree by the effect of a sudden change in market interest rates on our investment portfolio.

We do not believe that our cash, cash equivalents and available-for-sale investments have significant risk of default or illiquidity. While we believe our cash and cash equivalents and certificates of deposit do not contain excessive risk, we cannot provide absolute assurance that in the future our investments will not be subject to adverse changes in market value. In addition, we maintain significant amounts of cash and cash equivalents at one or more financial institutions that are in excess of federally insured limits.

Inflation generally affects us by increasing our cost of labor and clinical trial costs. We do not believe that inflation has had a material effect on our results of operations during the periods presented.

## BUSINESS

### OVERVIEW

#### Our Business

We are a clinical-stage biopharmaceutical company focused on discovering and developing engineered monoclonal antibodies to treat severe and life-threatening diseases with unmet medical needs. We use our proprietary XmAb technology platform to create next-generation antibody product candidates designed to treat autoimmune and allergic diseases, cancer and other conditions. In contrast to conventional approaches to antibody design, which focus on the portion of antibodies that interact with target antigens, we focus on the portion of the antibody that interacts with multiple segments of the immune system. This portion, referred to as the Fc domain, is constant and interchangeable among antibodies. Our engineered Fc domains, the XmAb technology, can be readily substituted for natural Fc domains. We believe our Fc domains enhance antibody performance by, for example, increasing immune inhibitory activity, improving cytotoxicity or extending circulating half-life, while maintaining 99.5% identity in structure and sequence to natural antibodies. By improving over natural antibody function, we believe that our XmAb-engineered antibodies offer innovative approaches to treating disease and potential clinical advantages over other treatments.

Our business strategy is based on the plug-and-play nature of the XmAb technology platform to modify features of natural antibodies and create numerous differentiated antibody product candidates. We have internally generated a pipeline that has allowed us to selectively partner certain development programs while maintaining full ownership of other programs. We also have a number of technology licenses under which we have licensed the XmAb technology platform to pharmaceutical and biotechnology companies for use in a limited number of programs, providing multiple revenue streams that require no further resources from Xencor. There are currently five antibody product candidates in clinical trials that have been engineered with XmAb technology, including four candidates being advanced by licensees and development partners.

Our internally-generated pipeline includes the following three lead XmAb-engineered antibodies that are currently in development:

- **XmAb5871** is being developed for the treatment of autoimmune diseases, including rheumatoid arthritis and lupus. It uses our Immune Inhibitor Fc Domain and targets B cells, an important component of the immune system. We believe XmAb5871 has the potential to address a key unmet need in autoimmune therapies due to its combination of potent B-cell inhibition without B-cell depletion. We are currently conducting a Phase 1b/2a clinical trial for XmAb5871 in rheumatoid arthritis patients with active disease on stable non-biologic DMARD therapy. We expect to report preliminary data from this trial in the second half of 2014. Our partner, Amgen Inc. (Amgen), has an option to acquire an exclusive worldwide license for XmAb5871, exercisable at any time before completion of a data review period following our planned subsequent Phase 2b proof-of-concept clinical trial. Until the option exercise, we lead research, development and manufacturing activities for XmAb5871 with collaborative input and development support from Amgen. According to the American College of Rheumatology, rheumatoid arthritis and lupus affect approximately 1.3 million and 160,000 adults in the United States, respectively. Humira, the leading antibody therapy for autoimmune diseases, generated sales of approximately \$9.3 billion worldwide in 2012.
- **XmAb7195** is being developed for the treatment of severe asthma and allergic diseases. It uses our Immune Inhibitor Fc Domain and is designed to reduce blood plasma levels of IgE, which mediates allergic responses and allergic disease. Its three specific mechanisms of action give it potential advantages over current therapies: (i) increased IgE binding, (ii) inhibition of IgE production and (iii) rapid clearance of IgE from circulation. We anticipate filing an

investigational new drug application (IND) with the United States Food and Drug Administration (FDA) and initiating a Phase 1a clinical trial in the first half of 2014. We plan to report preliminary data from this trial at the end of 2014. According to the U.S. Centers for Disease Control and Prevention (CDC), one in 12 Americans has asthma, and there were 1.8 million emergency room visits caused by asthma in 2010. Xolair, the leading antibody therapy for the treatment of severe refractory asthma, generated approximately \$1.3 billion in worldwide sales in 2012.

- **XmAb5574/MOR208** is being developed for the treatment of blood-based cancers and uses our Cytotoxic Fc Domain. Our partner, MorphoSys AG (MorphoSys), is currently conducting two Phase 2 clinical trials of XmAb5574/MOR208 in patients with B-cell acute lymphoblastic leukemia (B-ALL) and non-Hodgkin lymphomas (NHL). According to the Leukemia and Lymphoma Society, over 60,000 Americans are diagnosed with these cancers each year. Rituxan, the leading antibody therapy for NHL, generated approximately \$6.1 billion in worldwide oncology sales in 2012.

A summary of the partnered and non-partnered product development programs that we have generated internally is shown below.

	PROGRAM	Fc DOMAIN	PRIMARY INDICATION	DISCOVERY LEAD	PRECLIN	PHASE I	PHASE 2	COMMERCIAL RIGHTS
Partnered Programs	XmAb5871	Immune Inhibitor	Autoimmune	██████████	██████████	██████████	██████████*	Xencor Option to AMGEN
	XmAb5574/MOR208	Cytotoxic	Oncology CLL/NHL/ALL	██████████	██████████	██████████	██████████	Morphosys
Non-partnered Programs	XmAb7195	Immune Inhibitor	Asthma/allergy	██████████	██████████			Xencor
	Xtend-TNF	Xtend	Autoimmune	██████████	██████████			Xencor
	CD3 x CD38	Heterodimer	Oncology	██████████				Xencor
	CD3 x CD123	Heterodimer	Oncology	██████████				Xencor
	Xtend-CTLA4	Xtend	Autoimmune	██████████				Xencor
	Anti-X/CD32b	Immune Inhibitor	TBD	██████████				Xencor

\* Currently enrolling Phase 2a portion of Phase 1b/2a clinical trial.

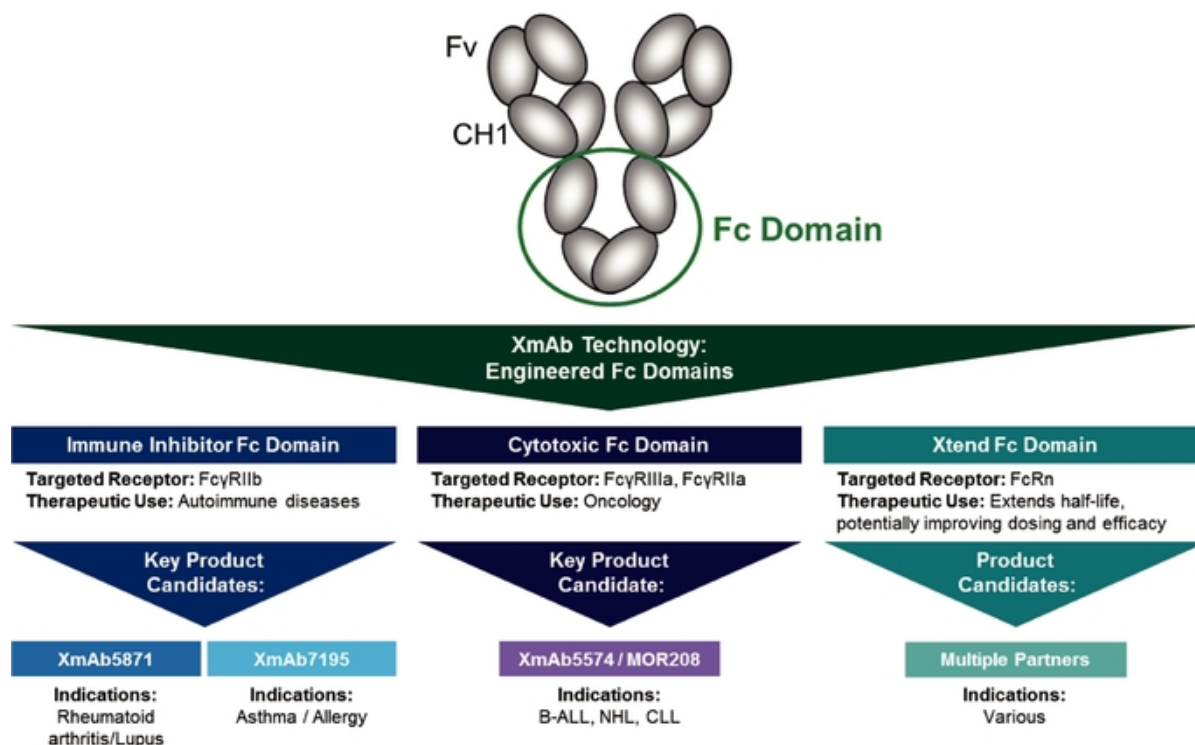
In addition, we have licensed our XmAb technology to pharmaceutical and biotechnology companies for use in a limited number of their programs. These licensees include Boehringer Ingelheim, CSL, Janssen, Merck and Alexion, and collectively these licensees have three Phase 1 clinical development-stage programs and four pre-clinical development-stage programs.

Our XmAb Fc domain technology is a platform of antibody components that enable the creation of therapeutic antibody candidates that have novel interactions with the human immune and antibody regulation systems. We have identified a set of Fc domains, each of which is engineered to have a specific function based on its Fc receptor binding profile, including:

- **Immune Inhibitor Fc Domain**—selective immune inhibition and rapid target clearance, targeting the receptor FcγRIIb
- **Cytotoxic Fc Domain**—increased cytotoxicity, targeting the receptors FcγRIIIa on natural killer (NK) cells and FcγRIIa on other immune system cells
- **Xtend Fc Domain**—extended antibody half-life, targeting the receptor FcRn on endothelial cells

In addition, we have engineered XmAb Fc domains with other properties, including rapid antigen clearance, antibody stability and multiple-antigen specificity (heterodimer). Each XmAb Fc domain consists of a naturally occurring Fc domain with a small number of amino acid changes, usually two,

that we found to be critical for modulating interactions with the desired Fc receptors. With such limited modifications of the natural Fc domain, XmAb-engineered antibodies are typically over 99.5% identical in structure and sequence to natural antibodies, simplifying product development yet enhancing function.



We were founded in 1997 based on protein engineering technology developed by our co-founders Bassil Dahiyat, Ph.D. and Stephen Mayo, Ph.D. at the California Institute of Technology. We began our first therapeutic monoclonal antibody engineering and discovery programs in 2002 and entered into our first XmAb technology license in 2004. Our product development partnerships and technology licenses have provided us with approximately \$60 million in cash during the last five years, and we have the potential to receive an aggregate of approximately \$1.3 billion in milestone payments, in addition to royalties on sales, upon successful development and commercialization of the programs contemplated by our product development partnership and technology license agreements. These potential milestone payments include \$240 million relating to the achievement of clinical development milestones. At present, our XmAb technology platform is protected by 21 U.S. issued patents and 44 U.S. patent applications, in addition to foreign counterparts.

**Our Strategy**

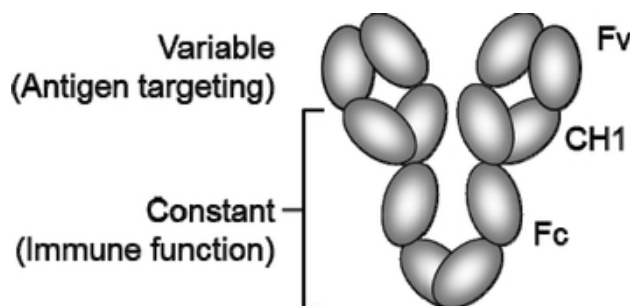
Our goal is to become a leading biopharmaceutical company focused on developing and commercializing engineered monoclonal antibodies to treat severe and life-threatening diseases with unmet medical needs. Key elements of our strategy are to:

- **Advance the clinical development of our lead Immune Inhibitor Fc Domain product candidates.** We are developing XmAb5871, in collaboration with Amgen, for the treatment of autoimmune diseases and are developing XmAb7195 independently for the treatment of asthma and allergic diseases.

- **Continue to monetize and expand the use of our XmAb technology platform.** We are seeking additional licensing and partnering opportunities, similar to our collaborations with Amgen and with MorphoSys for XmAb5574/MOR208, with leading pharmaceutical and biotechnology companies.
- **Build a large and diversified portfolio of product candidates.** We aim to create new XmAb-engineered antibody product candidates that exploit the novel properties of our XmAb technology platform.
- **Broaden the functionality of our XmAb technology platform.** We are conducting further research into the function and application of antibody Fc domains in order to expand the scope of our XmAb technology platform.
- **Continue to expand our patent portfolio protecting our XmAb technology platform.** We seek to expand and protect our development programs and product candidates by filing and prosecuting patents in the United States and other countries.

## Antibodies as Therapeutic Agents

Antibodies are Y-shaped proteins that are produced by B cells and used by the immune system to target and neutralize foreign objects known as antigens. These objects may include tumor cells, bacteria and viruses. Antibodies are composed of two structurally independent parts, the variable domain (the Fv domain) and the constant domain (the Fc domain and the CH1 domain). The Fv domain is responsible for targeting a specific antibody to a specific antigen and is different for every type of antibody. The Fc domain interacts with various receptors on immune cells and other cells and, rather than binding antibodies to target antigens, it endows antibodies with properties beyond simple binding, such as immune response regulation and cytotoxicity. Importantly, Fc domains are the same and interchangeable from antibody to antibody.



Most antibody research to date has been based on the ability to discover and improve antigen-selective antibody Fv domains. Many pharmaceutical and biotechnology companies have efforts to discover, develop and commercialize antibody drugs using such Fv-based tools. A number of successful products have resulted from these efforts and the global market for antibody therapeutics was estimated to be approximately \$45 billion in 2011, of which the U.S. market was estimated to be \$20 billion.

Intense competition drives companies to develop differentiated antibody drugs, often because of the common pursuit of the same antigen Fv targets across the industry. Industry efforts have focused on engineering Fv domains since the mid-1980s to enhance performance. More recently, many efforts at differentiation have attempted to improve upon antibody performance by drastically changing the antibody structure or substituting new molecules altogether, for example, new antibody-like scaffolds, bi-specific antibodies and antibody-drug conjugates. A challenge to these efforts has been making these new drug molecules replicate the beneficial features of natural antibodies, including ease of production, safety, efficacy and simplicity. These efforts, however, have largely ignored the Fc domain.

In contrast, in the last decade Xencor has focused on Fc engineering. Fc engineering involves additional complexities, particularly consideration of simultaneous interactions with multiple Fc receptors and immune cell types and requires significant expertise in structural biology and immunology. We developed the XmAb technology to create significantly enhanced antibody performance while preserving over 99.5% of the natural antibody structure because we believe that maintaining native antibody structure could retain these beneficial features in our highly differentiated antibody candidates.

### **Our XmAb Technology Platform**

We developed the XmAb technology platform from a systematic effort to engineer the Fc domain of antibodies to manipulate its interactions with a variety of its natural receptors. We used our patented screening technology, consisting of algorithms and computer models of the three-dimensional structure of the Fc domain, to focus on, from the vast number of possibilities, manageable sets of possible amino acid changes that result in small modifications to the Fc domain structure which effect significant changes in antibody function and performance.

From this design and screening effort, we have identified a set of Fc domains, each of which is engineered with particular amino acid changes to augment a specific naturally-occurring antibody function based on its Fc receptor binding profile:

- ***Immune Inhibitor Fc Domain***—rapid target clearance and selective immune inhibition, targeting the receptor FcγRIIb;
- ***Cytotoxic Fc Domain***—increased cytotoxicity, targeting the receptors FcγRIIIa on natural killer (NK) cells and FcγRIIa on other immune system cells; and
- ***Xtend Fc Domain***—extended half-life, targeting the receptor FcRn on endothelial cells.

In addition, we have engineered XmAb Fc domains with other properties, including rapid antigen clearance, antibody stability and multispecificity (heterodimer). Each XmAb Fc domain consists of a naturally occurring Fc domain with a small number of amino acid changes, usually two, that we found to be critical for modulating interactions with the desired Fc receptors. Therefore, XmAb product candidates are usually over 99.5% identical in structure and sequence to natural antibodies but have enhanced function. In contrast to other engineering approaches for next-generation antibodies, we believe that our platform minimizes changes to antibody structure while maximizing functional improvement. We believe this conservative design allows our engineered antibodies to retain the beneficial stability, pharmacokinetics, and ease of discovery of natural antibodies, as well as to use well-validated methods for antibody manufacturing. We believe we can thereby avoid the problems many new antibody platforms have had in production and drug stability.

Our XmAb technologies include modified Fc domains that modulate existing immune receptor interactions to tailor antibodies for improved therapeutic use. In the table below, we detail the properties of the Fc receptors targeted by our XmAb technologies:

<u>XmAb Fc Domain</u>	<u>Receptor</u>	<u>Receptor Type</u>	<u>Function</u>	<u>Cell Types</u>	<u>Disease Area</u>
Immune Inhibitor	FcγRIIb	inhibitory	cell inhibition	B cells, other immune cells	autoimmune
			rapid target clearance	liver sinusoidal endothelial cells	various
Cytotoxic	FcγRIIa	activating	phagocytosis	macrophage	oncology
	FcγRIIIa		cytotoxicity	NK cells	
Xtend	FcRn	salvage, transport	antibody recycling	endothelial cells	various

### ***Immune Inhibitor Fc Domain technology***

FcγRIIb is an inhibitory receptor that is expressed on B cells and other cells. FcγRIIb, when engaged by Fc domains, signals inside the cell to block immune response activation pathways, for example the B-cell receptor pathway that activates in response to antigen recognition and ultimately results in the production of antibodies to antigen. We have focused on this role as an important negative feedback regulator of the B-cell response, where its biology is well-validated. Its expression and signaling characteristics have made it a difficult target for monoclonal antibodies, as targeting it by itself does not trigger its inhibitory properties. FcγRIIb must be associated with other specific partner proteins on the cell surface to activate its inhibitory properties. We have circumvented this problem by discovering variants of the Fc domain with enhanced binding to FcγRIIb and designed the Fv domain to target a B-cell protein. This coupling of the two target proteins, in some cases, will trigger the inhibitory properties of FcγRIIb.

We have discovered a series of FcγRIIb immune inhibitor Fc variants with increased binding affinity to FcγRIIb of up to 400-fold. The high affinity variant has two amino acid substitutions in the Fc domain and has been applied to create our first immune inhibitor product development candidate XmAb5871. This antibody, described in greater detail below, targets CD19 on B cells through its variable domain and recruits FcγRIIb to induce its inhibitory properties. We have shown in several preclinical studies that XmAb5871 inhibits B-cell responses to a variety of stimuli, and we have begun clinical development (in partnership with Amgen) on this product candidate.

We have also applied this high affinity Immune Inhibitor Fc Domain to our anti-IgE antibody XmAb7195, which as a result inhibits activation of only IgE-positive B cells and hence prevents production of IgE, a key mediator of allergic response. Also, we have discovered an exciting new mechanism of action mediated by the Immune Inhibitor Fc Domains. High FcγRIIb binding causes very rapid clearance from the circulation of the complexes formed between XmAb7195 and IgE, a property that we believe is unique among IgE inhibitor antibodies. This provides another mechanism to lower the amount of circulating IgE.

The rapid clearance mechanism of Immune Inhibitor Fc Domains offers a highly differentiating function for antibodies targeting soluble antigens, such as IgE, and opens opportunities for the technology beyond B-cell modulation. For example, we are generating discovery candidates using Immune Inhibitor Fc Domains to clear pathologic targets from circulation.

### **Cytotoxic Fc Domain technology**

Our Cytotoxic Fc Domain technology consists of a series of variant Fc domains that improve binding to the activating Fcγ receptors. This binding improvement drives increased antibody-dependent cell cytotoxicity (ADCC), a primary mechanism of antibody cytotoxicity. The lead Fc variant used in nearly all of our Cytotoxic Fc Domain antibody candidates is an Fc domain with two amino acid substitutions that increase affinity for FcγRIIIa, the activating receptor expressed on natural killer (NK) cells, by approximately 40-fold. NK cells are cytotoxic lymphocytes of the innate immune system and play a major role in elimination of tumor cells and virally infected cells. Our Cytotoxic Fc Domain also increases affinity for FcγRIIa by approximately five-fold, with potential for recruitment of other important effector cells such as macrophages, which play a role in both innate and adaptive immunity by engulfing and digesting foreign material. FcγRIIIa is considered an important mediator of the antitumor efficacy of antibodies such as Genentech's Herceptin (trastuzumab) and Biogen/Idexx/Genentech's Rituxan (rituximab).

Numerous publications have demonstrated the importance of Fcγ receptors for anti-tumor efficacy in mouse models and also in clinical studies of Rituxan and Herceptin. We have applied our Cytotoxic Fc Domain to a large number of validated (e.g. Rituxan, Herceptin, Bristol-Myers Squibb and Eli Lilly and Company's Erbitux (cetuximab)) and unvalidated antibodies, and in all cases we have seen a marked increase of ADCC measured *in vitro*. We have established that the Cytotoxic Fc Domain technology increases the anti-tumor efficacy of antibodies in a number of mouse models. In primate studies, we have shown that our anti-CD19 antibody XmAb5574/MOR208, which incorporates our Cytotoxic Fc Domain, depletes monkey B cells whereas a similar anti-CD19 antibody with an unmodified Fc domain did not successfully kill B cells.

In Phase 1 clinical studies, antibodies incorporating our Cytotoxic Fc Domain, for example our XmAb2513 against CD30 in Hodgkin's lymphoma, have shown tumor reduction response rates comparable or superior to response rates in published reports of non-Fc engineered antibodies against the same target cells. Several partners and licensees are using our Cytotoxic Fc Domain in their oncology antibodies, including four programs currently in clinical trials.

### **Xtend Fc Domain technology**

Our Xtend Fc Domain technology consists of Fc domains designed to increase binding affinity to the receptor FcRn. FcRn is present inside lysosomes in endothelial cells lining the blood vessels and functions to rescue antibodies from the degradation that makes most proteins short-lived in circulation. As a result of interactions with FcRn, all antibodies have half-lives ranging from a few days to a few weeks, allowing less frequent dosing for antibody drugs than most other biologics. We have engineered a series of Fc variants that increase binding of the Fc domain to FcRn to enhance FcRn-mediated rescue and thereby increase circulating half-life. Our lead Xtend Fc Domain has two amino acid substitutions and has shown up to three-fold increases of *in vivo* half-life for a number of different antibodies in monkey models.

We believe extension of half-life can be exploited to improve therapeutic antibody performance in several ways:

- Increased dosing interval, providing superior patient convenience and likely compliance. Such a reduced frequency of dosing also results in lower drug use in aggregate, reducing cost of goods.
- Lower drug quantities at the same dosing interval as the parent antibody. This can simplify dosage formulation and sometimes enable subcutaneous formulation. Cost of goods is reduced as well.
- Higher drug levels using the same dose and dosing interval as the parent antibody, resulting in longer drug exposure and potentially translating to better efficacy.



We have licensed Xtend Fc Domain technology to several biopharmaceutical companies who are using Xtend Fc Domains to both improve existing antibody drugs and to create new drugs with long half-lives.

#### ***Additional XmAb Fc domains***

We continue to design Fc domain variants and have identified improved functions in addition to those described above. Our goal is to remain at the forefront of antibody engineering by using our expertise in Fc domain engineering to create new functions for use in antibody therapeutics. We have Fc variants that improve complement-dependent cytotoxicity. Other Fc variants have been engineered to eliminate binding to all Fcγ receptors, thereby creating Fc domains that have no cytotoxic effector function at all. Such domains have important use in therapeutics where no effector function is desired.

We have created Fc variants that form heterodimeric Fc domains that enable the creation of bispecific antibodies that have different Fv domains on each side of the Fc domain in order to bind to a different antigen with each of their Fv domains. For example, we can readily create bispecific antibodies that bind both CD3 and a tumor antigen in order to recruit cytotoxic T cells to the tumor cell. Because of the Fc domain, these bispecific antibodies retain the long half-life and ease of production typical of standard antibodies. We have generated a number of bispecific antibody discovery programs using our XmAb heterodimer Fc domains and have demonstrated that a bispecific antibody built on these Fc domains is active in primate models.

#### ***Antibody Fv domain engineering capabilities***

We have developed tools to engineer humanized and fully human, high-affinity antibody Fv domains. Usually starting from a mouse antibody Fv domain, we analyze its amino acid sequence computationally to find the best matches with human antibody sequences, which we then substitute into the murine Fv domain to create antibodies with very high human sequence content. Our approach preserves the structural integrity of the antibody and maintains binding to antigen. We also perform antigen affinity enhancement by computationally filtering sequence changes and generating small, focused libraries of Fv variants that we screen for tighter binding. All of our internally discovered candidates, including XmAb5871, XmAb7195 and XmAb5574/MOR208, were generated using these tools.

#### **Lead XmAb Product Candidates**

<b>Candidate</b>	<b>Indication</b>	<b>Fc Domain</b>	<b>Worldwide Commercial Rights</b>	<b>Stage of Development</b>	<b>Next Steps</b>
<b>XmAb5871</b>	lupus and rheumatoid arthritis	Immune Inhibitor	Xencor (Amgen option upon Phase 2b POC data)	Phase 1b/2a ongoing	Preliminary data expected 2H 2014; Phase 2b POC trial planned first half of 2015
<b>XmAb7195</b>	asthma and allergic diseases	Immune Inhibitor	Xencor	preclinical	IND filing planned 1H 2014 Phase 1a trial planned 1H 2014
<b>XmAb5574/MOR208</b>	B-cell cancers	Cytotoxic	MorphoSys	Phase 2 trials ongoing	Phase 2 trials for other indications* Phase 3 clinical trials*

\* Timing and trial design for future clinical trials to be determined by MorphoSys.

## **XmAb5871, a B-cell Inhibitor for the Treatment of Autoimmune Diseases**

### ***Background and Market Opportunity***

XmAb5871 is a monoclonal antibody that inhibits B cells, without depleting them, for the treatment of autoimmune diseases. B cells have an important natural role in the immune response, recognizing pathogens and ultimately producing anti-pathogen antibodies. The B-cell response is naturally regulated by a variety of mechanisms, including the use of the B-cell inhibitory receptor, FcγRIIb. FcγRIIb is triggered by an excess of anti-pathogen antibodies, preventing over-activation of B cells to a particular pathogen and over-production of antibodies. In autoimmune diseases, the immune system aberrantly attacks proteins and/or cells in the body (auto-antigens) through both B-cell- and T-cell-mediated pathways. In many autoimmune diseases, including rheumatoid arthritis and systemic lupus erythematosus (lupus), B cells play a significant role in pathogenesis, acting as antigen-presenting cells and as precursors to autoantibody-producing plasma cells.

The autoimmune disease therapeutic market presents a large opportunity with currently marketed antibody-based products, such as Rituxan (marketed under the trade name MabThera outside the United States), with 2012 worldwide sales for the treatment of autoimmune indications of approximately \$1.1 billion, and GlaxoSmithKline's Benlysta (belimumab), with 2012 worldwide sales of over \$200.0 million for the treatment of lupus. Management of rheumatoid arthritis frequently requires multiple therapies as patients cycle through various treatment options. Anti-TNF agents, such as Humira, are currently the first-line therapy for patients that fail disease modifying anti-rheumatic drug (DMARD) therapy. Management of lupus depends on disease severity and disease manifestations. Milder disease is often controlled with nonsteroidal anti-inflammatory drugs (NSAIDs) to treat inflammation and pain. The immunosuppressive antimalarial drug hydroxychloroquine and low-dose corticosteroids are used to treat skin and arthritis symptoms. Patients with disease manifestations in vital organs are often subject to prolonged use of systemic corticosteroids, which have significant short and long term side effects. Life-threatening manifestations of lupus, such as those involving the kidneys or central nervous system are treated more aggressively with drugs such as high dose corticosteroids and additional immunosuppressive agents. In aggregate, existing drugs for lupus are mostly old, have significant side effects, and lack sufficient efficacy to control the disease. Thus, the unmet need remains high in lupus, encouraging the development of biologic therapies. Because of the central role of B cells in lupus, therapies targeting B cells have been explored and showed detectable but modest signs of efficacy.

Rituxan, which causes outright depletion of B cells, has been approved for treatment of moderate-to-severe rheumatoid arthritis, with promising efficacy. In addition, while Rituxan has not been approved as a lupus therapy, we believe it is prescribed off-label as a treatment for lupus. A number of investigator-sponsored lupus clinical trials and case studies have suggested it may be efficacious. The nearly-complete B-cell depletion caused by Rituxan, however, comes with an increased risk of infection. For example, Rituxan has been associated with a low risk of the often fatal progressive multifocal leukoencephalopathy, which is inflammation of the brain that has been attributed to reactivation of a latent virus. Moreover, a second generation B-cell depleting product candidate being developed by Genentech and Biogen Idec, ocrelizumab, was suspended from development in rheumatoid arthritis and lupus due to serious and opportunistic infections, some of which were fatal. B-cell recovery after depletion can take weeks to months, exacerbating the situation if an infection arises.

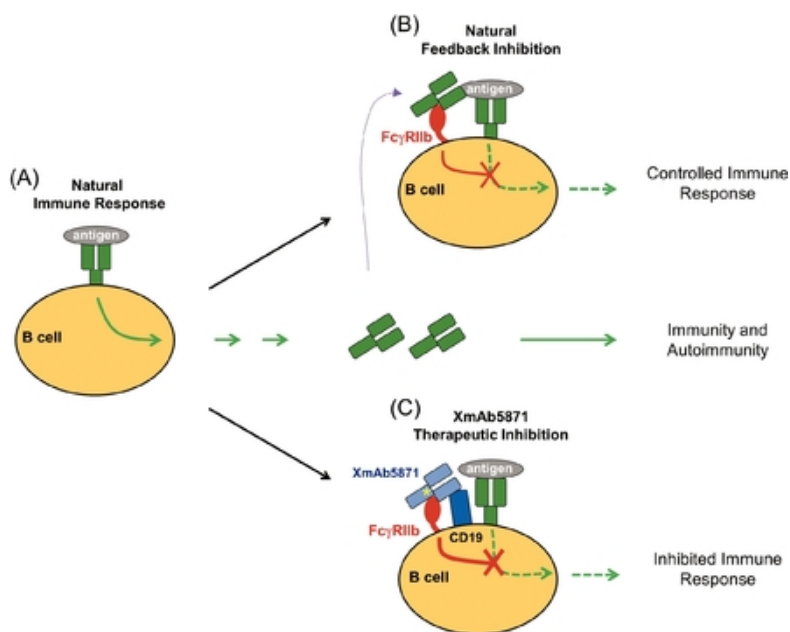
A second notable B-cell inhibitor is the anti-BLyS antibody Benlysta. BLyS (B-lymphocyte stimulator) is a B-cell survival factor, and Benlysta's inhibition of this factor leads to an attenuation of B cells and their responses. Despite FDA concern raised in advisory committee briefing documents over the "somewhat marginal efficacy" of Benlysta and lack of demonstrated efficacy in the African

American population, the high unmet need resulted in approval of Benlysta as the first FDA-approved lupus therapy in over 50 years. We believe Benlysta's sales reflect its modest efficacy.

Despite some promise from the two therapies mentioned above, because of their side effect risk and limited efficacy, the unmet need in lupus remains high for the over 160,000 Americans with a definite lupus diagnosis. Additionally, over 150,000 Americans have a probable lupus diagnosis and could potentially benefit from new therapies with improved efficacy and acceptable safety profiles.

### Overview of XmAb5871

XmAb5871 is a monoclonal antibody for the treatment of autoimmune diseases that uses our Immune Inhibitor Fc Domain to target FcγRIIb, an inhibitory receptor expressed on B cells and other immune cells, and through its Fv domain targets CD19, which is expressed on all B cells. By simultaneously targeting the B-cell proteins, CD19 and FcγRIIb, XmAb5871 has an ability to engage the natural inhibitory pathway provided by FcγRIIb, preventing further activation of B cells by autoantigens and potentially also suppressing the ability of B cells to further provoke downstream autoimmune responses from T cells. CD19 and FcγRIIb are expressed broadly throughout B-cell development, so we expect that XmAb5871 will confer broad suppression of B-cell activation and downstream events such as antibody production. We have demonstrated that XmAb5871 inhibits B-cell function in multiple animal models and in initial human clinical trials without destroying these important immune cells, in contrast to other B-cell targeting therapies, such as Rituxan, that attack and destroy B cells. We believe the combination of potent inhibition without B-cell depletion, which can lead to opportunistic infections, has the potential to address a key unmet need in autoimmune therapies. The coupling between CD19 and FcγRIIb, mediated by XmAb5871, promotes a strong negative signal in the B cell, preventing its activation and potentially blocking disease pathology in a variety of autoimmune and inflammatory conditions by broadly blocking all B-cell populations. XmAb5871 is the first potential therapy that we are aware of that targets FcγRIIb inhibition.



**Therapeutic Inhibition by XmAb5871 Mimics Natural Pathways.** (A) B-cell responses against antigen lead to antibody secretion, resulting in immunity and in some cases autoimmunity. (B) Excess antibodies produced in the B-cell response can engage both the antigen and the inhibitory receptor FcγRIIb on the B-cell surface, acting to control the immune response. (C) XmAb5871 mimics the natural feedback inhibition by targeting CD19, rather than the antigen, on the B-cell surface and recruiting FcγRIIb to inhibit activation of the targeted B cell.

In December 2010, we entered into a collaboration and option agreement with Amgen for XmAb5871. During the option period, which expires upon completion of a data review period following our planned Phase 2b proof-of-concept (POC) clinical trial, we lead research, development and manufacturing activities for XmAb5871 with collaborative input and development support from Amgen. Under the agreement, Amgen paid us an upfront payment and early development milestones and is obligated to pay additional milestones, both before and after payment of an option exercise fee, and royalties on sales following an exercise of the option by Amgen. If Amgen exercises its option and pays the option exercise fee, it will be solely responsible for the costs associated with the further development, commercialization, manufacture, distribution, marketing and promotion of XmAb5871.

### ***Clinical Development Summary***

In December 2012, we completed a Phase 1a clinical trial in healthy volunteers and XmAb5871 was observed to be well tolerated and to have promising immunosuppressive activity based on several biomarkers observed during the trial. Currently, we are conducting a Phase 1b/2a clinical trial in rheumatoid arthritis patients with active disease on stable non-biologic DMARD therapy to study safety, pharmacokinetics and XmAb5871's effect on rheumatoid arthritis disease response.

#### *Phase 1b/2a Clinical Trial*

We initiated a Phase 1b/2a clinical trial of XmAb5871 in January 2013. This clinical trial is a multi-center, randomized, placebo-controlled, double-blinded, ascending multiple dose study of the safety, tolerability, pharmacokinetics and pharmacodynamics of XmAb5871 in rheumatoid arthritis patients with active disease on stable non-biologic DMARD therapy. The primary objectives of this clinical trial are (1) to determine the safety and tolerability profile of biweekly, multiple dose, intravenous administration at a single dose level of XmAb5871 in patients with rheumatoid arthritis and (2) to characterize the pharmacokinetics and immunogenicity of intravenously administered XmAb5871 in patients with rheumatoid arthritis at multiple doses. The secondary objectives of this clinical trial include evaluating the effect of XmAb5871 on rheumatoid arthritis disease response as measured by changes in Disease Activity Score 28 using C-reactive protein (DAS28 CRP) at Week 13 for the Phase 2a portion of this clinical trial.

This clinical trial is being conducted in two parts. In the first part, 29 rheumatoid arthritis patients with active disease on stable non-biologic DMARD therapy have been enrolled into four consecutive dose cohorts (0.3 to 10.0 mg/kg) randomized approximately 6:2 (six XmAb5871 patients to two placebo patients), other than for the lowest dose, where it was 3:1. Each patient will be administered XmAb5871 or placebo every 14 days for a total of six doses. We have enrolled the fourth and highest dose cohort.

Through September 30, 2013, XmAb5871 has been reported to be well-tolerated. Only one patient has experienced a serious adverse event (infusion-related reaction with hypotension), and this patient is the only one to have discontinued the study prematurely. Other adverse events that have been reported by investigators as related to treatment (whether a patient's treatment was placebo or XmAb5871 remains double-blinded) and have occurred in more than one patient include: nausea, vomiting, fever-increased temperature, headache and bronchitis. Further, preliminary immunogenicity testing data for the first 2 cohorts through the treatment phase of the study have been negative.

In the second part of this clinical trial, approximately 30 additional rheumatoid arthritis patients with active disease on stable non-biologic DMARD therapy will be enrolled in an expansion cohort, randomized 2:1 (two XmAb5871 patients to one placebo patient), at the highest dose studied in the first part of the trial, 10.0 mg/kg. Each patient will be administered XmAb5871 or placebo every 14 days for a total of six doses. The expansion cohort will enable collection of more comprehensive multiple dose safety and PK data at the selected dose and potentially enable detection of early clinical

activity in a rheumatoid arthritis patient population with moderate to high disease activity. We expect to report data from this trial in the second half of 2014.

### *Phase 1a Clinical Trial*

We have completed a Phase 1a clinical trial of XmAb5871. This clinical trial was initiated in October 2011 and completed in December 2012 and was a randomized, blinded, placebo-controlled, single ascending dose clinical trial to investigate the safety, tolerability and pharmacokinetics of XmAb5871 in healthy male adult volunteers. Subjects received a single intravenous infusion of XmAb5871 or placebo in one of seven dose cohorts ranging from 0.03 mg/kg to 10.0 mg/kg. A total of 48 subjects were enrolled, with 36 subjects receiving XmAb5871 and 12 receiving placebo.

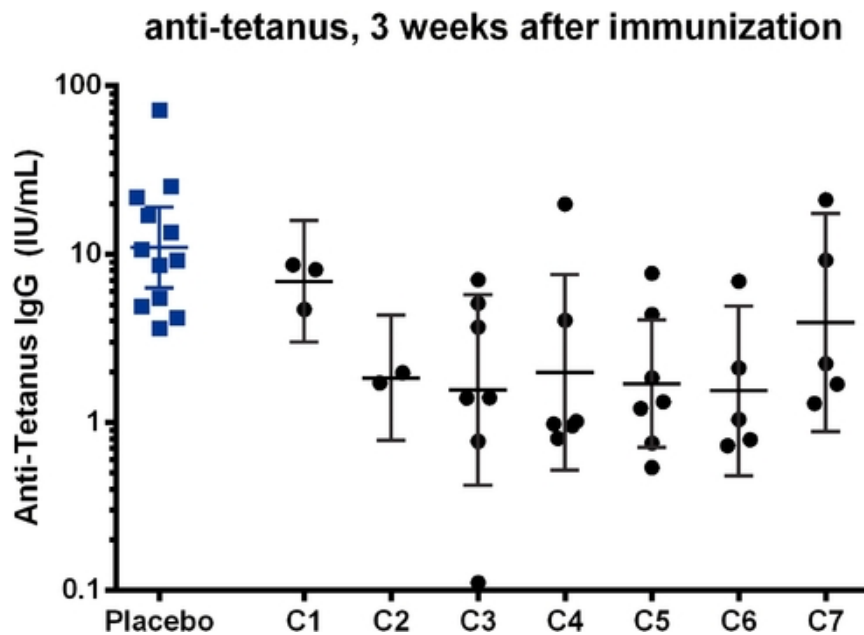
The primary objectives of this clinical trial were (1) to determine the safety and tolerability profile of single-dose intravenous administration of XmAb5871 and (2) to characterize the single-dose pharmacokinetics and immunogenicity of XmAb5871. We also included several biomarkers to evaluate the ability of XmAb5871 to suppress B-cell responses in treated subjects. XmAb5871 was well tolerated at all doses investigated. No subjects experienced a serious adverse event or a dose-limiting toxicity. The most frequently reported adverse events associated with XmAb5871 were gastrointestinal symptoms including nausea, vomiting, abdominal pain, abdominal discomfort, epigastric discomfort (upper stomach pain) and diarrhea. All but one were mild to moderate, with one subject experiencing severe nausea. All 48 subjects completed the clinical trial protocol. Samples positive for anti-drug antibodies (immunogenicity) were detected in 44% of subjects, with only half of these subjects having an immunogenicity signal greater than two-fold above baseline. Immunogenicity is a common occurrence for antibody therapies. These antibody responses did not appear to impact drug activity or disposition.

Biomarker analysis from this clinical trial suggests that XmAb5871 can achieve target saturation and B-cell immunosuppression at relatively low doses (0.03 mg/kg) and that biweekly dosing is feasible. CD19 was fully occupied on B-cell surfaces by XmAb5871 at all doses, and the time to recovery of free CD19 increased as the dose level increased. As discussed above, our ability to suppress B-cell responses without complete B-cell eradication may be an important safety differentiator relative to other therapies such as Rituxan. Hallmarks of B-cell depletion are sustained reduction of detectable B cells for weeks or months following cessation of therapy. In the Phase 1a clinical trial, B cells were reduced by approximately 50% from baseline at all doses. The extent of the B-cell reduction did not increase as dose level increased, and B-cell counts recovered to pre-treatment values nearly simultaneous with the clearance of XmAb5871.

To assess B-cell function in the treated subjects, we examined CD86 levels, a marker of B-cell activation and a precursor to T-cell activation. XmAb5871 suppressed this B-cell activation marker at all doses, and once again, the recovery of B-cell activation was concurrent with the clearance of XmAb5871 from the subjects' serum.

Our goal in the design of XmAb5871 was to create a potent and reversible inhibitor of autoimmune B-cell responses, including the ability to inhibit the pathogenic auto-antibody responses in autoimmune diseases. Because the healthy volunteers are not expected to have auto-antibodies, we immunized them with tetanus and keyhole limpet hemocyanin (KLH) to elicit antibody responses to those antigens. XmAb5871 suppressed anti-tetanus antibody responses for all doses, with the exception of our lowest starting dose (0.03 mg/kg) (figure below). Placebo treated subjects showed an increase in anti-tetanus antibody levels of over 12-fold compared to a 4-fold increase for XmAb5871 treated subjects. We observed similar immunosuppression of anti-KLH responses. The immunization

biomarkers show that XmaB5871 can effectively suppress an immune response at well-tolerated doses feasible for biweekly dosing.



XmaB5871 reduced responses to tetanus toxoid vaccination in subjects in a Phase 1a study. C1-7 were subjects treated with 0.03, 0.1, 0.2, 0.6, 2, 5 and 10 mg/kg of XmaB5871, respectively. Anti-tetanus antibody was measured three weeks after subjects were immunized with tetanus.

#### *Further Clinical Development*

Our planned clinical trials include an intravenous to subcutaneous bridging study in humans to prepare for subcutaneous administration in our future clinical trials. We believe that a subcutaneous formulation will be more commercially attractive and convenient for patients. Several subcutaneous formulations are being developed in collaboration with Amgen and should be compatible with auto-injector devices for doses in the 1-3 mg/kg range. We expect to initiate our Phase 2b POC clinical trial in the first half of 2015 and expect to enroll 150-200 moderate-to-severe rheumatoid arthritis patients on stable DMARD therapy. This clinical trial is designed to assess efficacy at 24 weeks. We expect that data from this trial, if positive, will support pivotal Phase 3 clinical trials in rheumatoid arthritis and lupus.

Additionally, we may explore the utility of XmaB5871 in other diseases where B cells are implicated, including multiple sclerosis, myasthenia gravis, Sjogren's syndrome and a variety of orphan diseases.

#### *Preclinical Development Summary*

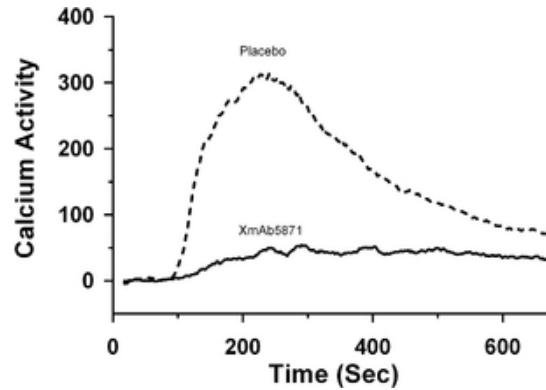
We have examined the ability of XmaB5871 to inhibit B cells in preclinical studies, including *in vitro* and *in vivo* studies. The observation in our preclinical studies include:

- No depletion of human B cells in culture;
- Inhibition of human B cells, including B cells donated by lupus and arthritis patients, stimulated by a variety of agents;
- Suppression of antibody responses in humanized mouse models;

- Suppression of disease in mouse models of arthritis and multiple sclerosis without B-cell depletion; and
- Well tolerated at high doses in monkeys.

As discussed above, the lack of B-cell depletion is an important property of XmAb5871, giving it a potential safety advantage relative to B-cell depleting therapies like Rituxan. We have shown that XmAb5871 did not kill B cells in a culture of human blood cells over a wide concentration range. In contrast, Rituxan and XmAb5574, depleting antibodies for treating B-cell cancers, both significantly depleted B cells.

The hallmark of B-cell activation is intracellular calcium mobilization. B cells taken from human donors can be stimulated in vitro resulting in a readily observable mobilization of calcium. In contrast, in the presence of XmAb5871, stimulation of the B cells leads to very slight calcium mobilization, barely detectable with our assays (figure below).



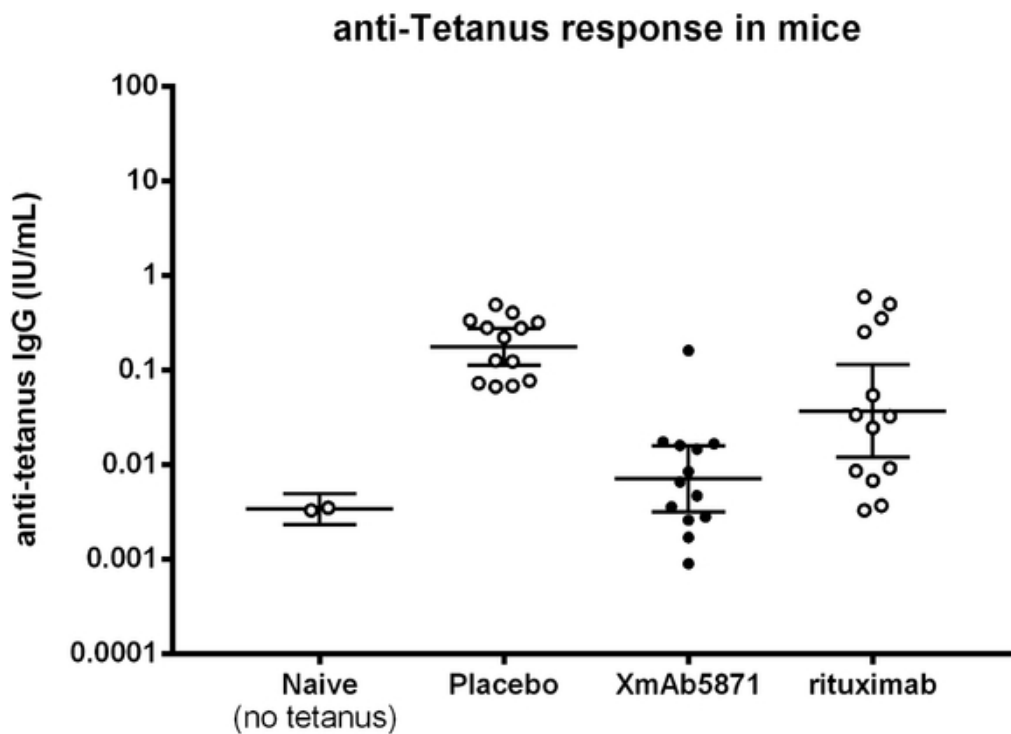
**XmAb5871 suppresses calcium mobilization, a hallmark of B-cell activation. Upon stimulation, B cells treated with placebo showed an increase in calcium flux. In contrast, B cells treated with XmAb5871 showed a low calcium signal.**

A second common measure of B-cell activation is their proliferation in response to various stimuli. In preclinical studies, we demonstrated XmAb5871 inhibits B-cell proliferation stimulated by anti-CD79b, IL-4, BLyS or lipopolysaccharide (LPS), a range of stimulants that signal through different pathways. The inhibition of the BLyS-mediated propagation is particularly notable given the recent approval of the anti-BLyS antibody Benlysta for treatment of lupus, suggesting that XmAb5871 inhibition includes the pathways blocked by Benlysta.

Because most autoimmune diseases involve contributions from T cells in addition to B cells, we examined the ability of XmAb5871 to reduce the propensity of the B cell to activate T cells. CD86 is the ligand for CD28 on T cells and their interaction is a major stimulant of T cells. For example, the blockade of CD86 by Bristol-Myers Squibb's Orencia (abatacept) is used as a treatment for rheumatoid arthritis and is also being investigated for the treatment of lupus. Upon B-cell stimulation, CD86 is increased on the B-cell surface, promoting the ability of the B cell to engage and activate the T-cell response. In the presence of XmAb5871, however, we observed that CD86 was significantly diminished. This observation led subsequently to the use of a similar assay as an activity biomarker for our Phase 1a clinical trial.

XmAb5871 was consistently immunosuppressive in mouse models of the human B-cell response. Because the antibody does not recognize mouse CD19 or mouse FcγRIIb, we used humanized mouse models (huSCID), in which human peripheral-blood cells, including B cells and T cells, are engrafted into an immune compromised mouse. These are well-established models and the human immune cells will normally react to immunization with antigen. Assuming that most of our human donors would have

been vaccinated with tetanus toxoid, we set up humanized mouse models with a tetanus booster vaccination to see if XmAb5871 could suppress the anti-tetanus response (figure below). We ran the model numerous times and observed a robust anti-tetanus antibody response in untreated mice (the placebo control group), which we did not observe in mice treated with XmAb5871, indicating effective B-cell inhibition. Rituximab was included as a control, showing only intermediate suppression of the anti-tetanus antibody response. XmAb5871's ability to prevent antibody responses in these humanized mouse models suggests it might be capable of inhibiting antibody responses in general and thus autoantibody responses in humans with autoimmune diseases.



**XmAb5871 inhibited anti-tetanus antibody responses in mice engrafted with human B cells and immunized with tetanus.**

We could not test XmAb5871 for activity in mouse disease models because of the lack of reactivity with the mouse CD19 and FcγRIIb. Accordingly, we created an XmAb5871 surrogate antibody called XENP8206, which has an Fv domain that recognizes mouse CD19 and an Fc domain identical to XmAb5871. We then used mice transgenic for human FcγRIIb as a background system for disease models. In these mice, the mouse FcγRIIb gene has been replaced with the human FcγRIIb gene so their FcγRIIb receptor can be recognized by the XENP8206 Immune Inhibitor Fc Domain. In vitro experiments with B cells taken from the transgenic mice showed us that XENP8206 was capable of mimicking XmAb5871's B-cell inhibition activity, and that the activity was dependent on engagement of human FcγRIIb. In a collagen-induced arthritis model, XENP8206-treated mice had little to no evidence of inflammation, whereas untreated mice had a 40% incidence of disease. XENP8206's ability to decrease symptoms in a mouse model of multiple sclerosis was at least as good as a Rituxan surrogate antibody, which caused complete depletion of the mouse B cells. XmAb5871's surrogate antibody XENP8206 did not cause significant B-cell depletion in our mouse studies.

We completed both 12-week and 24-week, multiple dose, preclinical monkey toxicology studies of XmAb5871 and found no adverse events in doses up to 200 mg/kg. Additional preclinical work has also



shown that XmAb5871 is capable of suppressing B cells donated by lupus and rheumatoid arthritis patients in both *in vitro* and *in vivo* models.

## **XmAb7195, an IgE Inhibitor for the Treatment of Asthma and Allergic Diseases**

### ***Background and Market Opportunity***

XmAb7195 is an anti-IgE antibody engineered to reduce even very high IgE levels for the treatment of asthma and other atopic diseases. Its three specific mechanisms of action give it potential advantages over current therapies: increased IgE affinity, inhibition of the B-cell transition to IgE-secreting cells and rapid clearance of IgE from circulation. According to the CDC, asthma affects approximately one in 12 Americans, more than half of asthma sufferers have at least one attack each year and thousands of people die from asthma attacks each year. Disease severities cover a wide range, and the treatment landscape is multi-tiered for asthma patients. Patients with mild and moderate asthma are generally well controlled with inhaled corticosteroids and long-acting beta agonists. However, a small percentage of the estimated 25 million asthma patients in the United States have severe asthma and are refractory to high-dose combination therapy. This severe population is commonly treated with oral corticosteroids, which are associated with a host of undesirable side effects and are often insufficient to control the disease.

IgE, the target of Genentech and Novartis AG's Xolair (omalizumab), is the direct mediator of allergies and the allergic asthma response. When IgE binds to allergens, it triggers an allergic response, which can ultimately result in the debilitating bronchoconstriction of asthma, and other systemic pathologies such as atopic dermatitis and chronic urticaria, also known as hives. Xolair's efficacy in severe asthma through the suppression of IgE has validated IgE as a therapeutic target.

Xolair has been used to treat the severe asthma population, generating worldwide sales in 2012 of approximately \$1.3 billion. While Xolair has demonstrated efficacy in severe asthma, its modest potency has led to two key limitations:

- Because Xolair's modest potency would require an impractically large dose to control high IgE levels, it is approved for use only in a limited number of asthma patients, leaving approximately 20% of asthma patients that have high body weight and high IgE levels ineligible; and
- Of those patients treated with Xolair, approximately half do not reach target IgE reductions.

### ***Overview***

XmAb7195 is an anti-IgE antibody engineered to reduce IgE levels for the treatment of asthma and other atopic diseases. Its three specific mechanisms of action give it potential advantages over current therapies: increased IgE affinity, inhibition of the transition of B cells to IgE-secreting cells and rapid clearance of IgE from circulation.

- XmAb7195 is a humanized anti-IgE antibody with an Fv domain that targets the same IgE epitope as Xolair, which is validated to block IgE. XmAb7195's affinity for IgE is approximately three times higher than that of Xolair. We believe that this contributes to the increased suppression of IgE observed in our preclinical studies.
- XmAb7195, in contrast to Xolair, has our Immune Inhibitor Fc Domain that has a 400-fold higher affinity than natural antibodies for FcγRIIb. XmAb7195 and XmAb5871 have the same Fc domain, but XmAb7195, unlike XmAb5871, inhibits only IgE-positive B cells. By binding to FcγRIIb on IgE-positive B cells, XmAb7195 suppresses their activation and differentiation into IgE-secreting plasma cells. This binding reduces IgE production, a mechanism not seen with Xolair, and ultimately lowers IgE levels in the blood.

- In our preclinical primate and other animal studies, we observed rapid reductions in IgE levels, even from the highly-elevated levels found in chimpanzees, and rapid clearance of IgE from circulation. We did not observe any clearance or such magnitude of reduction with Xolair. This suggests a new mechanism of action in which high FcγRIIb binding causes very rapid clearance of the complexes formed between XmAb7195 and IgE in the liver. We believe XmAb7195 binds to FcγRIIb expressed in cells lining the blood vessels in the liver which take up and degrade the XmAb7195 IgE complex.

These three mechanisms lead to levels of serum IgE below quantifiable levels in preclinical chimpanzee studies and offer the potential for superior IgE control and superior clinical efficacy. We believe the limitations of current treatment with Xolair can be overcome with XmAb7195, and that superior IgE control means our product candidate can potentially treat a larger population with superior efficacy.

#### ***Preclinical Development Summary***

We have performed a variety of *in vitro* and *in vivo* studies to explore the ability of XmAb7195 to sequester IgE and inhibit its production. These preclinical studies have shown that XmAb7195 inhibits the production of IgE in a variety of settings, with greater and/or prolonged reductions of IgE compared to Xolair. We also have observed evidence of three different mechanisms of action. The observations from our preclinical studies include:

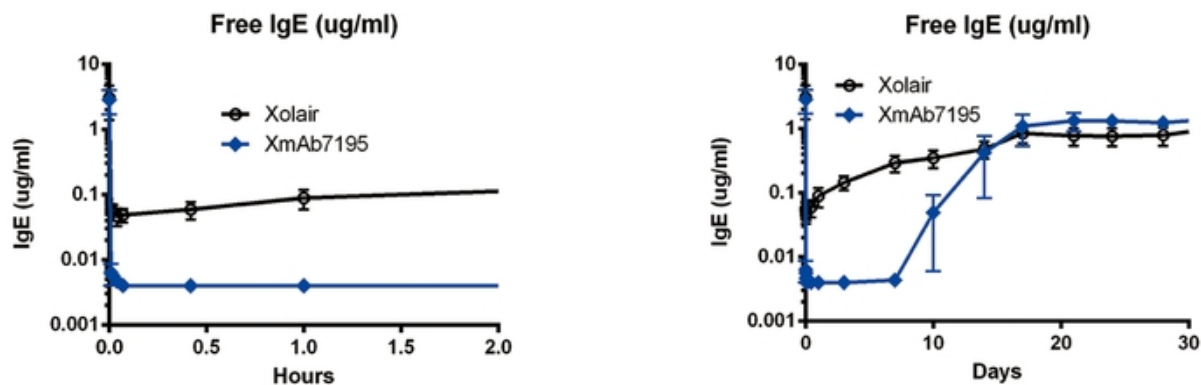
- Selective inhibition of IgE production in human B-cell assays;
- Prolonged reduction of free and total IgE in humanized mice compared to Xolair;
- Greater reduction of free and total IgE in chimpanzees compared to Xolair;
- Well tolerated at high doses in monkeys; and
- Well tolerated in chimpanzees.

Important for XmAb7195's mechanisms of action is the binding of circulating IgE and our *in vitro* and *in vivo* studies reflect this activity and its three-fold tighter binding to IgE than Xolair. In a preclinical study, we treated B cells to induce their transition into IgE-secreting plasma cells and observed that XmAb7195 reduced the total amount of IgE produced. This is consistent with our prediction that the incorporation of our Immune Inhibitor Fc Domain causes the inhibition of IgE B cells. In this respect, XmAb7195 behaves similarly to XmAb5871, which we have shown to have broad capacity to inhibit the production of all classes of antibodies by B cells. In the case of XmAb7195, however, the B-cell inhibition is restricted to B cells expressing IgE on their surface, and our preclinical studies confirm this selectivity.

As with XmAb5871, XmAb7195's enhanced Fc domain does not bind well to mouse FcγRIIb, so we used models of mice engrafted with human blood cells and examined IgE levels in response to XmAb7195. Compared to Xolair, XmAb7195 prolonged the reduction of free IgE levels, indicating an additional biological effect beyond that of simple IgE binding. Total IgE levels (which is the sum of IgE complexed with anti-IgE antibody plus any free IgE) were significantly reduced in XmAb7195-treated mice, but not reduced in the Xolair-treated mice. We interpret these data as further evidence that XmAb7195, through its Immune Inhibitor Fc Domain, engages FcγRIIb on IgE B cells and prevents their transition into IgE-secreting plasma cells. In further studies in the humanized mice, we compared the activity of XmAb5871 to XmAb7195 and saw that the XmAb7195 suppression was restricted to IgE versus other immunoglobulins such as IgG and IgM.

We have also tested the activity of XmAb7195 in chimpanzees, which we believe is the most predictive animal model of the effects of XmAb7195 in humans. Chimpanzees, including those in our study, normally have very high levels of IgE compared to humans, and humans with these levels would be considered ineligible for Xolair because their IgE levels exceed Xolair's effective range. We treated

six chimpanzees, three with XmAb7195 and three with Xolair, and observed that both antibodies caused a reduction in circulating free IgE, as shown in the figures below.



XmAb7195 reduces free IgE levels in chimpanzees to below the limits of quantification of our IgE assay, 0.004 mg/ml. Chimpanzees treated with Xolair had transient impact, briefly reducing free IgE to approximately 0.050 mg/ml. The plots show data from the same study at different time intervals.

Xolair only transiently reduced the free IgE, however, and never achieved the low IgE levels generally believed necessary for efficacy (0.02 mg/ml or lower). Xolair, consistent with human clinical studies, increased total IgE three to five fold. XmAb7195, on the other hand, reduced free IgE levels to below our limit of quantification (0.004 mg/ml), amounting to at least 10-fold lower IgE than with Xolair. XmAb7195-treated chimpanzees had marked and rapid reductions in total IgE as well, once again consistent with the added mechanisms of action contributed by the Immune Inhibitor Fc Domain. We believe that the very rapid reduction in total IgE implicates a third mechanism of action, namely the ability to rapidly clear IgE bound to XmAb7195. A second chimpanzee study confirmed these findings, and additional preclinical studies with surrogate antibodies in FcγRIIb transgenic mice closely resemble our observations in chimpanzees, indicating that the rapid clearance mechanism is a general phenomenon and a potential new application of the Immune Inhibitor Fc Domain platform.

We have performed 12-week, multiple dose toxicology studies in cynomolgus monkeys up to 100 mg/kg and XmAb7195 is well tolerated with no adverse effects observed. Furthermore, although the chimpanzee studies were not designed as toxicology studies, XmAb7195 was well tolerated at the 5 mg/kg dose we tested at both single and multiple doses.

#### **Clinical Development Plans**

We plan to file an IND for XmAb7195 for asthma with the FDA and to initiate a Phase 1a clinical trial in the first half of 2014 and to report preliminary data at the end of 2014. The Phase 1a single ascending dose clinical trial in healthy volunteers will include parallel cohorts in allergen-sensitive subjects with high IgE levels. This clinical trial will be designed to study safety and pharmacokinetics in humans and validate XmAb7195's ability to suppress both free and total IgE levels. If the Phase 1a clinical trial is successful, we anticipate starting a Phase 1b multiple ascending dose clinical trial of XmAb7195 in healthy adult volunteers and in patients with mild-to-moderate asthma in early 2015 to study safety, pharmacokinetics, and IgE reduction. We have received correspondence from the FDA in response to a pre-IND meeting request that concurred with our Phase 1 clinical trial plan, pending review of a full IND submission. Following the Phase 1a and 1b clinical trials, we anticipate initiating a Phase 2 POC clinical trial of XmAb7195 for intermediate-term treatment of patients with poorly-controlled asthma, which we expect will include patients with high IgE levels and/or high body mass. We expect the dosing for this clinical trial to be based on data from the Phase 1 clinical trials.

## **XmAb5574/MOR208, a Cytotoxic B-cell Depleting Product Candidate for the Treatment of B-cell Cancers**

### ***Background and Market Opportunity***

XmAb5574/MOR208 is a monoclonal antibody that targets CD19 and incorporates our Cytotoxic Fc Domain technology to kill malignant B cells. In contrast to XmAb5871, which uses our Immune Inhibitor Fc Domain, XmAb5574/MOR208 targets cancer cells where depletion is the goal in treating the disease.

B-cell cancers include lymphomas such as the non-Hodgkin Lymphomas (NHL) and leukemias such as chronic lymphocytic leukemia (CLL) and acute lymphoblastic leukemia (ALL). Collectively, lymphomas represent about five percent of all cancers diagnosed in the United States. NHL is the most prevalent of all lymphoproliferative diseases, with the National Cancer Institute estimating that over 69,000 new cases will be reported in the United States in 2013, and 85% of NHLs are classified as B-cell disorders. The Leukemia and Lymphoma Society estimates that over 16,000 new cases of CLL and over 6,000 new cases of ALL will be reported in 2013. CD19, the target of XmAb5871's Fv domain, is a B-cell surface protein that is highly expressed on the tumor cells in NHL and many leukemias, including ALL and CLL. We believe that targeting CD19 with XmAb5574/MOR208 offers potential advantages over the current standard of care for B-cell malignancies, which is treatment with Rituxan plus chemotherapy. Rituxan, an anti-CD20 antibody, plus chemotherapy has successfully treated many B-cell NHLs and some B-cell leukemias, demonstrating the utility of antibodies targeting B-cell diseases. Although the Rituxan-chemotherapy regimen has led to major improvements in response rates and progression-free survival, the majority of patients relapse and many lose responsiveness to Rituxan treatment.

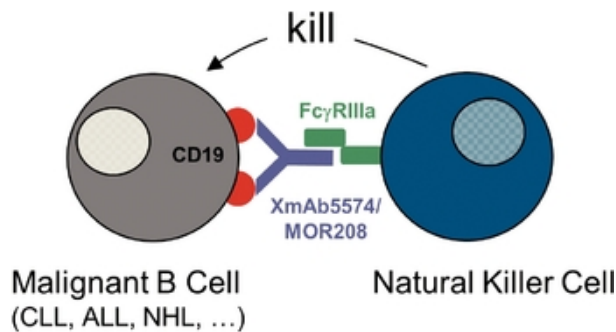
### ***Overview***

XmAb5574/MOR208 is a monoclonal antibody that targets CD19 and incorporates our Cytotoxic Fc Domain technology for killing of malignant B cells. XmAb5574/MOR208 was discovered by us and is now being developed by MorphoSys, pursuant to a collaboration and license agreement that we entered into in June 2010. Under this agreement, we granted MorphoSys an exclusive worldwide license to XmAb5574/MOR208 for all indications. We were responsible for completing a Phase 1 clinical trial of XmAb5574/MOR208 in CLL, which was completed in January 2013. MorphoSys is solely responsible, at its own cost, for all other development and commercialization activities. MorphoSys commenced Phase 2 clinical trials in patients with B-ALL and NHL, in April and May 2013, respectively.

We humanized XmAb5574/MOR208 with our proprietary technology and applied our Cytotoxic Fc Domain to enhance binding to the human Fc receptors FcγRIIIa and FcγRIIa, thereby enhancing recruitment of natural killer (NK) cells and other FcγR-bearing effector cells. We applied further engineering to the CD19-binding Fv domain of XmAb5574/MOR208 to enhance its affinity over 10-fold for human CD19, and also increased its affinity for monkey CD19, enabling monkey toxicology and efficacy studies.

CD19 is an alternative target to CD20 that can be used in salvage regimens for patients failing Rituxan. Further, CD19 is expressed on the B cell surface earlier in development and persists longer through B-cell maturation. Therefore, XmAb5574/MOR208 may be able to target a broader spectrum of lymphoid malignancies, such as ALL or CLL, where Rituxan's efficacy may be limited. Finally, we believe that combination therapy of XmAb5574/MOR208 with immunomodulatory agents, such as

lenalidomide, and/or new chemotherapy agents, offers the potential for superior efficacy to existing therapies.



**XmAb5574 recruits Natural Killer cells to malignant B cells to promote their destruction.**

### *Clinical Development Summary*

In preclinical studies, we demonstrated that XmAb5574/MOR208 had FcγR-dependent anti-tumor activity against multiple human B-cell lymphomas in vitro and strong anti-tumor effects in mouse lymphoma models. We also demonstrated favorable half-life and potent B-cell depletion in monkey models. Our completed Phase 1 multiple ascending dose clinical trial in patients with CLL demonstrated an acceptable safety profile and encouraging signs of anti-tumor activity.

#### *Phase 1 Clinical Trial*

In January 2013, we completed a Phase 1 clinical trial of XmAb5574/MOR208 in patients with high-risk, heavily-pretreated CLL, in which the antibody showed encouraging signs of preliminary anti-tumor activity and an acceptable safety profile and was well tolerated. Dose levels from 0.3 to 12 mg/kg were tested. The trial protocol was amended to include a period of extended dosing for a total of eight patients at the 12 mg/kg dose to study the effect of longer duration of exposure on safety and response rate. The primary endpoints for this clinical trial were safety, pharmacokinetics and immunogenicity. The secondary endpoints for this clinical trial included clinical responses assessed according to International Working Group on CLL (IWCLL) 2008 and 1996 Guidelines. Overall response rate by IWCLL 2008 criteria was 29.6% (eight partial responses in 27 evaluable patients). Using IWCLL 1996, response criteria resulted in a response rate of 66.7% (18 partial responses). We expect regulatory approval of oncology therapies to require progression-free survival data or overall survival data.

During the Phase 1 clinical trial, the most common adverse events were mild to moderate infusion reactions which were experienced only with the first dose. Clinically-significant, treatment-related adverse events classified as Grade 3 or higher occurred in 5 out of 27 patients. One patient treated at the 1 mg/kg dose level experienced neutropenia (low white blood cells). Four patients at the 12 mg/kg dose level experienced one or more of neutropenia, febrile neutropenia (neutropenia with fever), thrombocytopenia (low platelets), elevated aspartate aminotransferase (liver enzyme level) or tumor lysis syndrome (metabolic toxicity linked to rapid destruction of tumor cells). Only one dose-limiting toxicity, neutropenia, was observed and this was in one of the 16 patients treated at the 12 mg/kg dose level. No maximum tolerated dose was reached in this clinical trial.

#### *Further Clinical Development*

Based on the Phase 1 clinical trial results, MorphoSys decided to continue the development of XmAb5574/MOR208 and has initiated two Phase 2 clinical trials of XmAb5574/MOR208 in patients with ALL and NHL, respectively. The Phase 2 clinical trial in ALL began in April 2013 and is an open-label, multicenter, single-arm clinical trial designed to assess efficacy in patients suffering from

relapsed or refractory B-ALL. Secondary outcome measures include response duration, safety and pharmacokinetics of XmAb5574/MOR208. In total, 30 patients are planned to be enrolled. The Phase 2 clinical trial in NHL began in May 2013 and is an open-label, multicenter, single-arm clinical trial designed to assess the efficacy of XmAb5574/MOR208 in patients with relapsed or refractory NHL. Secondary outcome measures include response duration, safety and pharmacokinetics of XmAb5574/MOR208. A total of up to 120 patients are planned to be enrolled in four separate sub-indications (follicular lymphoma, MCL, diffuse large B-cell lymphoma, and other forms of NHL). Additional clinical trials in other B-cell malignancies and in combination with chemotherapy are possible and will be conducted at the discretion of and under the control of MorphoSys.

### **Preclinical Development Summary**

Our preclinical observations include:

- Cytotoxicity against multiple lymphoma cell lines;
- Cytotoxicity against malignant cells from ALL and MCL patients;
- Inhibition of tumor growth in mouse xenograft models;
- Rapid and sustained depletion of peripheral and tissue B cells in monkeys; and
- Well tolerated at high doses in monkeys.

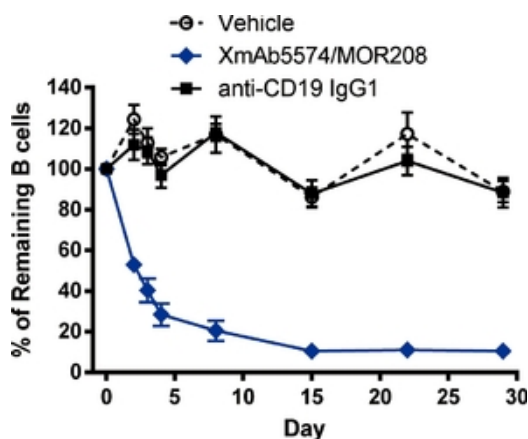
In preclinical *in vitro* studies, we tested XmAb5574/MOR208 for ADCC activity against a large number of lymphoma-derived tumor cell lines. In these studies, XmAb5574/MOR208 was shown to mediate strong NK-mediated killing against the CD19-positive tumor cell lines tested. Similar tests were performed with tumor cells taken directly from patients with either ALL or mantle cell lymphoma (MCL). In these studies, XmAb5574/MOR208 demonstrated substantial ADCC activity against both types of lymphomas. In all contexts examined, the control antibody, which is identical to XmAb5574/MOR208 except its Fc domain is an unmodified Fc domain (anti-CD19 IgG1), showed greatly reduced ADCC, in some cases with no detectable killing of tumor cells. This comparison highlights the impact of our Cytotoxic Fc Domain technology on the ability of anti-CD19 antibodies to recruit NK cells and attack tumor cells. In addition to NK-mediated killing, the presumed dominant mechanism of action, we also observed macrophage-mediated phagocytosis of tumor cells *in vitro*, and a direct anti-tumor effect (requiring no effector cells such as NK or macrophage) in which the antibody appears to slow the growth of some tumor lines.

We used mouse xenograft models to examine the *in vivo* activity of XmAb5574/MOR208 against subcutaneously implanted lymphoma cells. The antibody inhibits lymphoma growth in both prophylactic (tumor-prevention) models and established tumor models. Notably, anti-CD19 antibodies with unmodified Fc domains had diminished anti-tumor activity compared to XmAb5574/MOR208.

Although the precursor antibody does not react strongly with monkey CD19 or B cells, our affinity-enhanced Fv domain does react well with monkey B cells, and this enabled further POC and toxicology studies in cynomolgus monkeys. We performed an initial high-dose (10 mg/kg) study in monkeys and observed rapid depletion of peripheral B cells after a single dose of the antibody, ultimately reducing the B cells to less than five percent of their starting numbers. Significant B-cell reductions were also observed in the bone marrow, spleen and lymph nodes, notable because of Rituxan's relatively poor ability to impact tissue-resident B cells. The 10 mg/kg dose was well-tolerated by the monkeys, with no adverse effects.

In additional monkey studies, we compared the ability of different doses of XmAb5574/MOR208 to deplete monkey B cells and observed significant B-cell reductions at lower doses, 1 and 3 mg/kg. In a final study to demonstrate the impact of our Cytotoxic Fc Domain technology on *in vivo* tumor cell killing, we compared the ability of XmAb5574/MOR208 to an unmodified IgG1 control antibody (anti-CD19 IgG1) to deplete monkey B cells at a 3 mg/kg dose (figure below). The XmAb5574/MOR208-treated animals displayed a marked drop in peripheral B-cell counts. The

unmodified control antibody anti-CD19 IgG1, on the other hand, did not noticeably affect B-cell counts and was indistinguishable from the effects of treatment with vehicle alone.



A single dose of XmAb5574/MOR208 depletes peripheral B cells in cynomolgus monkeys. A control anti-CD19 antibody containing an unmodified IgG1 Fc domain and placebo, consisting of the buffer vehicle, have no effect on B cells.

## Our Research and Development Pipeline

We have used our various Fc platforms and antibody optimization capabilities to produce a growing pipeline of development candidates. These include new Immune Inhibitor Fc Domain candidates designed to remove target antigens from circulation and multiple oncology candidates using our CD3 bispecifics platform. We will continue to progress these candidates as additional options for clinical development by us or as out-licensing opportunities to generate additional revenue. From these efforts, we believe that we will have at least one additional product candidate identified for which we can submit an IND by mid-2015.

### *Applying the rapid clearance property of the Immune Inhibitor Fc Domain*

We are exploring multiple new candidate concepts for application of our Immune Inhibitor Fc Domain, in particular capitalizing on the newly discovered rapid clearance property, which builds off the natural scavenging role of FcγRIIb on liver sinusoidal endothelial cells. For example, building on our lead anti-IgE product candidate, XmAb7195, we are now characterizing a second-generation antibody with a modified version of the IIB immune inhibitor domain. The new Fc domain has intermediate affinity enhancement for FcγRIIb, which we have discovered promotes IgE control in mouse models with a longer dosing interval than XmAb7195. We plan to commence primate studies with this development candidate and begin development of a manufacturing cell line during 2013. We are also exploring approaches to clear pathologic immune complexes from circulation. Immune complexes are central to the kidney pathology in lupus nephritis and a variety of other conditions and form when antigens present in the circulation are recognized by antibodies of the immune system.

### *CD3 bispecifics for oncology*

Using our XmAb heterodimeric Fc domains, we are generating several tumor-targeted bispecific antibodies that contain a tumor antigen binding domain and a CD3 binding domain. Our platform enables the creation of Fc-containing bispecifics that recruit T-cells via CD3 binding to kill tumor cells targeted by the antigen binding domain. The inclusion of an Fc domain provides a potential improvement in half-life over first-generation bispecifics such as the Micromet (Amgen) BiTE technology, which require continuous infusion due to their extremely short half-life. We have produced a CD3 binding bispecific antibody that targets CD19, which demonstrates in primate models good tolerability, a multi-day half-life and sustained target cell depletion from a single dose. We have

produced a first development candidate targeting CD38 and confirmed the multi-day half-life in mouse models that is typical of standard antibodies, and have produced a second development candidate targeting CD123. We are creating a stable cell line for production and plan to perform activity studies in monkeys in the near future. Additional development candidates against additional tumor targets are in discovery.

### Second Generation Biologics

Our Xtend Fc Domain technology can potentially improve the performance of commercially successful therapeutic antibodies by enhancing their half-life and improving dosing convenience. We have produced several enhanced versions of antibodies, in some cases simply applying the Xtend Fc Domain mutations, and in other cases also modifying other features. AbbVie's Humira (adalimumab) is the industry-leading anti-TNF antibody for the treatment of rheumatoid arthritis, reaching global sales above \$5 billion. We have produced and characterized a half-life enhanced version of Humira that we call Xtend-TNF (also known as XmAb6755). It has approximately twice the *in vivo* half-life of Humira, which is dosed on a biweekly schedule, and we believe Xtend-TNF has the potential to achieve monthly dosing in rheumatoid arthritis patients without loss of efficacy. A stable cell line has been created and we have a business relationship with Boehringer Ingelheim to manufacture Xtend-TNF drug supply for preclinical toxicology and clinical studies.

A second enhanced rheumatoid arthritis drug is our Xtend-CTLA4, a CTLA-4-Fc fusion that we believe improves on the performance of Orencia. Orencia had initially inconvenient monthly intravenous dosing, but after approval of weekly subcutaneous dosing, global sales are now approaching \$1 billion annually. We applied the Xtend Fc Domain to our proprietary CTLA-4 fusion, achieving a 40% improvement in half-life in monkeys, and applying our engineering capabilities we enhanced affinity for its target CD86 by at least 20-fold. Monkey studies comparing Xtend-CTLA4 to abatacept showed that Xtend-CTLA4 had significantly superior immunosuppression and the potential for monthly subcutaneous dosing in humans.

### Product Development Partnerships, Other Commercial Agreements and Technology Licenses

We use product development partnerships with pharmaceutical and biotechnology companies to complement our internal drug discovery and development capabilities, to assist the efficient global commercialization of our products and technology and to generate near and long-term funding. To date, the revenue generated from upfront fees, license fees, option fees and milestone payments associated with these arrangements, combined with the development expenses assumed by our partners, have allowed us to better manage our operating expenses and continue to invest in building new opportunities. Under these partnership agreements and our technology license agreements, we are eligible to receive up to an aggregate of approximately \$1.3 billion in potential milestone payments upon successful commercialization of the programs contemplated by our product development partnership and technology license agreements. These payments include up to approximately \$240.0 million relating to the achievement of clinical development milestone events; up to approximately \$541.0 million relating to the filing and completion of regulatory approvals and up to approximately \$526.5 million relating to the achievement of certain product sale goals.

Below is a table summarizing our material product development agreements and exclusive technology license:

<u>Partner</u>	<u>Year</u>	<u>Licensed Antibody/Technology</u>	<u>Indication</u>	<u>Milestones</u>	<u>Royalties</u>	<u>Current Development Stage</u>
Product Development Partnerships:						
Amgen	2010	XmAb5871	Autoimmune disease	Yes	Yes	Phase 1 clinical
MorphoSys	2010	XmAb5574/MOR208	Oncology	Yes	Yes	Phase 2 clinical
Technology License:						
Alexion	2013	Xtend technology	Various	Yes	Yes	Preclinical



***Collaboration and Option Agreement with Amgen***

In December 2010, we entered into a collaboration and option agreement with Amgen Inc. (Amgen) pursuant to which we agreed to collaborate with Amgen to research, develop and commercialize XmAb5871, an Fc-engineered monoclonal antibody that targets CD19 via its Fv domains and FcγRIIb via its XmAb Fc domain, and products based thereon. Under the terms of the agreement, we granted to Amgen an exclusive license to research, develop, manufacture and commercialize XmAb5871 and certain related products worldwide, which license is exercisable by Amgen only after Amgen's (1) notification to us that it is electing to exercise the license and (2) payment of a \$50.0 million option exercise fee to us during the option period. The option period began when we received the upfront payment from Amgen and ends on the earliest to occur of (a) the 90<sup>th</sup> day after delivery by us of a clinical trial report package from the Phase 2 POC clinical trial, (b) the termination of the agreement, and (c) March 23, 2017 (or March 23, 2021, if Amgen exercises an option to take over certain aspects of development due to our failure to perform certain development obligations). During the option period and prior to Amgen exercising its option under the agreement, we are required to use reasonably diligent efforts to conduct development activities through completion of a POC trial. We are currently leading research, development and manufacturing activities for XmAb5871 with collaborative input and development support from Amgen and have established a joint development committee to govern the development activities of XmAb5871 which meets quarterly regarding the ongoing development program we are leading. If Amgen exercises its option and pays the option exercise fee under the agreement, the exclusive worldwide license to research, develop and commercialize XmAb5871 granted to Amgen under the agreement will become effective, and Amgen will thereafter have the right to control, and will be solely responsible for the costs associated with, the development, commercialization, manufacture, distribution, marketing, promotion and other exploitation of XmAb5871 and products based thereon.

Under the terms of the agreement, we received an initial upfront payment of \$11.0 million. In addition, if Amgen exercises its option, and if specified clinical, regulatory and sales milestones are achieved, we are entitled to milestone payments of up to \$439.0 million in the aggregate, \$2.0 million of which we received from Amgen upon the initiation of our Phase 1b/2a clinical trial of XmAb5871 in January 2013 in patients with moderate to severe rheumatoid arthritis. The additional \$437.0 million of milestone payments is comprised as follows: a total of \$62.0 million relates to clinical development milestone events; a total of \$150.0 million relates to the filing and completion of regulatory approvals and a total of \$225.0 million relates to the achievement of certain product sale goals. If licensed products are successfully commercialized, we are also entitled to receive tiered royalties in the high single-digit to the high-teen percent range based upon net sales of products by Amgen, its affiliates and its sublicensees in a calendar year, subject to minimum annual royalty payments and other adjustments in certain circumstances. The royalties payable by Amgen under the agreement may be increased if we elect to contribute to Amgen's development costs under the agreement. Amgen's royalty obligations continue on a product-by-product and country-by-country basis until the later to occur of the expiration of the last-to-expire valid claim in a licensed patent covering the applicable product in such country, or 10 years after the first commercial sale of such product in such country.

The term of this agreement will continue until all of Amgen's royalty payment obligations have expired or upon expiration of the option period if Amgen has not exercised the option. The agreement provides that it may be terminated by either party upon the other party's insolvency or the other party's material breach of the agreement if such breach remains uncured for 90 days, or 30 days in the case of a non-payment breach. Amgen may terminate the agreement without cause upon 90 days' advance written notice to us. If Amgen challenges the validity of a patent relating to XmAb5871, then we may terminate this agreement immediately. In the event that Amgen terminates this agreement for convenience or we terminate due to Amgen's material breach, worldwide rights to develop, manufacture and commercialize XmAb5871 will revert back to us completely. Along with these rights, Amgen is obligated to transfer all regulatory documents, clinical data and know-how, and we are

granted a license from Amgen to allow us to develop, manufacture and commercialize XmAb5871 worldwide without any financial obligations to Amgen.

### ***Collaboration and License Agreement with MorphoSys***

In June 2010, we entered into a collaboration and license agreement with MorphoSys AG (MorphoSys) which we subsequently amended in March 2012. We granted to MorphoSys an exclusive worldwide license under certain of our patents and know-how to research, develop and commercialize XmAb5574/MOR208, as well as other anti-CD19 antibodies that incorporate our cytotoxic Fc domain technology, with the right to sublicense under certain conditions. Under the terms of the agreement, we agreed to collaborate with MorphoSys to develop and commercialize XmAb5574/MOR208, a high potency cytotoxic monoclonal antibody developed by us for the treatment of B-cell malignancies and other diseases. Under the terms of the agreement, we initiated and sponsored a Phase 1 clinical trial for XmAb5574/MOR208 in patients with chronic lymphocytic leukemia in December 2010 which was completed in January 2013. Following such completion, MorphoSys is responsible for all further clinical development and commercialization of licensed antibodies and licensed products under the agreement and is required to use commercially reasonable efforts to achieve certain developmental and regulatory milestones and other diligence obligations under the agreement. In addition, MorphoSys is responsible for all costs relating to the development and commercialization of XmAb5574/MOR208, or other antibodies covered by the agreement, including manufacturing, regulatory, clinical and registration costs.

Under the terms of the agreement, we received an upfront payment of \$13.0 million and received \$3.0 million for development milestones in 2013. If certain developmental, regulatory and sales milestones are achieved, we are also eligible to receive up to an additional \$299.0 million in milestone payments. The \$299.0 million of milestone payments is comprised as follows: \$62.0 million relates to clinical development milestone events, \$187.0 million relates to the filing and completion of regulatory approvals and an additional \$50.0 million of aggregate milestone payments relate to the achievement of certain product sale goals. If licensed products are commercialized, we are also entitled to receive tiered royalties in the high single-digit to low-teen percent range based upon net sales of products sold by MorphoSys, its affiliates and its sublicensees in a calendar year. MorphoSys' royalty obligations continue on a licensed product-by-licensed product and country-by-country basis until the later to occur of the expiration of the last valid claim in the licensed patent covering a licensed product in such country, or 11 years after the first sale of a licensed product following marketing authorization in such country.

The term of this agreement will continue until all of MorphoSys' royalty payment obligations have expired unless terminated earlier. The agreement provides that it may be terminated by either party upon written notice to the other party in the event of the other party's insolvency or the other party's material breach of the agreement if such breach remains uncured for 120 days, or 30 days in the case of a non-payment breach. MorphoSys may terminate the agreement without cause upon 90 days' advance written notice to us. In the event that MorphoSys terminates this agreement for convenience or we terminate due to MorphoSys' material breach, worldwide rights to develop, manufacture and commercialize XmAb5574/MOR208, as well as any other antibodies covered by the agreement, revert back to us completely. Along with these rights, MorphoSys is obligated to transfer all regulatory documents, clinical data and know how, and we are granted a license from MorphoSys to allow us to develop, manufacture and commercialize XmAb5574/MOR208, or other antibodies covered by the agreement, worldwide, subject to reimbursing MorphoSys a portion of their development costs out of future revenue generated from the development and commercialization of XmAb5574/MOR208.

### ***Option and License Agreement with Alexion***

In January 2013, we entered into an option and license agreement with Alexion Pharmaceuticals, Inc. (Alexion). Under the terms of the agreement, we granted to Alexion an exclusive research license, with limited sublicensing rights, to make and use our Xtend technology to evaluate and advance compounds against six different target programs during a five-year research term under the agreement, up to completion of the first multi-dose human clinical trial for each target compound. Alexion may extend the research term for an additional three years upon written notice to us and payment of an extension fee of \$2.0 million. Alexion is responsible for conducting all research and development activities under the agreement at its own expense.

In addition, we granted to Alexion an exclusive option, on a target-by-target basis, to obtain an exclusive commercial, worldwide, royalty-bearing license, with sublicensing rights, under our Xtend technology to develop and commercialize products that contain the target for which the option is exercised. In order to exercise this option, Alexion must pay a \$4.0 million option fee with respect to each target for which the option is exercised. Alexion may exercise this option at any time during the research term.

Under the agreement, we received an upfront payment of \$3.0 million. Alexion is also required to pay an annual maintenance fee of \$0.5 million during the research term of the agreement and \$1.0 million during any extension of the research term. In addition, if certain development, regulatory and commercial milestones are achieved, we are eligible to receive up to \$66.5 million for the first product to achieve such milestones on a target-by-target basis. If licensed products are successfully commercialized, we are also entitled to receive royalties based on a percentage of net sales of such products sold by Alexion, its affiliates or its sublicensees, which percentage is in the low single digits. Alexion's royalty obligations continue on a product-by-product and country-by-country basis until the expiration of the last-to-expire valid claim in a licensed patent covering the applicable product in such country.

Absent early termination, the term of the agreement will continue until the expiration of Alexion's royalty payment obligations or until the expiration of the research term if Alexion has not exercised its option for a product license under the agreement. Either party may terminate the agreement for a material breach of the agreement by the other party if such breach remains uncured for 60 days, or 30 days in the case of a non-payment breach. Alexion may terminate the agreement without cause on a target-by-target basis upon 90 days' advance written notice to us.

### ***Collaboration Agreement with Boehringer Ingelheim***

In February 2012, we entered into a collaboration agreement with Boehringer Ingelheim International GmbH (BI) for the establishment of certain manufacturing processes and the production of our next generation monoclonal anti-TNF antibody for use in our preclinical and Phase 1 clinical development. Under the terms of the agreement, we are required to use commercially reasonable efforts to complete Phase 1 clinical testing of the product and to find a licensing partner for the further development and commercialization of the antibody into a therapeutic product.

We will be required to pay for services performed and products provided by BI under the agreement pursuant to project plans entered into from time to time. In addition, we are required to reimburse BI for all out-of-pocket expenses, including the cost of raw materials, incurred in connection with the project plan. BI has agreed to delay all payments due to them under the agreement, including an annual interest rate which is a low double digit percentage, until (A) in the case where we have entered into a license agreement with a third party, the later of (1) the effective date of such license agreement or (2) the earlier of (i) completion of the clinical summary report for a Phase 1 clinical trial of the product or (ii) February 10, 2017 or (B) in the case where we decide to continue to develop the product on our own, on or before five years from the earlier of (i) completion of the clinical summary

report for a Phase 1 clinical trial of the product or (ii) February 10, 2017. Any payments due by us in the situation described in clause (A) of the preceding sentence will be made in installments each of which will be limited to a maximum percentage of any licensing revenue that we receive under the applicable third-party license. We are not obligated to pay BI any or all of the amounts owed under the agreement, including interest payments if we: (a) are not able to further develop the product for technical or scientific reasons or (b) do not decide to proceed with the further development of the product without a business partner and are unable to enter into a partnership agreement within an agreed upon period of time after Phase 1 clinical development.

Pursuant to the agreement, we have granted BI a first right to negotiate to manufacture and supply the products for use in any future Phase 2 and Phase 3 clinical trials, and should BI exercise such right, BI has a first right to negotiate to manufacture and supply commercial product as our principal supplier for an agreed upon period following the first commercial launch of the products. In the event that we desire to produce the products using the process developed and performed by BI outside the agreement or any manufacturing agreement which we may enter into with BI, we will be required to pay BI a one time technology access fee of \$3.5 million in exchange for a worldwide, irrevocable, exclusive and royalty free license, with sublicensing rights, to use the process developed by BI under the agreement to produce the products.

Absent early termination, the agreement will terminate upon completion of all projects set forth in the agreement. Either party may terminate the agreement upon 180 days prior written notice to the other party if such party will not be able to carry out the project contemplated by the agreement for scientific, technical or business reasons. Either party may also terminate by written notice to the other party if the other party breaches the agreement in any material manner if such breach remains uncured for 30 days following written notice from the terminating party.

#### ***Clinical Supply Agreement with Cook Pharmica***

In October 2012, we entered into a clinical supply agreement with Cook Pharmica, LLC (Cook). Under the terms of the agreement, Cook agreed to produce and supply drug substance and drug product for use in our clinical studies and perform related services, and we granted to Cook, its affiliates and subcontractors a non-exclusive license to use certain of our intellectual property and confidential information for the purpose of performing obligations under the agreement. Cook is currently performing services related to the manufacture under current good manufacturing practices (cGMP) of drug substance of XmAb7195 under the agreement.

We pay for services performed and drug substance provided by Cook under the agreement pursuant to project plans entered into from time to time. In addition, we are required to reimburse Cook for all pass-through and out-of-pocket costs specified in each project plan, plus an additional percentage mark-up on certain of such costs, which percentage is in the low double digits.

Absent early termination, the agreement will terminate five years after the effective date, provided that the agreement will automatically renew for an additional two-year term. Cook has the unilateral right to terminate the agreement upon 180 days prior written notice to us. Either party may terminate the agreement upon written notice to the other party in the event of the other party's insolvency or the other party's material breach of the agreement if such breach remains uncured for 15 days in the case of a payment related breach or 30 days in the case of a non-payment related breach.

#### ***Development and Manufacturing Services Agreement with Catalent***

In September 2005, we entered into a development and manufacturing services agreement (the Catalent Manufacturing Agreement) with Catalent Pharma Solutions LLC (formerly Cardinal Health PTS, LLC) (Catalent). Under the terms of the agreement, Catalent may, from time to time, provide development and manufacturing services for us related to our XmAb technology. Catalent is currently

performing services related to the manufacture under cGMP of drug substance of XmAb5871 under the agreement. We pay for services performed by Catalent under the agreement pursuant to statements of work entered into from time to time.

Under the terms of the agreement, if Catalent develops one or more cell lines using its proprietary GPEXgene product expression technology (GPEX Technology) in the course of performing services under the agreement, we have the option to license any such cell line for non-cGMP research for a license fee of \$30,000 per year for a period of up to 10 years and on other terms to be agreed upon by Catalent and us. In addition, we have the option to license any cell line developed by Catalent in the course of performing services under the agreement that incorporates the GPEX Technology for use in the production of clinical and commercial supplies of gene expression products by us or any of our manufacturers for 10 years for an upfront fee that ranges between \$0 and \$0.3 million per cell line, an annual license fee of \$30,000, and development and regulatory milestones up to as much as an aggregate of \$3.1 million per cell line licensed, and on other terms to be agreed upon by Catalent and us.

This agreement will remain in effect unless either party terminates it in accordance with its terms. We may unilaterally terminate the agreement or activities under any statement of work entered into pursuant to the agreement upon 90 days written notice to Catalent. Catalent may unilaterally terminate the agreement upon 24 months written notice to us. Either party may terminate the agreement upon written notice to the other party upon the other party's insolvency or the other party's material breach of the agreement if such breach remains uncured for 30 days following notice thereof.

#### ***Cell Line Sale Agreement with Catalent***

In December 2011, we entered into a GPEX-derived cell line sale agreement with Catalent pursuant to which we purchased a cell line (the GPEX Cell Line) developed by Catalent under the Catalent Manufacturing Agreement for use in the manufacture of XmAb7195.

As consideration for the purchase and sale of the GPEX Cell Line under the agreement, we paid an initial upfront fee of \$125,000. In addition, we are required to pay an annual fee to Catalent and royalties based on a percentage of net sales for products that are derived from or utilize the GPEX Cell Line. Such percentage is less than 1.0%. We are also required to make payments to Catalent based upon the achievement of certain developmental and regulatory milestones totaling up to approximately \$2.9 million.

We have the unilateral right to terminate the agreement upon 30 days written notice to Catalent. In addition, either party may terminate the agreement upon written notice to the other party in the event of the other party's insolvency or the other party's material breach of the agreement if such breach remains uncured for 60 days following notice thereof. Absent early termination, the agreement will remain in effect. If we terminate the agreement without cause or if Catalent terminates the agreement for our material breach of the agreement, our ownership rights in the GPEX® Cell Line will automatically terminate, and title thereto will revert to Catalent.

#### ***Other Technology Licenses***

In addition to the product development partnerships and technology license agreement described above, we also enter into non-exclusive relationships whereby we license our intellectual property around a specific XmAb technology to a pharmaceutical or biotechnology company to use in one or more of their own products. By accessing our technology, our partners hope to improve the pharmacology of their antibodies and create potential commercial differentiation for their product candidates. Under these technology licenses, we generally grant rights to our licensees that are limited to the specific XmAb Fc domains that are required and also limited to a specific program or set of programs of the partner that are outside of our core strategic areas. This approach allows us to

maintain control over the vast majority of the rights to our platform while still disseminating our technology for broad use. The plug-and-play nature of XmAb technology allows us to structure nearly all of these licenses without any work commitment on our part; hence, these licenses allow us to generate revenue to support our own internal programs with no additional obligations on our part. The revenue we generate from these licenses comes in the form of license fees, annual maintenance fees, milestone payments and royalties. Typically, per antibody, the license fees are in the range of \$0.5 million to \$2.0 million depending on the size of the maintenance fees and early milestone payments. We may receive aggregate potential milestones payments under our technology license agreements of approximately \$172.5 million, and we may receive royalties under each agreement as a percentage of net sales, which percentage is in the low single digit range. The aggregate potential milestone payments payable to us include up to approximately \$65.0 million relating to the achievement of clinical development milestone events; up to approximately \$36.0 million relating to the filing and completion of regulatory approvals and up to approximately \$71.5 million relating to the achievement of certain product sale goals. Below is a table summarizing these technology licenses:

<u>Licensee</u>	<u>Year</u>	<u>Xencor Technology</u>	<u>Indication</u>	<u>Milestones</u>	<u>Royalties</u>	<u>Current Development Stage</u>
BI	2007	Cytotoxic	Oncology	Yes	Yes	Phase 1 trials (two candidates)
Janssen R&D, LLC	2009	Xtend	Autoimmune disease	Yes	Yes	preclinical
CSL Limited	2009	Cytotoxic	Oncology	Yes	Yes	Phase 1
CSL Limited	2013	Xtend	Hematological diseases	Yes	Yes	Preclinical
Merck	2013	Fc optimization	Autoimmune disease	Yes	Yes	Preclinical

## Intellectual Property

The foundation for XmAb technology and our product candidates and partnering is the generation and protection of intellectual property for novel antibody therapeutics. We combine proprietary computational methods for amino acid sequence design with laboratory generation and testing of new antibody compositions. Our design and engineering team prospectively assesses, with patent counsel, the competitive landscape with the goal of building broad patent positions and avoiding third-party intellectual property.

As a pioneer in Fc domain engineering, we systematically scanned the structure of the Fc domain to discover Fc variants. We have filed patent applications relating to thousands of specific Fc domain variants with experimental data on specific improvements of immune function, pharmacokinetics, structural stability and novel structural constructs. We have filed additional patent applications derived from these applications as we discover new properties of the Fc variants and as new business opportunities arise. We continually seek to expand the intellectual property coverage of our technology and candidates, and invest in discovering new Fc domain technologies and antibody product candidates.

As of September 30, 2013, our patent estate, on a worldwide basis, includes 164 issued patents (48 of which are in the United States) and over 180 pending patent applications (72 of which are in the United States) which we own or for which we have a fully-paid exclusive license, with claims directed to XmAb Fc domains, all of our clinical and preclinical stage antibodies and our computational protein design methods, called the PDA protein design platform. Of these patents and patent applications, 73 issued patents (21 of which are in the United States) and 106 pending patent applications (44 of which are in the United States) relate to our XmAb Fc domains, with claims directed to their incorporation into antibodies, Fc domain engineering and compositions of matter. These patents are expected to expire in the United States between 2023 and 2031. Our three lead product candidates are covered by issued U.S. composition of matter patents relating to both the XmAb Fc domains and the individual product candidates. The composition of matter patents relating to our lead product

candidates are expected to expire in the United States between 2027 and 2030, one of which relates to XmAb5574/MOR208, two relate to XmAb5871 and two relate to XmAb7195.

In addition to patent protection, we rely on trade secret protection and know-how to expand our proprietary position around our technology and other discoveries and inventions that we consider important to our business. We seek to protect this intellectual property in part by entering into confidentiality agreements with our employees, consultants, scientific advisors, clinical investigators and other contractors and also by requiring our employees, commercial contractors and certain consultants and investigators, to enter into invention assignment agreements that grant us ownership of certain discoveries or inventions made by them.

Further, we seek trademark protection in the United States and in certain other jurisdictions where available and when we deem appropriate. We have obtained registrations for the Xencor trademark, as well as certain other trademarks, which we use in connection with our pharmaceutical research and development services and our clinical-stage products, including XmAb, PDA and Protein Design Automation. We currently have registrations for Xencor and PDA in the United States, Australia, Canada, the European Community and Japan, for Protein Design Automation in the United States, Australia, Canada and the European Community, and for XmAb in the United States, Australia and the European Community.

## **Manufacturing**

We have adopted a manufacturing strategy of contracting with third parties in accordance with cGMP for the manufacture of drug substance and product. Additional contract manufacturers are used to fill, label, package and distribute investigational drug products. This allows us to maintain a more flexible infrastructure while focusing our expertise on developing our products. XmAb5871 and XmAb7195 are produced by mammalian cell culture of a Chinese hamster ovary (CHO) cell line that expresses the antibody, followed by multiple purification and filtration steps typical of those used for monoclonal antibodies. We will ultimately depend on contract manufacturers for the manufacture of our products for commercial sale, as well as for process development. Contract manufacturers are subject to extensive governmental regulation. We have multiple potential sources for the manufacturing of XmAb5871 and XmAb7195.

We are able to internally manufacture the quantities of our product candidates required for relatively short preclinical animal studies. We believe that this allows us to accelerate the drug development process by not having to rely on third parties for all of our manufacturing needs. However, we do rely and expect to rely on a number of contract manufacturers to produce sufficient quantities of our product candidates for use in more lengthy preclinical research.

## **Competition**

We compete in an industry that is characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products. Our competitors include pharmaceutical companies, biotechnology companies, academic institutions and other research organizations. We compete with these parties for promising targets for antibody-based therapeutics, new technology for optimizing antibodies and in recruiting highly qualified personnel. Many competitors and potential competitors have substantially greater scientific, research and product development capabilities as well as greater financial, marketing and sales and human resources than we do. In addition, many specialized biotechnology firms have formed collaborations with large, established companies to support the research, development and commercialization of products that may be competitive with ours. Accordingly, our competitors may be more successful than we may be in developing, commercializing and achieving widespread market acceptance. In addition, our competitors' products may be more effective or more effectively marketed and sold than any treatment we or our development partners

may commercialize and may render our product candidates obsolete or noncompetitive before we can recover the expenses related to developing and commercializing any of our product candidates.

Competition in autoimmune disease drug development is intense and includes multiple monoclonal antibodies, other biologics and small molecules approved for the treatment of rheumatoid arthritis and autoimmune diseases, many of which are being developed or marketed by large multinational pharmaceutical companies such as GlaxoSmithKline plc, AbbVie Inc., Janssen Pharmaceuticals, Inc., Genentech Inc. and Amgen Inc. Benlysta is currently the only monoclonal antibody that we are aware of that is approved for the treatment of lupus, although we believe that Rituxan is prescribed, off label, for this indication. Humira, Amgen's Enbrel (etanercept), Janssen Pharmaceuticals, Inc.'s Remicade (infliximab) and Simponi (golimumab), Orencia and Rituxan, among others, are approved for the treatment of rheumatoid arthritis. In addition, these and other pharmaceutical companies have monoclonal antibodies or other biologics in clinical development for the treatment of autoimmune diseases.

Many companies have approved therapies or are developing drugs for the treatment of asthma including multinational pharmaceutical companies such as GlaxoSmithKline, Novartis AG and AstraZeneca plc. Monoclonal antibody drug development has primarily focused on allergic asthma. Xolair is currently the only monoclonal antibody that we are aware of that is approved for the treatment of severe asthma. In addition, we are aware that Novartis, AstraZeneca/MedImmune and Genentech each have an antibody targeting IgE in Phase 1 or 2 clinical development for asthma. Other monoclonal antibodies in development target cytokines such as IL-13, IL-4, IL-5, IL-9, GM-CSF or their receptors. Although these drugs function differently from our products, if successfully developed, these drugs will compete in the asthma market. We are not aware of any companies developing drugs that target FcγRIIb for the treatment of asthma.

Competition in blood cancer drug development is intense, with more than 250 compounds in clinical trials by large multinational pharmaceutical companies and Rituxan is just one of many monoclonal antibodies approved for the treatment of NHL or other blood cancers. In addition, we are aware of a number of other companies with development stage programs that may compete with XmAb5574/MOR208 in the future. We anticipate that we will face intense and increasing competition as new treatments enter the market and advanced technologies become available.

## **Regulatory Overview**

Our business and operations are subject to a variety of U.S. federal, state and local and foreign supranational, national, provincial and municipal laws, regulations and trade practices. The FDA and comparable regulatory authorities in state and local jurisdictions and in other countries impose substantial and burdensome requirements upon companies involved in the clinical development, manufacture, marketing and distribution of drugs and biologics. These agencies and other federal, state and local entities regulate research and development activities and the testing, manufacture, quality control, safety, effectiveness, labeling, storage, recordkeeping, approval, advertising and promotion and export and import of our product candidate.

### **U.S. Government Regulation**

#### *U.S. Drug Development Process*

In the United States, the FDA regulates drugs and biologic products under the Federal Food, Drug and Cosmetic Act (FDCA) (21 U.S.C. §301, et seq), its implementing regulations and other laws, including, in the case of biologics, the Public Health Service Act. Our antibody product candidates are subject to regulation by the FDA as a biologic. Biologics require the submission of a Biologics License Application (BLA), to the FDA and approval of the BLA by the FDA before marketing in the United States. The process of obtaining regulatory approvals for commercial sale and distribution and the



subsequent compliance with applicable federal, state, local and foreign statutes and regulations require 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 to administrative or judicial civil or criminal sanctions. These sanctions could include the FDA's refusal to approve pending applications, license suspension or revocation, withdrawal of an approval, imposition of a clinical hold on clinical trials, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement or civil and/or criminal penalties. The process required by the FDA before a biologic may be marketed in the United States generally involves the following:

- completion of preclinical laboratory tests, animal studies and formulation studies performed in accordance with the FDA's current Good Laboratory Practices (GLP) regulations;
- submission to the FDA of an investigational new drug application (IND) which must become effective before human clinical trials in the United States may begin;
- performance of adequate and well-controlled human clinical trials in accordance with the FDA's current good clinical practices (GCP) regulations to establish the safety and efficacy of the product candidate for its intended use;
- submission to the FDA of a BLA;
- satisfactory completion of an FDA inspection (if the FDA deems it as a requirement) of the manufacturing facility or facilities where the product is produced to assess compliance with the FDA's cGMP regulations to assure that the facilities, methods and controls are adequate to preserve the product's identity, strength, quality and purity;
- potential audits by the FDA of the nonclinical and clinical trial sites that generated the data in support of the BLA;
- review of the BLA by an external Advisory Committee to the FDA, whose recommendations are not binding on the FDA; and
- FDA review and approval of the BLA prior to any commercial marketing or sale.

Before testing any compounds with potential therapeutic value in humans, the product candidate enters the preclinical testing stage. Preclinical tests include laboratory evaluations of product chemistry, stability and formulation, as well as animal studies to assess the potential toxicity and activity of the product candidate. The conduct of the preclinical tests must comply with federal regulations and requirements including GLPs. The sponsor must submit the results of the preclinical tests, together with manufacturing information, analytical data, any available clinical data or literature and a proposed clinical protocol, to the FDA as part of the IND. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA raises concerns or questions about the conduct of the clinical trial, including concerns that human research subjects will be exposed to unreasonable health risks. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. The FDA may also impose clinical holds on a product candidate at any time before or during clinical trials due to safety concerns or non-compliance, or for other reasons.

Clinical trials involve the administration of the product candidate to human patients under the supervision of qualified investigators, generally physicians not employed by or under the clinical trial sponsor's control. Clinical trials are conducted under protocols detailing, among other things, the objectives of the clinical trial, dosing procedures, subject selection and exclusion criteria and the parameters to be used to monitor subject safety and effectiveness. Each protocol must be submitted to the FDA as part of the IND. Clinical trials must be conducted in accordance with GCPs. Further, each clinical trial must be reviewed and approved by an IRB at or servicing each institution at which the clinical trial will be conducted. An IRB is charged with protecting the welfare and rights of clinical trial

participants and considers such items as whether the risks to individuals participating in the clinical trials are minimized and are reasonable in relation to anticipated benefits. The IRB also approves the form and content of the informed consent that must be signed by each clinical trial subject or his or her legal representative and must monitor the clinical trial until completed. Human clinical trials are typically conducted in three sequential phases that may overlap or be combined:

- *Phase 1.* The product candidate is initially introduced into a limited population of healthy human subjects and tested for safety, dosage tolerance, absorption, metabolism, distribution and excretion. In the case of some products for some diseases, or when the product may be too inherently toxic to ethically administer to healthy volunteers, the initial human testing is often conducted in patients with the disease or condition for which the product candidate is intended to gain an early indication of its effectiveness.
- *Phase 2.* The product candidate is evaluated in a limited patient population (but larger than in Phase 1) to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted indications and to assess dosage tolerance, optimal dosage and dosing schedule.
- *Phase 3.* Clinical trials are undertaken to further evaluate dosage and provide substantial evidence of clinical efficacy and safety in an expanded patient population (such as several hundred to several thousand) at geographically dispersed clinical trial sites. Phase 3 clinical trials are typically conducted when Phase 2 clinical trials demonstrate that a dose range of the product candidate is effective and has an acceptable safety profile. These trials typically have at least 2 groups of patients who, in a blinded fashion, receive either the product or a placebo. Phase 3 clinical trials are intended to establish the overall risk/benefit ratio of the product and provide an adequate basis for product labeling. Generally, two adequate and well-controlled Phase 3 clinical trials are required by the FDA for approval of a BLA.

Post-approval studies, sometimes referred to as Phase 4 clinical trials, may be conducted after initial marketing approval. These studies are used to gain additional experience from the treatment of patients in the intended therapeutic indication to further assess the biologic's safety and effectiveness after BLA approval. Phase 4 clinical trials can be initiated by the drug sponsor or as a condition of BLA approval by the FDA.

Annual progress reports detailing the results of the clinical trials must be submitted to the FDA and written IND safety reports must be promptly submitted to the FDA and the investigators for serious and unexpected adverse events or any finding from tests in laboratory animals that suggests a significant risk for human subjects.

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

#### *U.S. Review and Approval Processes*

The results of product development, preclinical studies and clinical trials, along with descriptions of the manufacturing process, analytical tests, proposed labeling and other relevant information are submitted to the FDA in the form of a BLA requesting approval to market the product for one or more specified indications. The submission of a BLA is subject to the payment of substantial user fees.

Once the FDA receives a BLA, it has 60 days to review the BLA to determine if it is substantially complete and the data is readable, before it accepts the BLA for filing. Once the submission is accepted for filing, the FDA begins an in-depth review of the BLA. Under the goals and policies agreed to by the FDA under the Prescription Drug User Fee Act (PDUFA), the FDA has 12 months from submission in which to complete its initial review of a standard BLA and make a decision on the application and eight months from submission for a priority BLA, and such deadline is referred to as the PDUFA date. The FDA does not always meet its PDUFA dates for either standard or priority BLAs. The review process and the PDUFA date may be extended by three months if the FDA requests or the BLA sponsor otherwise provides additional information or clarification regarding information already provided in the submission within the last three months before the PDUFA date.

After the BLA submission is accepted for filing, the FDA reviews the BLA to determine, among other things, whether the proposed product is safe and effective for its intended use, and whether the product is being manufactured in accordance with cGMP to assure and preserve the product's identity, strength, quality and purity. The FDA may refer applications for novel drug or biological products or drug or biological products which present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions. During the approval process, the FDA also will determine whether a risk evaluation and mitigation strategy (REMS) is necessary to assure the safe use of the product. If the FDA concludes a REMS is needed, the sponsor of the BLA must submit a proposed REMS; the FDA will not approve the BLA without an approved REMS, if required. A REMS can substantially increase the costs of obtaining approval.

Before approving a BLA, the FDA can inspect the facilities at which the product is manufactured. The FDA will not approve the BLA unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving a BLA, the FDA will typically inspect one or more clinical sites to assure that the clinical studies were conducted in compliance with GCP requirements. If the FDA determines that the application, manufacturing process or manufacturing facilities are not acceptable, it will outline the deficiencies in the submission and often will request additional clinical testing or information before a BLA can be approved.

The FDA will issue a complete response letter if the agency decides not to approve the BLA. The complete response letter describes all of the specific deficiencies in the BLA identified by the FDA. The deficiencies identified may be minor, for example, requiring labeling changes, or major, for example, requiring additional clinical trials. Additionally, the complete response letter may include recommended actions that the applicant might take to place the application in a condition for approval. If a complete response letter is issued, the applicant may either resubmit the BLA, addressing all of the deficiencies identified in the letter, or withdraw the application.

If a product receives regulatory approval, the approval may be significantly limited to specific diseases and dosages or the indications for use may otherwise be limited, which could restrict the commercial value of the product. Further, the FDA may require that certain contraindications, warnings or precautions be included in the product labeling. In addition, the FDA may require post marketing studies, sometimes referred to as Phase 4 testing, which involves clinical trials designed to further assess drug safety and effectiveness and may require testing and surveillance programs to monitor the safety of approved products that have been commercialized. After approval, certain changes to the approved biologic, such as adding new indications, manufacturing changes or additional labeling claims, are subject to further FDA review and approval. Depending on the nature of the change proposed, a BLA supplement must be filed and approved before the change may be implemented. For many proposed post-approval changes to a BLA, the FDA has up to 180 days to

review the application. As with new BLAs, the review process is often significantly extended by the FDA requests for additional information or clarification.

#### *Post-Approval Requirements*

Any biologic products for which we or our collaborators receive FDA approvals are subject to continuing regulation by the FDA, including, among other things, record-keeping requirements, reporting of adverse experiences with the product, providing the FDA with updated safety and efficacy information, product sampling and distribution requirements, complying with certain electronic records and signature requirements and complying with FDA promotion and advertising requirements, which include, among others, restrictions on direct-to-consumer advertising, promoting biologics for uses or in patient populations that are not described in the product's approved labeling (known as "off-label use"), industry-sponsored scientific and educational activities and promotional activities involving the internet. The FDA closely regulates the post-approval marketing and promotion of biologics, and although physicians may prescribe legally available drugs for off-label uses, manufacturers may not market or promote such off-label uses. Failure to comply with these or other FDA requirements can subject a manufacturer to possible legal or regulatory action, such as warning letters, suspension of manufacturing, seizure of product, injunctive action, mandated corrective advertising or communications with healthcare professionals, possible civil or criminal penalties or other negative consequences, including adverse publicity.

We will rely, and expect to continue to rely, on third-parties for the production of clinical and commercial quantities of our products. Our collaborators may also utilize third-parties for some or all of a product we are developing with such collaborator. Manufacturers are required to comply with applicable FDA manufacturing requirements contained in the FDA's cGMP regulations. cGMP regulations require among other things, quality control and quality assurance as well as the corresponding maintenance of records and documentation. Drug manufacturers and other entities involved in the manufacture and distribution of approved biologics are required to register their establishments with the FDA and certain state agencies and are subject to periodic inspections by the FDA and certain state agencies for compliance with cGMP and other laws. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain cGMP compliance.

#### *U.S. Patent Term Restoration and Marketing Exclusivity*

Depending upon the timing, duration and specifics of the FDA approval of our biologic product candidate, some of our U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, commonly referred to as the Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent restoration term of up to five years as compensation for patent term lost during product development and the FDA regulatory review process. However, patent term restoration cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date. The patent term restoration period is generally one-half the time between the effective date of an IND and the submission date of a BLA plus the time between the submission date of a BLA and the approval of that application. 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. The U.S. Patent and Trademark Office, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration. In the future, we may intend to apply for restoration of patent term for one of our currently owned or licensed patents to add patent life beyond its current expiration date, depending on the expected length of the clinical trials and other factors involved in the filing of the relevant BLA.

Market exclusivity provisions under the FDCA can also delay the submission or the approval of certain applications of other companies seeking to reference another company's BLA. Specifically, the

Biologics Price Competition and Innovation Act (BPCIA) established an abbreviated pathway for the approval of biosimilar and interchangeable biological products. The new abbreviated regulatory pathway establishes legal authority for the FDA to review and approve biosimilar biologics, including the possible designation of a biosimilar as "interchangeable" based on their similarity to existing brand product. Under the BPCIA, an application for a biosimilar product cannot be approved by the FDA until 12 years after the original branded product was approved under a BLA. However, an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement to one of the patents listed with the FDA by the innovator BLA holder. The BPCIA is complex and is only beginning to be interpreted and implemented by the FDA. As a result, its ultimate impact, implementation and meaning is subject to uncertainty.

#### *U.S. Foreign Corrupt Practices Act*

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

#### *Pharmaceutical Coverage, Pricing and Reimbursement*

Significant uncertainty exists as to the coverage and reimbursement status of any product candidate for which we obtain regulatory approval. In the United States and markets in other countries, sales of any products for which we receive regulatory approval for commercial sale will depend in part on the availability of coverage and adequate reimbursement from third-party payors. Third-party payors include government payor programs at the federal and state levels, including Medicare and Medicaid, managed care providers, private health insurers and other organizations. The process for determining whether a payor will provide coverage for a drug product may be separate from the process for setting the price or reimbursement rate that the payor will pay for the drug product. Third-party payors may limit coverage to specific drug products on an approved list or formulary, which might not include all of the FDA-approved drug products for a particular indication. Third-party payors are increasingly challenging the price and examining the medical necessity and cost-effectiveness of medical products and services, in addition to their safety and efficacy. We may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of our products, in addition to the costs required to obtain the FDA approvals. Our product candidates may not be considered medically necessary or cost-effective. A payor's decision to provide coverage for a drug product does not imply that an adequate reimbursement rate will be approved. Adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development.

The cost of pharmaceuticals continues to generate substantial governmental and third-party payor interest. We expect that the pharmaceutical industry will experience pricing pressures due to the trend toward managed healthcare, the increasing influence of managed care organizations and additional legislative proposals. 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 our products to be cost-effective compared to other available therapies, they may not cover our products after approval as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow us to sell our products at a profit. The U.S. 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 drugs. Adoption of such controls and measures, and tightening of restrictive policies in jurisdictions with existing controls and measures, could limit payments for pharmaceuticals such as the product candidates that we are developing and could adversely affect our net revenue and results.

Different pricing and reimbursement schemes exist in other countries. In the European Community, governments influence the price of pharmaceutical products through their pricing and reimbursement rules and control of national healthcare systems that fund a large part of the cost of those products to consumers. Some jurisdictions operate positive and negative list systems under which products may only be marketed once a reimbursement price has been agreed. To obtain reimbursement or pricing approval, some of these countries may require the completion of clinical trials that compare the cost-effectiveness of a particular product candidate to currently available therapies. Other member states allow companies to fix their own prices for medicines, but monitor and control company profits. The downward pressure on healthcare costs in general, and particularly prescription drugs, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products. In addition, in some countries, cross-border imports from low-priced markets exert a commercial pressure on pricing within a country. There can be no assurance that any country that has price controls or reimbursement limitations for drug products will allow favorable reimbursement and pricing arrangements for any of our products.

#### *Healthcare Reform*

In the United States and foreign jurisdictions, there have been and continue to be a number of legislative and regulatory proposals to change the healthcare system in ways that could affect our ability to sell our product candidates profitably, once they are approved for sale. Among policy makers and payors in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives.

In March 2010, the Patient Protection and Affordable Health Care Act, as amended by the Health Care and Education Affordability Reconciliation Act (collectively, PPACA) was enacted, which includes measures to significantly change the way healthcare is financed by both governmental and private insurers. Among the provisions of PPACA of importance to the pharmaceutical and biotechnology industries are the following:

- an annual, nondeductible fee on any entity that manufactures or imports certain branded prescription drugs and biologic agents, apportioned among these entities according to their market share in certain government healthcare programs, that began in 2011;
- an increase in the rebates a manufacturer must pay under the Medicaid Drug Rebate Program to 23.1% and 13% of the average manufacturer price for branded and generic drugs, respectively;
- a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts to negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D;
- extension of manufacturers' Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations;
- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to additional individuals and by adding new mandatory eligibility

categories for certain individuals with income at or below 133% of the Federal Poverty Level beginning in 2014, thereby potentially increasing manufacturers' Medicaid rebate liability;

- expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program;
- new requirements under the federal Open Payments program, created under Section 6002 of PPACA and its implementing regulations, that manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) report annually to the U.S. Department of Health and Human Services (HHS) information related to "payments or other transfers of value" made or distributed to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals and that applicable manufacturers and applicable group purchasing organizations report annually to HHS ownership and investment interests held by physicians (as defined above) and their immediate family members, with data collection required beginning August 1, 2013, reporting to the Centers for Medicare & Medicaid Services (CMS) required by March 31, 2014 and by the 90th day of each subsequent calendar year, and disclosure of such information to be made by CMS on a publicly available website beginning in September 2014;
- a new requirement to annually report drug samples that manufacturers and distributors provide to physicians, effective April 1, 2012;
- expansion of healthcare fraud and abuse laws, including the False Claims Act and the Anti-Kickback Statute, new government investigative powers, and enhanced penalties for noncompliance;
- a licensure framework for follow-on biologic products;
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research;
- creation of the Independent Payment Advisory Board which, beginning in 2014, will have authority to recommend certain changes to the Medicare program that could result in reduced payments for prescription drugs and those recommendations could have the effect of law even if Congress does not act on the recommendations; and
- establishment of a Center for Medicare Innovation at CMS to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending that began on January 1, 2011.

In addition, other legislative changes have been proposed and adopted since PPACA was enacted. In August 2011, the President signed into law the Budget Control Act of 2011, which, among other things, created the Joint Select Committee on Deficit Reduction to recommend proposals in spending reductions to Congress. The Joint Select Committee on Deficit Reduction did not achieve its targeted deficit reduction of at least \$1.2 trillion for the years 2013 through 2021, triggering the legislation's automatic reductions to several government programs. These reductions include aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, starting in 2013. Under the Budget Control Act of 2011, as amended, federal budget "sequestration" became effective in March 2013 and automatically reduced payments under various government programs, including for example certain Medicare provider and supplier reimbursement payments. Sequestration may have a material adverse effect on our customers and accordingly, our financial operations. 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, which could have a material adverse effect on our customers and accordingly, our financial operations.

#### *Other Healthcare Laws and Compliance Requirements*

In the United States, the research, manufacturing, distribution, sale and promotion of drug products and medical devices are potentially subject to regulation by various federal, state and local authorities in addition to the FDA, including CMS, other divisions of HHS (e.g., the Office of Inspector General), the U.S. Department of Justice, state Attorneys General, and other state and local government agencies. For example, sales, marketing and scientific/educational grant programs must comply with fraud and abuse laws such as the federal Anti-Kickback Statute, as amended, the federal False Claims Act, as amended, and similar state laws. Pricing and rebate programs must comply with the Medicaid Drug Rebate Program requirements of the Omnibus Budget Reconciliation Act of 1990, as amended, and the Veterans Health Care Act of 1992, as amended. If products are made available to authorized users of the Federal Supply Schedule of the General Services Administration, additional laws and requirements apply. All of these activities are also potentially subject to federal and state consumer protection and unfair competition laws.

The federal Anti-Kickback Statute prohibits any person, including a prescription drug manufacturer (or a party acting on its behalf), from knowingly and willfully soliciting, receiving, offering or providing remuneration, directly or indirectly, to induce or reward either the referral of an individual, or the furnishing, recommending or arranging for a good or service, for which payment may be made under a federal healthcare program such as the Medicare and Medicaid programs. This statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on one hand and prescribers, purchasers and formulary managers on the other. 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 term "remuneration" is not defined in the federal Anti-Kickback Statute and has been broadly interpreted to include anything of value, including for example, gifts, discounts, the furnishing of supplies or equipment, credit arrangements, payments of cash, waivers of payments, ownership interests and providing anything at less than its fair market value. Although there are a number of statutory exemptions and regulatory safe harbors protecting certain business arrangements from prosecution, the exemptions and safe harbors are drawn narrowly, and practices that involve remuneration intended to induce prescribing, purchasing or recommending may be subject to scrutiny if they do not qualify for an exemption or safe harbor. Our practices may not in all cases meet all of the criteria for safe harbor protection from federal Anti-Kickback Statute liability. The reach of the Anti-Kickback Statute was broadened by the recently enacted PPACA, which, among other things, amends 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 federal False Claims Act (discussed below) or the civil monetary penalties statute, which imposes fines against any person who is determined to have presented or caused to be presented claims to a federal healthcare 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. Additionally, many states have adopted laws similar to the federal Anti-Kickback Statute, and some of these state prohibitions apply to referral of patients for healthcare items or services reimbursed by any third-party payor, not only the Medicare and Medicaid programs in at least some cases, and do not contain safe harbors.

The federal False Claims Act imposes liability on any person or entity that, among other things, knowingly presents or causes to be presented, a false or fraudulent claim for payment by a federal healthcare program. The qui tam provisions of the False Claims Act allow a private individual to bring



civil actions on behalf of the federal government alleging that the defendant has submitted a false claim to the federal government, and to share in any monetary recovery. In recent years, the number of suits brought by private individuals has increased dramatically. In addition, various states have enacted false claims laws analogous to the False Claims Act. Many of these state laws apply where a claim is submitted to any third-party payor and not merely a federal healthcare program. There are many potential bases for liability under the False Claims Act. Liability arises, primarily, when an entity knowingly submits, or causes another to submit, a false claim for reimbursement to the federal government. The False Claims Act has been used to assert liability on the basis of inadequate care, kickbacks and other improper referrals, improperly reported government pricing metrics such as Best Price or Average Manufacturer Price, improper use of Medicare numbers when detailing the provider of services, improper promotion of off-label uses (i.e., uses not expressly approved by FDA in a drug's label) and allegations as to misrepresentations with respect to the services rendered. Our future activities relating to the reporting of discount and rebate information and other information affecting federal, state and third-party reimbursement of our products, and the sale and marketing of our products and our service arrangements or data purchases, among other activities, may be subject to scrutiny under these laws. We are unable to predict whether we would be subject to actions under the False Claims Act or a similar state law, or the impact of such actions. However, the cost of defending such claims, as well as any sanctions imposed, could adversely affect our financial performance. Also, the Health Insurance Portability and Accountability Act of 1996 (HIPAA) created several new federal crimes, including healthcare fraud, and false statements relating to healthcare matters. The healthcare fraud statute prohibits knowingly and willfully executing a scheme to defraud any healthcare benefit program, including private third-party payors. The false statements statute prohibits 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.

In addition, we may be subject to, or our marketing activities may be limited by, data privacy and security regulation by both the federal government and the states in which we conduct our business. For example, HIPAA and its implementing regulations established uniform federal standards for certain "covered entities" (healthcare providers, health plans and healthcare clearinghouses) governing the conduct of certain electronic healthcare transactions and protecting the security and privacy of protected health information. The American Recovery and Reinvestment Act of 2009, commonly referred to as the economic stimulus package, included expansion of HIPAA's privacy and security standards called the Health Information Technology for Economic and Clinical Health Act (HITECH) which became effective on February 17, 2010. Among other things, HITECH makes HIPAA's privacy and security standards directly applicable to "business associates"— 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.

There are also an increasing number of state "sunshine" laws that require manufacturers to make reports to states on pricing and marketing information. Several states have enacted legislation requiring pharmaceutical companies to, among other things, establish marketing compliance programs, file periodic reports with the state, make periodic public disclosures on sales, marketing, pricing, clinical trials and other activities and/or register their sales representatives and prohibiting or limiting certain other sales and marketing practices. In addition, beginning in 2013, a similar federal requirement will require manufacturers to track and report to the federal government certain payments and other transfers of value made to physicians and other healthcare professionals and teaching hospitals and ownership or investment interests held by physicians and their immediate family members. The

government, in turn, will make reported information available to the public. These laws may adversely affect our sales, marketing and other activities by imposing administrative and compliance burdens on us. If we fail to track and report as required by these laws or otherwise comply with these laws, we could be subject to the penalty provisions of the pertinent state and federal authorities.

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 penalties, including criminal and significant civil monetary penalties, damages, fines, imprisonment, exclusion from participation in government healthcare programs, injunctions, recall or seizure of products, total or partial suspension of production, denial or withdrawal of pre-marketing product approvals, private "qui tam" actions brought by individual whistleblowers in the name of the government or refusal to allow us to enter into supply contracts, including government contracts, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations. To the extent that any of our products are sold in a foreign country, we may be subject to similar foreign laws and regulations, which may include, for instance, applicable post-marketing requirements, including safety surveillance, anti-fraud and abuse laws and implementation of corporate compliance programs and reporting of payments or transfers of value to healthcare professionals.

### ***Europe / Rest of World Government Regulation***

In addition to regulations in the United States, we, and our collaborators, will be subject to a variety of regulations in other jurisdictions governing, among other things, clinical trials and any commercial sales, marketing and distribution of our products.

Whether or not we, or our collaborators, obtain FDA approval for a product, we must obtain the requisite approvals from regulatory authorities in foreign countries prior to the commencement of clinical trials or marketing of the product in those countries. The requirements and process governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country. In addition, we and our collaborators may be subject to foreign laws and regulations and other compliance requirements, including, without limitation, anti-kickback laws, false claims laws and other fraud and abuse laws, as well as laws and regulations requiring transparency of pricing and marketing information and governing the privacy and security of health information, such as the European Union's Directive 95/46 on the Protection of Individuals with regard to the Processing of Personal Data.

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

### **Employees**

As of September 30, 2013, we had 31 employees, 28 of whom were full-time, 14 of whom hold Ph.D. or M.D. degrees, 21 of whom were engaged in research and development activities and 10 of whom were engaged in business development, finance, information systems, facilities, human resources or administrative support. None of our employees are represented by any collective bargaining unit. We believe that we maintain good relations with our employees.

### **Facilities**

Our principal laboratory and administrative facilities are located in Monrovia, California, which is located in the greater Los Angeles region. We currently lease approximately 24,000 square feet of laboratory and office space in Monrovia, California under a lease that expires April 30, 2015. We believe that our existing facilities are adequate to meet our current needs, and that suitable additional alternative spaces will be available in the future on commercially reasonable terms.

### **Legal Proceedings**

We are not currently subject to any material legal proceedings.

**MANAGEMENT**

The following table sets forth information about our executive officers and directors as of November 1, 2013.

<b>Name</b>	<b>Age</b>	<b>Position</b>
Bassil I. Dahiyat, Ph.D.	43	President and Chief Executive Officer, Director
Edgardo Baracchini, Jr., Ph.D.	54	Chief Business Officer
Paul Foster, M.D.	59	Chief Medical Officer
John R. Desjarlais, Ph.D.	49	Vice President, Research
John J. Kuch	54	Vice President, Finance
Bruce L.A. Carter, Ph.D.(2)(3)	70	Chairman of the Board and Director
Robert F. Baltera, Jr.	48	Director
Jonathan Fleming(1)(2)	56	Director
Atul Saran(1)(3)	40	Director
John S. Stafford III	43	Director
Harold R. Werner(1)(2)(3)	65	Director

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

**Executive Officers**

**Bassil I. Dahiyat, Ph.D.** has served as our President and Chief Executive Officer since February 2005 and as a member of our Board of Directors since August 1997. Dr. Dahiyat co-founded Xencor in 1997 and, from 1997 to 2003, served as our Chief Executive Officer and, from 2003 to 2005, served as our Chief Scientific Officer. In 2005, Dr. Dahiyat was recognized as a technology pioneer by the World Economic Forum. Additionally, Dr. Dahiyat was named one of 2003's Top 100 Young Innovators by MIT's Technology Review magazine for his work on protein design and its development for therapeutic applications and has received awards from the American Chemical Society, the Controlled Release Society and the California Institute of Technology. Dr. Dahiyat holds a Ph.D. in Chemistry from the California Institute of Technology and B.S. and M.S.E. degrees in Biomedical Engineering from Johns Hopkins University. We believe Dr. Dahiyat's experience in the pharmaceutical industry and as one of our founders qualifies him to serve on our Board of Directors.

**Edgardo Baracchini, Jr., Ph.D.** joined us as Chief Business Officer in January 2010. From March 2002 through June 2009, he served as Senior Vice President of Business Development at Metabasis Therapeutics, Inc., a publicly-held biopharmaceutical company, until its merger with Ligand Pharmaceuticals Inc. From June 1999 through February 2002, Dr. Baracchini was Vice President of Business Development at Elitra Pharmaceuticals Inc., and the Director of Business Development at Agouron Pharmaceuticals, Inc. until its acquisition by Warner-Lambert Co. Dr. Baracchini holds a Ph.D. in Molecular and Cell Biology from the University of Texas at Dallas and conducted his postdoctoral research at the University of California, San Diego and The Scripps Research Institute. He also earned an M.B.A. from the University of California, Irvine, and a B.S. in Microbiology from the University of Notre Dame.

**Paul Foster, M.D.** joined us as Chief Medical Officer in August 2012, after serving in a substantially similar capacity as an outside consultant from January 2010 until August 2012. Dr. Foster has 27 years of experience in a career spanning academic basic research, academic medical practice, research & development, product development, clinical development, drug safety, medical affairs, regulatory affairs and product commercialization. From June 2008 through May 2009 he served as Chief Medical Officer

for Cardium Therapeutics Inc., a publicly-held health sciences and regenerative medicine company, and prior to that provided medical/clinical consulting services as Senior Vice President Development and Chief Medical Officer of Development & Strategic Consulting Associates, LLC. He has held senior leadership positions in both large and small biopharmaceutical companies including Biogen Idec, Inc., IDEC Pharmaceuticals Corp., Abbott Laboratories, Alpha Therapeutics Corporation, Reata Pharmaceuticals, Inc. and Dade Behring, Inc. He has experience with the development of biologics, small molecules and in-vitro diagnostics in therapeutic areas including oncology, hematology, inflammation and autoimmune diseases. Dr. Foster received his M.D. from Duke University School of Medicine and trained in Internal Medicine and Hematology/Oncology, and received a B.S. in Chemistry from the University of Michigan.

**John R. Desjarlais, Ph.D.** has served as our Vice President, Research since October 2006, and joined the Company in July 2001, initially serving as our Director of Protein Engineering. Dr. Desjarlais oversees all aspects of discovery and research at the company including technology development, protein and antibody engineering and generation of product candidates. Prior to joining us, Dr. Desjarlais was an Assistant Professor of Chemistry at Penn State University from 1997 to 2001. Dr. Desjarlais received a B.S. in Physics from the University of Massachusetts and holds a Ph.D. in Biophysics from Johns Hopkins University. He then conducted postdoctoral research at the University of California, Berkeley. Dr. Desjarlais has driven the Company's technology development and engineering efforts for over five years and participated in the development of the Company's business and intellectual property strategies.

**John J. Kuch** has served as our Vice President, Finance since October 2010, and joined the Company in October 2000, serving as our Senior Director of Finance. Mr. Kuch has primary responsibility for financial reporting, budgeting, cash-flow management, investments and facility issues for the Company. Prior to joining us, he worked for over 15 years in public accounting. From August 1997 through December 1998 he served as a Director at PricewaterhouseCoopers LLP. Mr. Kuch is a certified public accountant and received his B.S. and M.S. in Accounting from the University of Illinois.

#### **Non-Employee Directors**

**Bruce L.A. Carter, Ph.D.** has served as a member of our Board of Directors since September 2009, and was appointed Chairman of the Board in December 2009. Since June 2012, Dr. Carter has served as a director of Regulus Therapeutics Inc., a publicly-held biopharmaceutical company. From November 2009 until May 2011, Dr. Carter served as Executive Chairman of the Board of Directors of Immune Design Corp., a privately-held biotechnology company, and as Chairman of its Board of Directors until February 2012, and continues to serve as an independent director. Since June 2008, he has served as a director of Dr. Reddy's Laboratories Limited, a publicly-held pharmaceutical company. From April 1998 to January 2009, Dr. Carter served as Chief Executive Officer of ZymoGenetics, Inc., a publicly-held biotechnology company (acquired by Bristol-Myers Squibb in October 2010). Dr. Carter holds a Ph.D. in Microbiology from Queen Elizabeth College, University of London and a B.Sc. with Honors in Botany from the University of Nottingham, England. We believe that Dr. Carter's experience as an executive and his breadth of knowledge and valuable understanding of the pharmaceutical industry qualify him to serve on our Board of Directors.

**Robert F. Baltera, Jr.** joined our Board of Directors in November 2013. Most recently, Mr. Baltera was the Chief Executive Officer of Amira Pharmaceuticals, Inc., a private pharmaceutical development company, a position he held from July 2007 through September 2011. Amira was sold to Bristol-Myers Squibb in September 2011. Before becoming Amira's Chief Executive Officer, he held a number of senior management positions at Amgen Inc., a private biopharmaceutical company, the last being Vice President of Corporate and Contract Manufacturing. He served as Amgen's team leader responsible for the approval of Kineret® in rheumatoid arthritis. Mr. Baltera currently serves on the board of directors of Organovo Holdings, Inc., a publicly-held biotechnology development company, and the following

private companies: Panmira Pharmaceuticals, LLC, FLAP, LLC, Synovex Corporation and Ruga Corporation, as well as an industry group, the San Diego Venture Group. Mr. Baltera holds an M.B.A. from the Anderson School at the University of California, Los Angeles and earned a B.S. in Microbiology and an M.S. in Genetics from The Pennsylvania State University. Mr. Baltera attended the Director Education and Certification program at the University of California, Los Angeles and passed the certification exam. We believe that Mr. Baltera's previous executive leadership and product development experience, as well as his educational background qualify him to serve on our Board of Directors.

**Jonathan Fleming** has served as a member of our Board of Directors since January 2013. Mr. Fleming is the Managing General Partner of Oxford Bioscience Partners, an international venture capital firm specializing in life science technology-based investments, a position which he has held since June 1999. He joined Oxford Bioscience Partners in August 1996 as a General Partner. Prior to joining Oxford Bioscience Partners, Mr. Fleming was a Founding General Partner of MVP Ventures in Boston from 1988 to 1996. He began his investment career with TVM Techno Venture Management in Munich, Germany in 1985. Mr. Fleming is also a co-founder of Medica Venture Partners, a venture capital investment firm specializing in early-stage healthcare and biotechnology companies in Israel. Mr. Fleming was on the board of directors of Asterand plc from September 2008 to September 2011, the board of directors of Memory Pharmaceuticals Corp. from January 1998 to May 2005 and from October 2006 to November 2008, the board of directors of IMCOR Pharmaceuticals Co. from June 2003 to March 2009, and is a director of several private companies including Leerink Swann LLC, an investment bank specializing in healthcare companies, since June 1998, Laboratory Partners, a clinical diagnostic testing company, since June 2006, and RailRunner, N.A., Inc., a rail products and services company, since June 1999. Mr. Fleming is a Trustee of the Museum of Science in Boston, a director of the New England Healthcare Institute, and a senior lecturer at the Massachusetts Institute of Technology Sloan School of Business. He holds an M.P.A from Princeton University and a B.A. from the University of California, Berkeley. We believe that Mr. Fleming's experience and his success as a venture capitalist specializing in healthcare and biotech companies qualify him to serve on our Board of Directors.

**Atul Saran** has served as a member of our Board of Directors since August 2011. Since May 2013, Mr. Saran has been the Vice President, Corporate Development & Ventures for AstraZeneca plc, a multinational pharmaceutical and biologics company, and Chair of the MedImmune Ventures, Inc. investment committee. From February 2003 to May 2013, Mr. Saran held various positions at MedImmune, LLC (formerly MedImmune, Inc.), a biotechnology company, and its various corporate affiliates, both before and after its acquisition by AstraZeneca in 2007. In particular, from January 2011 to May 2013, Mr. Saran was Senior Vice President, Corporate Development & Ventures of MedImmune and a member of the MedImmune Ventures investment committee, and from September 2008 to January 2011, he served as the Vice President, Deputy General Counsel and Assistant Secretary of MedImmune. From April 1998 to January 2003, Mr. Saran was an associate attorney in the private equity/emerging business practice group at Hogan & Hartson LLP. Mr. Saran currently serves on the board of directors of VentiRx Pharmaceuticals, Inc. and previously served on the board of directors of Arriva Pharmaceuticals, Inc. and Inotek Pharmaceuticals Corporation. Mr. Saran graduated summa cum laude from the University of Illinois College of Law, and received his B.S. in Biological Sciences from Stanford University. He also successfully completed two years of medical school at the University of Illinois College of Medicine and Step 1 of the United States Medical Licensing Examination. We believe that Mr. Saran's experience as an executive in the biopharmaceutical industry and legal training qualify him to serve on our Board of Directors.

**John S. Stafford III** has served as a member of our Board of Directors since October 1997. Since January 2001, Mr. Stafford has served as Chief Executive Officer of Ronin Capital, LLC, a registered broker-dealer with proprietary trading operations encompassing equity, fixed income and derivative

securities. Ronin Capital, LLC is a member of the Chicago Board Options Exchange, the Chicago Board of Trade, the Chicago Mercantile Exchange and other U.S. principal exchanges. Prior to joining Ronin Capital, LLC, Mr. Stafford was a Managing Director of Stafford Trading, Inc., a business primarily involved in proprietary trading operations and venture capital investments, from 1996 to 2001. The company, headquartered in Chicago, operated a successful specialist and market-making business and conducted proprietary trading in equities, futures and fixed income products. Mr. Stafford's venture capital activities consisted of investments in over 40 companies, and he is a board member on several of these companies, including Aware, Inc., Clinical Micro Sensors, Inc. and All Optical Networks, Inc. We believe that Mr. Stafford's capital markets and venture capital experience qualifies him to serve on our Board of Directors.

**Harold R. Werner** has served as a member of our Board of Directors since February 2008. Mr. Werner is a co-founder and since 1985 is a General Partner of HealthCare Ventures LLC, a venture capital fund specializing in the health-care industry. Mr. Werner has served as a director of over 30 public and private companies. Prior to the formation of HealthCare Ventures in 1985, Mr. Werner was Director of New Ventures for Johnson & Johnson Development Corporation. Mr. Werner currently serves on the board of directors of Acix, Inc., Stemgent, Inc. and InfaCare Pharmaceutical Corp. He also serves as an advisor to Ophthalmic Research Associates, Inc. and SinoLogic Pharmaceuticals Limited. Mr. Werner received his B.S. and M.S. degrees in Engineering from Princeton University and an M.B.A. from the Harvard Graduate School of Business Administration. We believe that Mr. Werner's experience as a venture capitalist specializing in the healthcare industry qualifies him to serve on our Board of Directors.

### **Board Composition**

Our business and affairs are organized under the direction of our Board of Directors, which currently consists of seven members. The primary responsibilities of our Board of Directors are to provide oversight, strategic guidance, counseling and direction to our management. Our Board of Directors meets on a regular basis and on an ad hoc basis as required.

Our Board of Directors has determined that all of our directors other than Dr. Dahiyat and Mr. Stafford are independent directors, as defined by Rule 5605(a)(2) of the NASDAQ Listing Rules.

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 elected annually to a one-year term. The authorized size of our Board of Directors is currently seven members. The authorized number of directors may be changed only by resolution of the board of directors. Our directors may be removed with or without cause by the affirmative vote of the holders of a majority of our voting stock.

### **Board Leadership Structure**

The Board of Directors has a Chairman of the Board, Bruce L.A. Carter, Ph.D., who has authority, among other things, to call and preside over Board of Directors meetings, to set meeting agendas, and to determine materials to be distributed to the Board of Directors. Accordingly, the Chairman has substantial ability to shape the work of the Board of Directors. We believe that separation of the positions of Chairman and Chief Executive Officer reinforces the independence of the Board of Directors in its oversight of our business and affairs. In addition, we have a separate chair for each committee of the Board of Directors. The chairs of each committee are expected to report annually to the Board of Directors on the activities of their committee in fulfilling their responsibilities as detailed in their respective charters or specify any shortcomings should that be the case. In addition, we believe that having a separate Chairman creates an environment that is more conducive to objective evaluation and oversight of management's performance, increasing management accountability and improving the ability of the Board of Directors to monitor whether management's actions are in the

best interests of us and our stockholders. As a result, we believe that having a separate Chairman can enhance the effectiveness of the Board of Directors as a whole.

### **Role of the Board in Risk Oversight**

The Audit Committee of the Board of Directors is primarily responsible for overseeing our risk management processes on behalf of the Board of Directors. Going forward, we expect that the Audit Committee will receive reports from management at least quarterly regarding our assessment of risks. In addition, the Audit Committee reports regularly to the Board of Directors, which also considers our risk profile. The Audit Committee and the Board of Directors focus on the most significant risks we face and our general risk management strategies. While the Board of Directors oversees our risk management, management is responsible for day-to-day risk management processes. Our Board of Directors expects management to consider risk and risk management in each business decision, to proactively develop and monitor risk management strategies and processes for day-to-day activities and to effectively implement risk management strategies adopted by the Audit Committee and the Board of Directors. We believe this division of responsibilities is the most effective approach for addressing the risks we face and that our Board of Directors leadership structure, which also emphasizes the independence of the Board of Directors in its oversight of its business and affairs, supports this approach.

### **Board Committees**

Our Board of Directors has established an audit committee, a compensation committee and a nominating and corporate governance committee.

#### ***Audit Committee***

Our audit committee consists of Messrs. Fleming, Saran and Werner. Our Board of Directors has determined that each of the members of our audit committee satisfies the NASDAQ Stock Market and SEC independence requirements. Mr. Fleming serves as the chair of our audit committee. The functions of this committee include, among other things:

- evaluating the performance, independence and qualifications of our independent auditors and determining whether to retain our existing independent auditors or engage new independent auditors;
- reviewing and approving the engagement of our independent auditors to perform audit services and any permissible non-audit services;
- monitoring the rotation of partners of our independent auditors on our engagement team as required by law;
- prior to engagement of any independent auditor, and at least annually thereafter, reviewing relationships that may reasonably be thought to bear on their independence, and assessing and otherwise taking the appropriate action to oversee the independence of our independent auditor;
- reviewing our annual and quarterly financial statements and reports, including the disclosures contained under the caption "Management's Discussion and Analysis of Financial Condition and Results of Operations," and discussing the statements and reports with our independent auditors and management;
- reviewing with our independent auditors and management significant issues that arise regarding accounting principles and financial statement presentation and matters concerning the scope, adequacy and effectiveness of our financial controls;

- reviewing with management and our auditors any earnings announcements and other public announcements regarding material developments;
- establishing procedures for the receipt, retention and treatment of complaints received by us regarding financial controls, accounting or auditing matters and other matters;
- preparing the report that the SEC requires in our annual proxy statement;
- reviewing and providing oversight of any related-person transactions in accordance with our related person transaction policy and reviewing and monitoring compliance with legal and regulatory responsibilities, including our code of business conduct and ethics;
- reviewing our major financial risk exposures, including the guidelines and policies to govern the process by which risk assessment and risk management is implemented;
- reviewing on a periodic basis our investment policy; and
- reviewing and evaluating on an annual basis its own performance, including its compliance with its charter.

Our Board of Directors has determined that Mr. Fleming qualifies as an audit committee financial expert within the meaning of SEC regulations and that each member of the audit committee meets the financial literacy requirements of the NASDAQ Listing Rules. Both our independent registered public accounting firm and management periodically meet privately with our audit committee.

#### ***Compensation Committee***

Our compensation committee consists of Dr. Carter and Messrs. Fleming and Werner. Mr. Werner serves as the chair of our compensation committee. Our Board of Directors has determined that each of the members of our compensation committee is a non-employee director, as defined in Rule 16b-3 promulgated under the Securities Exchange Act of 1934, as amended (the Exchange Act) is an outside director, as defined pursuant to Section 162(m) of the Code and satisfies the NASDAQ Stock Market independence requirements. The functions of this committee include, among other things:

- reviewing, evaluating and making recommendations to the full Board of Directors for approval of, our overall compensation strategy and policies;
- reviewing, evaluating and making recommendations to the full Board of Directors for approval of, the compensation and other terms of employment of our executive officers;
- reviewing, evaluating and making recommendations to the full Board of Directors for approval of, performance goals and objectives relevant to the compensation of our executive officers and assessing their performance against these goals and objectives;
- reviewing, evaluating and making recommendations to the full Board of Directors for approval of, equity incentive plans, compensation plans and similar programs advisable for us, as well as modifying, amending or terminating existing plans and programs;
- evaluating risks associated with our compensation policies and practices and assessing whether risks arising from our compensation policies and practices for our employees are reasonably likely to have a material adverse effect on us;
- reviewing, evaluating and making recommendations to the full Board of Directors for approval of, the type and amount of compensation to be paid or awarded to our non-employee board members;



- evaluating policies with respect to votes by our stockholders to approve executive compensation as required by Section 14A of the Exchange Act and determining our recommendations regarding the frequency of advisory votes on executive compensation;
- reviewing and assessing the independence of compensation consultants, legal counsel and other advisors as required by Section 10C of the Exchange Act;
- administering our equity incentive plans;
- establishing policies with respect to equity compensation arrangements;
- reviewing the competitiveness of our executive compensation programs and evaluating the effectiveness of our compensation policy and strategy in achieving expected benefits to us;
- reviewing, and making recommendations to the full Board of Directors for approval of, the terms of any employment agreements, severance arrangements, change in control protections and any other compensatory arrangements for our executive officers;
- reviewing the adequacy of its charter on a periodic basis;
- reviewing with management and approving our disclosures under the caption "Compensation Discussion and Analysis" and related tables in our periodic reports or proxy statements to be filed with the SEC;
- preparing the report that the SEC requires in our annual proxy statement; and
- reviewing and assessing on an annual basis its own performance.

#### *Nominating and Corporate Governance Committee*

Our nominating and corporate governance committee consists of Dr. Carter and Messrs. Saran and Werner. Our Board of Directors has determined that each of the members of this committee satisfies the NASDAQ Stock Market independence requirements. Dr. Carter serves as the chair of our nominating and corporate governance committee. The functions of this committee include, among other things:

- identifying, reviewing and evaluating candidates to serve on our Board of Directors consistent with criteria approved by our Board of Directors;
- determining the minimum qualifications for service on our Board of Directors;
- evaluating director performance on the board and applicable committees of the board and determining whether continued service on our board is appropriate;
- evaluating, nominating and recommending individuals for membership on our Board of Directors;
- evaluating nominations by stockholders of candidates for election to our Board of Directors;
- considering and assessing the independence of members of our Board of Directors;
- developing a set of corporate governance policies and principles, including a code of business conduct and ethics, periodically reviewing and assessing these policies and principles and their application and recommending to our Board of Directors any changes to such policies and principles;
- considering questions of possible conflicts of interest of directors as such questions arise;
- reviewing the adequacy of its charter on an annual basis; and
- annually evaluating the performance of the nominating and corporate governance committee.

### **Compensation Committee Interlocks and Insider Participation**

None of our current or former executive officers serves as a member of the compensation committee. None of our officers serves, or has served during the last completed fiscal year on 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. Prior to establishing the compensation committee, our full board of directors made decisions relating to compensation of our officers. For a description of transactions between us and members of our compensation committee and affiliates of such members, please see "Certain Relationships and Related Party Transactions."

### **Code of Business Conduct and Ethics**

We have adopted a written code of business conduct and ethics that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or person performing similar functions. Following this offering, a current copy of the code will be available on the Corporate Governance section of our website, [www.xencor.com](http://www.xencor.com).

### **Limitation of Liability and Indemnification**

Our amended and restated certificate of incorporation, which will become effective upon the closing of this offering, limits the liability of directors to the maximum extent permitted by Delaware law. Delaware law allows a corporation to eliminate the personal liability of directors of a corporation to the corporation and its stockholders for monetary damages for breach of their fiduciary duties as directors, except for liability for any:

- breach of their duty of loyalty to the corporation or its stockholders;
- act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law; or
- transaction from which the directors derived an improper personal benefit.

Our amended and restated certificate of incorporation, which will become effective upon the closing of this offering, does not eliminate a director's duty of care and, in appropriate circumstances, equitable remedies, such as injunctive or other forms of non-monetary relief, will remain available under Delaware law. These limitations also do not affect a director's responsibilities under any other laws, such as the federal securities laws or other state or federal laws. Our amended and restated bylaws, which will become effective upon the closing of this offering, provide that we will indemnify our directors and executive officers and may indemnify other officers, employees and other agents, to the fullest extent permitted by law. Our amended and restated bylaws, which will become effective upon the closing of this offering, also provide that we are obligated to advance expenses incurred by a director or officer in advance of the final disposition of any action or proceeding and also permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in connection with their services to us, regardless of whether our amended and restated bylaws permit such indemnification. We have obtained a policy of directors' and officers' liability insurance.

We intend to enter into separate indemnification agreements with our directors and executive officers, in addition to the indemnification provided for in our amended and restated bylaws. These agreements, among other things, will require us to indemnify our directors and executive officers for

certain expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by a director or executive officer in any action or proceeding arising out of their services as one of our directors or executive officers or any other company or enterprise to which the person provides services at our request. We believe that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duties. They may also reduce the likelihood of derivative litigation against directors and officers, even though an action, if successful, might benefit us and our stockholders. A stockholder's investment may be harmed to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

Except as otherwise disclosed under the heading "Legal Proceedings" in the "Business" section of this prospectus, at present, there is no pending litigation or proceeding involving any of our directors or executive officers as to which indemnification is required or permitted, and we are not aware of any threatened litigation or proceeding that may result in a claim for indemnification.

**EXECUTIVE AND DIRECTOR COMPENSATION**

Our named executive officers for the year ended December 31, 2012, which consist of our principal executive officer and our two other most highly compensated executive officers, are:

- Bassil I. Dahiyat, Ph.D., our President and Chief Executive Officer;
- Edgardo Baracchini, Jr., Ph.D., our Chief Business Officer; and
- Paul Foster, M.D., our Chief Medical Officer.

**Summary Compensation Table**

<u>Name and principal position</u>	<u>Year</u>	<u>Salary (\$)</u>	<u>Option awards \$(1)</u>	<u>Non-equity incentive plan compensation \$(2)</u>	<u>All other compensation \$(3)</u>	<u>Total (\$)</u>
Bassil I. Dahiyat, Ph.D. <i>President and Chief Executive Officer</i>	2012	358,750	—	87,894	175	446,819
Edgardo Baracchini, Jr., Ph.D. <i>Chief Business Officer</i>	2012	286,103	—	66,877	175	353,155
Paul Foster, M.D.(4) <i>Chief Medical Officer</i>	2012	402,000	10,940	32,344	73	445,357

- (1) In accordance with SEC rules, this column reflects the aggregate grant date fair value of the option awards granted during 2012 computed in accordance with Financial Accounting Standard Board Accounting Standards Codification Topic 718 for stock-based compensation transactions (ASC 718). Assumptions used in the calculation of these amounts are included in Note 5 to our financial statements appearing elsewhere in this prospectus. These amounts do not reflect the actual economic value that will be realized by the named executive officer upon the vesting of the stock options, the exercise of the stock options, or the sale of the common stock underlying such stock options.
- (2) This column reflects the annual performance-based cash bonuses earned for 2012 which were paid in a lump sum cash payment in the first quarter of 2013. For more information, see below under "—Annual Performance-Based Bonus Opportunity."
- (3) This column reflects term life and disability insurance premiums paid by us on behalf of the named executive officers. All of these benefits are provided to the named executive officers on the same terms as provided to all of our regular full-time employees. For more information regarding these benefits, see below under "—Perquisites, Health, Welfare and Retirement Benefits."
- (4) Dr. Foster became our Chief Medical Officer on August 1, 2012 and prior to this time served as a consultant to us. The amount in the "Salary" column includes \$277,000 paid during 2012 for his consulting services prior to his commencement of employment with us and \$125,000 paid to Dr. Foster as base salary.

**Annual Base Salary**

The compensation of our named executive officers is generally determined and approved by our Board of Directors at the beginning of each year or, if later, in connection with the commencement of employment of the executive, based on the recommendation of the Compensation Committee. Our Board of Directors approved the following 2012 base salaries for our named executive officers, which

became effective after such approval in February 2012, except with respect to Dr. Foster, whose base salary became effective upon his commencement of employment with us on August 1, 2012.

<u>Name</u>	<u>2012 Base Salary (\$)</u>
Bassil I. Dahiyat, Ph.D.	358,750
Edgardo Baracchini, Jr., Ph.D.	286,103
Paul Foster, M.D.(1)	300,000

- (1) Prior to his commencement of employment on August 1, 2012, Dr. Foster performed consulting services to us pursuant to an Amended Consulting Agreement between Development and Strategic Consulting Associates, LLC and us described below under "—Agreements with our Named Executive Officers." We paid Development and Strategic Consulting Associates, LLC a total of \$277,000 in fees for Dr. Foster's consulting services during 2012.

In January 2013, based on the recommendation of the Compensation Committee, the Board of Directors approved an increase to Dr. Dahiyat's and Dr. Baracchini's annual base salaries to \$364,131 and \$290,395, respectively.

### **Annual Performance-Based Bonus Opportunity**

In addition to base salaries, our named executive officers are eligible to receive annual performance-based cash bonuses, which are designed to provide appropriate incentives to our executives to achieve defined annual corporate goals and to reward our executives for individual achievement towards these goals.

The annual performance-based bonus each named executive officer is eligible to receive is based on (1) the individual's target bonus, as a percentage of base salary, (2) the percentage attainment of the corporate goals established by the Board of Directors, after recommendation by the Compensation Committee for such year, and, with respect to our named executive officers other than Dr. Dahiyat, (3) the percentage attainment of the individual goals established by the Board of Directors, upon recommendation by the Compensation Committee and the Chief Executive Officer, for each named executive officer for such year. The actual performance-based bonus paid, if any, is calculated by multiplying the executive's annual base salary, target bonus percentage, percentage attainment of the corporate goals and percentage attainment of the individual goals, as applicable.

At the end of the year, the Board of Directors approves the extent to which we achieved our corporate goals, after recommendation by the Compensation Committee. The extent to which each executive achieves his individual goals is determined by our Board of Directors, based on the Compensation Committee's and our Chief Executive Officer's review and recommendation.

Corporate and individual goals are communicated to the named executive officers each year, prior to or shortly following the beginning of the year to which they relate or if later, in connection with the named executive officer's commencement of employment with us. The corporate goals are composed of several goals that relate to our annual corporate objectives and various business accomplishments which vary from time to time depending on our overall strategic objectives, but relate generally to business development, financial and research and development objectives. The individual goals are composed of factors that relate to each named executive officer's ability to drive his own performance and the performance of his direct employee reports towards reaching our corporate goals. The proportional emphasis placed on each goal within the corporate and individual goals may vary from time to time depending on our overall strategic objectives and the Board of Directors' subjective determination of which goals have more impact on our performance.

For 2012, the Board of Directors determined that each named executive officer's target bonus was 35% of base salary. Additionally, each named executive officer was eligible to receive up to an additional 35% of the named executive officer's target bonus in the event that we attained certain stretch corporate goals, resulting in a maximum overall potential bonus of up to 135% of each named

executive officer's target bonus if we achieved all of our corporate goals and stretch corporate goals in full. Dr. Dahiyat's 2012 bonus was entirely dependent upon corporate goals, whereas Drs. Baracchini's and Foster's bonuses were weighted 75% based on corporate goals and 25% based on individual goals. Dr. Foster's bonus was pro rated for the period of time during which he served as our employee in 2012.

The corporate goals and relative overall weighting towards corporate goal achievement for 2012 were (1) research and development progress (50%) (consisting of commencement of various clinical and pre-clinical development activities for our XmAb5871 and XmAb7195 antibodies and completion of research tasks for our Immune Inhibitor Fc Domain technology); (2) business development achievements (40%) (consisting of cash targets for revenue in new deals and in total for new and existing deals); and (3) financial objectives (10%) (consisting of maintaining our expenditures within budget and matching our year-end cash target). The stretch goals and the additional potential percentage of target bonus that could be earned with respect to such goals were licensing particular antibody-related intellectual property (15%) and exceeding a particular target in revenue in new deals (20%).

The individual goals for 2012 related to our corporate goals and varied by individual. Dr. Baracchini's individual goals related to his efforts towards our business development goal relating to cash revenue and Dr. Foster's individual goals related to his efforts towards our research and development goals, particularly enrollment of Phase 1b trial for our XmAb5871 antibody.

In early 2013, the Board of Directors considered each corporate goal in detail and upon recommendation by the Compensation Committee, determined that we had achieved 70% of the 2012 corporate goals (including corporate stretch goals). Specifically, we achieved the majority of our research and development goals for our XmAb5871 and XmAb7195 antibodies. We met our financial goal of maintaining expenditures within budget, but we did not meet our goal of matching our year-end cash target and we partially achieved our business development revenue goal. We achieved our stretch goal of licensing particular antibody-related intellectual property and we did not achieve our stretch goal relating to revenue.

As a result, in early 2013, the Board of Directors after recommendation by the Compensation Committee approved an overall corporate goal achievement of 70%. Accordingly, Dr. Dahiyat received a bonus of \$87,894. Based on Dr. Dahiyat's review and recommendation with respect to Dr. Baracchini and Dr. Foster, and the Compensation Committee's deliberations with respect to each named executive officer's individual performance against his individual goals, the Board of Directors approved performance-based bonus amounts of \$66,877 for Dr. Baracchini, in recognition of his efforts towards our revenue goal and \$32,344 for Dr. Foster, due to his efforts in the clinical development of our XmAb5871 antibody, which represented a pro-rated bonus for the period of time he provided services to us as an employee in 2012.

### **Equity-Based Incentive Awards**

Our equity-based incentive awards are designed to align our interests with those of our employees and consultants, including our named executive officers. The Board of Directors or the Compensation Committee is responsible for approving equity grants.

We use stock options as the primary incentive for long-term compensation to our named executive officers because they are able to profit from stock options only if our stock price increases relative to the stock option's exercise price. Although we may grant equity awards to our employees and consultants from time to time, we do not have a current practice of making annual equity grants to our executives. However, our executives generally are awarded an initial grant upon commencement of employment. Additional grants may occur periodically in order to specifically incentivize executives with respect to achieving certain corporate goals or to reward executives for exceptional performance.

Prior to this offering, we have granted all stock options pursuant to our 2010 Equity Incentive Plan (the 2010 plan) and our Amended and Restated 2000 Stock Incentive Plan (the 2000 plan). In 2010, we instituted an option exchange program under which each holder of an option under our 2000 plan elected to exchange that option for options under our 2010 plan covering the same number of shares with the same vesting schedule and exercise price per share equal to the fair market value of our common stock on the date of exchange. We may no longer grant stock options under our 2000 plan and there are no outstanding stock options outstanding under this plan. Following this offering, we will grant equity incentive awards under the terms of our 2013 Equity Incentive Plan. The terms of our equity plans are described below under "—Equity Benefit Plans."

All options are granted with an exercise price per share that is no less than the fair market value of our common stock on the date of grant of each award. Our stock option awards generally vest over a four-year period and may be subject to acceleration of vesting and exercisability under certain termination and change of control events.

On September 26, 2012, the Board of Directors granted an option to purchase 58,064 shares of common stock to Dr. Foster in connection with his commencement of employment with us, with an exercise price of \$0.59 per share. We did not grant stock options or other equity awards to any of our other named executive officers in 2012. In September 2013, we granted stock options to purchase 202,024, 62,393 and 19,778 shares to Drs. Dahiyat, Baracchini and Foster, respectively, each with an exercise price of \$4.25 per share. These options vest over a four-year period subject to each of the named executive officer's continued service with us.

#### **Agreements with our Named Executive Officers**

Below are written descriptions of our employment agreements, consulting agreements and offer letters with our named executive officers.

*Dr. Dahiyat.* We entered into a Second Amended and Restated Executive Employment Agreement with Dr. Dahiyat in January 2007 setting forth the terms of his employment. Pursuant to the agreement, Dr. Dahiyat is entitled to an initial annual base salary of \$350,000, subject to increase by the Board of Directors and subject to decrease by the Board of Directors upon certain circumstances. Dr. Dahiyat is eligible to receive an annual cash performance bonus up to 25% of his base salary based upon achievement of performance metrics. Pursuant to the agreement, Dr. Dahiyat was granted an option to purchase 282,451 shares of our common stock in January 2007 that vested over a four-year period subject to Dr. Dahiyat's continued service and an option to purchase 96,774 shares of our common stock in January 2007 that vested upon achievement of our annual performance bonus metrics over the following four years, of which 61,693 shares vested upon achievement of such metrics and 35,081 shares failed to vest and were forfeited. The agreement also forgave any unpaid interest due under promissory notes between Dr. Dahiyat and us. In September 2013, we entered into a Third Amended and Restated Executive Employment Agreement with Dr. Dahiyat that amends and restates his 2007 agreement described above. This agreement makes certain clarifications and updates in the law, including the tax code, and reflects Dr. Dahiyat's 2013 annual base salary of \$364,131 and annual target performance bonus of 35% of his base salary. Dr. Dahiyat is additionally entitled to certain severance and change of control benefits pursuant to his agreements, the terms of which are described below under "—Potential Payments Upon Termination or Change of Control." In September 2013, we agreed to forgive all outstanding promissory notes between Dr. Dahiyat and us, contingent and effective upon the filing of the registration statement for this offering.

*Dr. Baracchini.* In January 2010, we entered into an offer letter agreement with Dr. Baracchini setting forth the terms of his employment. Pursuant to the agreement, Dr. Baracchini is entitled to an initial annual base salary of \$275,000 and is eligible to receive an annual cash performance bonus up to 25% of his annual base salary based upon achievement of corporate and individual performance goals.

In addition, the offer letter agreement provides for an option to purchase 183,171 shares of our common stock that was granted in January 2010 and vests over a four-year period subject to Dr. Baracchini's continued service. Until July 2011, Dr. Baracchini also received \$2,000 per month for housing and transportation expenses. In September 2013, we entered into a letter agreement with Dr. Baracchini that amends and restates his 2010 letter agreement described above. This agreement makes certain clarifications and updates in the law, including the tax code, and reflects Dr. Baracchini's 2013 annual base salary of \$290,395 and annual target performance bonus of 35% of his base salary. Dr. Baracchini is entitled to certain severance and change of control benefits pursuant to his agreements, the terms of which are described below under "—Potential Payments Upon Termination or Change of Control."

*Dr. Foster.* In August 2012, we entered into an offer letter agreement with Dr. Foster setting forth the terms of his employment. Pursuant to the agreement, Dr. Foster provides services to us at a 75% of full-time basis, is entitled to an initial annual base salary of \$300,000 and is eligible to receive an annual performance bonus based upon achievement of corporate and individual performance goals. In addition, the offer letter agreement provides for an option to purchase 58,064 shares of our common stock that was granted in September 2012 and vests over a four-year period subject to Dr. Foster's continued service. In August 2013, we entered into a new letter agreement with Dr. Foster which provides that he provides services to us at a 90% of full-time basis at an annual base salary of \$360,000.

Prior to commencing employment with us, Dr. Foster performed consulting services pursuant to a consulting agreement between us and Development and Strategic Consulting Associates, LLC which became effective in January 2010 and was amended in January 2011. Under the amended consulting agreement, Development and Strategic Consulting Associates, LLC was paid a monthly rate of \$24,000 for Dr. Foster's services for approximately 60 hours of work relating to clinical trial management and clinical strategy commensurate with the level of a part-time Chief Medical Officer, in addition to reimbursement of out-of-pocket expenses related to these services.

#### **Potential Payments Upon Termination or Change of Control**

Regardless of the manner in which a named executive officer's service terminates, the named executive officer is entitled to receive amounts earned during his or her term of service, including salary and unused vacation pay.

*Dr. Dahiyat.* Pursuant to his Second Amended and Restated Executive Employment Agreement, if we terminate Dr. Dahiyat's employment without cause or if Dr. Dahiyat resigns for good reason at any time, he will be entitled to a pro rated annual performance bonus for the year of termination. In addition, if Dr. Dahiyat's termination without cause or resignation for good reason occurs within 13 months following a "change of control," subject to his execution of an effective release and waiver of claims in favor of us, Dr. Dahiyat will receive a lump sum severance payment equal to 12 months of his base salary in effect at the time of termination (calculated with respect to no less than a \$350,000 annual base salary rate) and payment for continued health benefits under COBRA for 12 months.

For purposes of Dr. Dahiyat's employment agreement:

- "cause" generally means his (i) indictment or conviction of any felony or crime involving moral turpitude or dishonesty; (ii) participation in any fraud against us; (iii) material breach of his duties to us, including persistent unsatisfactory performance or habitual neglect of job duties; (iv) refusal to follow our lawful written directions or material failure to perform his duties other than due to his physical or mental disability; or (v) material breach of our written policies or his Proprietary Information and Inventions Agreement with us.
- "change of control" generally means (i) any sale, merger, consolidation, tender offer or similar acquisition of shares or other transaction or series of related transaction which results in a



change in the majority of our voting power; (ii) a sale or other disposition of all or a substantial part of our assets; or (iii) a change in the majority of our incumbent board.

- "good reason" generally means Dr. Dahiyat's resignation within three months of any of the following actions taken with respect to Dr. Dahiyat without his express written consent (i) assignment of any duties or responsibilities which result in any material diminution of or material change that is adverse to his position, status or circumstances of employment; (ii) a reduction in his base salary; (iii) any action which would adversely affect his participation in, or reduce his benefits under our benefit plans; (iv) a relocation to a location more than 200 miles from our Monrovia, California location; (v) any breach by us of any material provision of his employment agreement; or (vi) any failure by us to obtain the assumption of his employment agreement by any successor or assign of us.

Pursuant to his Third Amended and Restated Executive Employment Agreement that became effective in September 2013, if we terminate Dr. Dahiyat's employment without cause or if Dr. Dahiyat resigns for good reason at any time, subject to his execution of an effective release and waiver of claims in favor of us, Dr. Dahiyat will receive (1) a lump sum severance payment equal to 12 months of his base salary in effect at the time of termination (calculated with respect to no less than a \$364,131 annual base salary rate), (2) payment for continued health benefits under COBRA for 12 months, (3) a pro rated target bonus and (4) accelerated vesting of all of his outstanding stock options and other equity awards subject to time-based vesting as if Dr. Dahiyat had completed an additional 12 months of service. If Dr. Dahiyat's termination without cause or resignation for good reason occurs within one month before or 13 months following a change of control, subject to his execution of an effective release and waiver of claims in favor of us, Dr. Dahiyat will receive the benefits described above, except that his target bonus will not be pro rated and he will receive full acceleration of all of his outstanding stock options and other equity awards subject to time-based vesting. For purposes of Dr. Dahiyat's Third Amended and Restated Executive Employment Agreement, "cause" and "change of control" generally have the same meanings as set forth in his Second Amended and Restated Executive Employment Agreement and "good reason" generally means Dr. Dahiyat's resignation within 15 days after providing us with notice and the opportunity to cure any of the following actions taken with respect to Dr. Dahiyat without his express written consent: (i) a material diminution or material adverse change to his authority, duties or responsibilities; (ii) a material diminution in the authority, duties or responsibilities of his supervisor; (iii) a material reduction in his annual base salary; (iv) a relocation of his principal office to a location that increases his one-way commute by more than 40 miles; or (v) any breach of any material provision of his Third Amended and Restated Executive Employment Agreement.

*Dr. Baracchini.* Pursuant to his offer letter agreement, if we terminate Dr. Baracchini's employment without cause or if Dr. Baracchini resigns for good reason, in each case prior to or more than 12 months following a "change of control," subject to his execution of an effective release and waiver of claims in favor of us, Dr. Baracchini will receive (1) a lump sum severance payment equal to the sum of (a) 75% of his then-current annual base salary and (b) the arithmetic mean of his annual bonuses for the three full completed years prior to the date of termination, pro rated for the number of days Dr. Baracchini worked during the year of his termination and (2) vesting acceleration of his outstanding stock options and restricted stock to the extent such options or restricted stock would have vested during the nine months following his termination. In the event that Dr. Baracchini's termination without cause or resignation for good reason occurs within a "change of control period," defined as the period beginning on the execution of a definitive written agreement that if consummated would result in a change of control and ending on the earlier of the termination of such agreement or 12 months following the consummation of such change of control, subject to his execution of an effective release and waiver of claims in favor of us, Dr. Baracchini will receive (1) a lump sum severance payment equal to the sum of (a) 125% of his then-current annual base salary and (b) the arithmetic mean of his

annual bonuses for the three full completed years prior to the date of termination, pro rated for the number of days Dr. Baracchini worked during the year of his termination and (2) vesting acceleration in full of his outstanding stock options and restricted stock.

For purposes of Dr. Baracchini's offer letter agreement:

- "cause" generally means his (i) gross negligence or willful misconduct in performing his duties; (ii) material and willful violation of any federal or state law or regulation applicable to our business; (iii) significant or material refusal or failure to act in accordance with any lawful specific direction or order of our Board of Directors; (iv) commission or any act of fraud with respect to us; (v) breach of any material provision of his Proprietary Information and Inventions Agreement with us; (vi) conviction or entry of plea of nolo contendere to a felony or a crime involving moral turpitude.
- "change of control" generally means (i) a sale or other disposition of all or substantially all of our assets; (ii) a merger or consolidation in which we are not the surviving entity and in which our stockholders cease to own 50% of the voting power of the surviving entity; (iii) a reverse merger in which we are the surviving entity but our stockholders cease to own 50% of our voting power; (iv) an acquisition by any person, entity or group of beneficial ownership of more than 50% of our combined voting power.
- "good reason" generally means Dr. Baracchini's resignation following certain notice and cure periods due to any of the following actions taken with respect to Dr. Baracchini without his consent (i) a material reduction in his authority or job responsibilities, accompanied by a change in title; (ii) a material reduction in his combined annual base salary and non-cash benefits; (iii) a relocation of our executive offices by 50 miles that requires an increase in his one-way driving distance by more than 25 miles.

Pursuant to his letter agreement that became effective in September 2013, Dr. Baracchini receives substantially the same severance benefits as under his 2010 letter agreement described above, except that the vesting acceleration benefits apply to all outstanding stock options and equity awards held by Dr. Baracchini that are subject to time-based vesting.

Dr. Foster is not entitled to any severance or change of control benefits under the terms of his offer letter agreements or his prior consulting agreement.

Each of our named executive officers holds stock options under our equity incentive plans that were granted subject to our form of stock option agreements. A description of the termination and change of control provisions in such equity incentive plans and form of stock option agreements is provided below under "—Equity Benefit Plans."

Each of our named executive officers was eligible to participate in a retention bonus plan that provided for certain payments in connection with a change of control. The retention bonus plan and all eligibility for benefits under this plan terminated on December 31, 2012.

**Outstanding Equity Awards at Fiscal Year-End**

The following table sets forth certain information regarding equity awards granted to our named executive officers that remain outstanding as of December 31, 2012.

	Grant Date	Option Awards(1)		Option Exercise Price (\$)(2)	Option Expiration Date
		Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#)		
Bassil I. Dahiyat, Ph.D.	7/28/2010	282,451(3)	—	\$ 0.59	12/31/2016
	7/28/2010	249,914(4)	—	\$ 0.59	6/8/2015
	7/28/2010	61,693(3)(5)	—	\$ 0.59	12/31/2016
Edgardo Baracchini, Jr., Ph.D.	1/18/2010	133,562	49,609(6)	\$ 0.59	1/17/2020
Paul Foster, M.D.	9/26/2012	—	58,064(7)	\$ 0.59	9/25/2022

- (1) All of the outstanding option awards were granted under and subject to the terms of the 2010 plan, described below under "—Equity Benefit Plans." Except as otherwise indicated, each option award becomes exercisable as it becomes vested and all vesting is subject to the executive's continuous service with us through the vesting dates and the potential vesting acceleration described above under "—Potential Payments Upon Termination or Change of Control."
- (2) All of the option awards were granted with a per share exercise price equal to the fair market value of one share of our common stock on the date of grant, as determined in good faith by our Board of Directors.
- (3) This option was originally granted on January 1, 2007 and was subject to our option exchange program in 2010 described above under "—Equity-Based Incentive Awards."
- (4) This option was originally granted on June 9, 2005 and was subject to our option exchange program in 2010 described above under "—Equity-Based Incentive Awards."
- (5) This option originally covered 96,774 shares and vested based upon the achievement of certain performance objectives over a four-year period. 35,081 shares underlying this option failed to vest and were cancelled upon failure to achieve such objectives.
- (6) 45,793 shares vested and became exercisable on January 12, 2011 and 3,816 shares vest and become exercisable on the 12<sup>th</sup> day of each month commencing thereafter and ending on January 12, 2014.
- (7) 14,516 shares vest and become exercisable on August 1, 2013 and 1,210 shares vest and become exercisable on the 1<sup>st</sup> day of each month commencing thereafter and ending on August 1, 2016.

**Option Exercises and Stock Vested**

Our named executive officers did not exercise any stock option awards during the fiscal year ended December 31, 2012.

**Option Repricings**

We did not engage in any repricings or other modifications or cancellations to any of our named executive officers' outstanding equity awards during the year ended December 31, 2012. We engaged in an option exchange program in 2010 described above under "—Equity-Based Incentive Awards."

**Perquisites, Health, Welfare and Retirement Benefits**

Our named executive officers are eligible to participate in our employee benefit plans, including our medical, dental, vision, group life, disability and accidental death and dismemberment insurance plans, in each case on the same basis as all of our other employees. We provide a 401(k) plan to our employees, including our named executive officers, as discussed in the section below entitled "—401(k) Plan."

We do not provide perquisites or personal benefits to our named executive officers. We do, however, pay the premiums for term life insurance and disability insurance for all of our employees, including our named executive officers. Our Board of Directors may elect to adopt qualified or non-qualified benefit plans in the future if it determines that doing so is in our best interests.

#### **401(k) Plan**

We maintain a defined contribution employee retirement plan (401(k) plan) for our employees. Our named executive officers are eligible to participate in the 401(k) plan on the same basis as our other employees. The 401(k) plan is intended to qualify as a tax-qualified plan under Section 401(k) of the Internal Revenue Code. The 401(k) plan provides that each participant may contribute up to the lesser of 100% of his or her compensation or the statutory limit, which was \$17,000 for calendar year 2012. Participants that are 50 years or older can also make "catch-up" contributions, which in calendar year 2012 was up to an additional \$5,500 above the statutory limit. We currently do not make matching contributions into the 401(k) plan on behalf of participants. Participant contributions are held and invested, pursuant to the participant's instructions, by the plan's trustee.

#### **Nonqualified Deferred Compensation**

None of our named executive officers participate in or have account balances in nonqualified defined contribution plans or other nonqualified deferred compensation plans maintained by us. Our Board of Directors may elect to provide our officers and other employees with non-qualified defined contribution or other nonqualified deferred compensation benefits in the future if it determines that doing so is in our best interests.

#### **Equity Benefit Plans**

##### ***2013 Equity Incentive Plan***

Our Board of Directors adopted the 2013 plan in November 2013, and we expect our stockholders will approve the 2013 plan prior to this offering and that the 2013 plan will become effective as of the date of the effectiveness of the registration statement of which this prospectus is a part. Once the 2013 plan is effective, no further grants will be made under the 2010 plan.

*Stock Awards.* The 2013 plan provides for the grant of incentive stock options (ISOs), nonstatutory stock options (NSOs), stock appreciation rights, restricted stock awards, restricted stock unit awards, performance-based stock awards, and other forms of equity compensation (collectively, stock awards), all of which may be granted to employees, including officers, non-employee directors and consultants of us and our affiliates. Additionally, the 2013 plan provides for the grant of performance cash awards. ISOs may be granted only to employees. All other awards may be granted to employees, including officers, and to non-employee directors and consultants.

*Share Reserve.* Initially, the aggregate number of shares of our common stock that may be issued pursuant to stock awards under the 2013 plan after the 2013 plan becomes effective will not exceed 4,194,133 shares, which includes (i) 1,509,677 new shares, (ii) the number of shares reserved for future grant under our 2010 plan at the time our 2013 plan becomes effective, plus (iii) any shares subject to outstanding stock options or other stock awards that were granted under our 2010 plan and that are forfeited, terminate, expire or are otherwise not issued. Additionally, the number of shares of our common stock reserved for issuance under our 2013 plan will automatically increase on January 1 of each year, beginning on January 1, 2014 (assuming the 2013 plan becomes effective before such date) and continuing through and including January 1, 2023, by 4% of the total number of shares of our capital stock outstanding on December 31 of the preceding calendar year, or a lesser number of shares determined by our Board of Directors. The maximum number of shares that may be issued upon the exercise of ISOs under our 2013 plan is 8,388,266 shares.

No person may be granted stock awards covering more than 2,000,000 shares of our common stock under our 2013 plan during any calendar year pursuant to stock options, stock appreciation rights and other stock awards whose value is determined by reference to an increase over an exercise or strike price of at least 100% of the fair market value on the date the stock award is granted. Additionally, no person may be granted in a calendar year a performance stock award covering more than 2,000,000 shares or a performance cash award having a maximum value in excess of \$3,000,000. Such limitations are designed to help assure that any deductions to which we would otherwise be entitled with respect to such awards will not be subject to the \$1,000,000 limitation on the income tax deductibility of compensation paid to any covered executive officer imposed by Section 162(m) of the Code.

If a stock award granted under the 2013 plan expires or otherwise terminates without being exercised in full, or is settled in cash, the shares of our common stock not acquired pursuant to the stock award again will become available for subsequent issuance under the 2013 plan. In addition, the following types of shares under the 2013 plan may become available for the grant of new stock awards under the 2013 plan: (1) shares that are forfeited to or repurchased by us prior to becoming fully vested; (2) shares withheld to satisfy income or employment withholding taxes; or (3) shares used to pay the exercise or purchase price of a stock award. Shares issued under the 2013 plan may be previously unissued shares or reacquired shares bought by us on the open market. As of the date hereof, no awards have been granted and no shares of our common stock have been issued under the 2013 plan.

*Administration.* Our Board of Directors, or a duly authorized committee thereof, has the authority to administer the 2013 plan. Our Board of Directors may also delegate to one or more of our officers the authority to (1) designate employees (other than other officers) to be recipients of certain stock awards, and (2) determine the number of shares of common stock to be subject to such stock awards. Subject to the terms of the 2013 plan, our Board of Directors or the authorized committee, referred to herein as the plan administrator, determines recipients, dates of grant, the numbers and types of stock awards to be granted and the terms and conditions of the stock awards, including the period of their exercisability and vesting schedule applicable to a stock award. Subject to the limitations set forth below, the plan administrator will also determine the exercise price, strike price or purchase price of awards granted and the types of consideration to be paid for the award.

The plan administrator has the authority to modify outstanding awards under our 2013 plan. Subject to the terms of our 2013 plan, the plan administrator has the authority to reduce the exercise, purchase or strike price of any outstanding stock award, cancel any outstanding stock award in exchange for new stock awards, cash or other consideration, or take any other action that is treated as a repricing under generally accepted accounting principles, with the consent of any adversely affected participant.

*Stock Options.* ISOs and NSOs are granted pursuant to stock option agreements adopted by the plan administrator. The plan administrator determines the exercise price for a stock option, within the terms and conditions of the 2013 plan, provided that the exercise price of a stock option generally cannot be less than 100% of the fair market value of our common stock on the date of grant. Options granted under the 2013 plan vest at the rate specified by the plan administrator.

The plan administrator determines the term of stock options granted under the 2013 plan, up to a maximum of 10 years. Unless the terms of an option holder's stock option agreement provide otherwise, if an option holder's service relationship with us, or any of our affiliates, ceases for any reason other than disability, death or cause, the option holder may generally exercise any vested options for a period of three months following the cessation of service. The option term may be extended in the event that exercise of the option following such a termination of service is prohibited by applicable securities laws or our insider trading policy. If an optionholder's service relationship with us or any of our affiliates ceases due to disability or death, or an optionholder dies within a certain

period following cessation of service, the optionholder or a beneficiary may generally exercise any vested options for a period of 12 months in the event of disability and 18 months in the event of death. In the event of a termination for cause, options generally terminate immediately upon the termination of the individual for cause. In no event may an option be exercised beyond the expiration of its term.

Acceptable consideration for the purchase of common stock issued upon the exercise of a stock option will be determined by the plan administrator and may include (1) cash, check, bank draft or money order, (2) a broker-assisted cashless exercise, (3) the tender of shares of our common stock previously owned by the optionholder, (4) a net exercise of the option if it is an NSO, and (5) other legal consideration approved by the plan administrator.

Unless the plan administrator provides otherwise, options generally are not transferable except by will, the laws of descent and distribution, or pursuant to a domestic relations order. An optionholder may designate a beneficiary, however, who may exercise the option following the optionholder's death.

*Tax Limitations On Incentive Stock Options.* The aggregate fair market value, determined at the time of grant, of our common stock with respect to ISOs that are exercisable for the first time by an optionholder during any calendar year under all of our stock plans may not exceed \$100,000. Options or portions thereof that exceed such limit will generally be treated as NSOs. No ISO may be granted to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power or that of any of our affiliates unless (1) the option exercise price is at least 110% of the fair market value of the stock subject to the option on the date of grant, and (2) the term of the ISO does not exceed five years from the date of grant.

*Restricted Stock Awards.* Restricted stock awards are granted pursuant to restricted stock award agreements adopted by the plan administrator. Restricted stock awards may be granted in consideration for (1) cash, check, bank draft or money order, (2) services rendered to us or our affiliates, or (3) any other form of legal consideration. Common stock acquired under a restricted stock award may, but need not, be subject to a share repurchase option in our favor in accordance with a vesting schedule to be determined by the plan administrator. A restricted stock award may be transferred only upon such terms and conditions as set by the plan administrator. Except as otherwise provided in the applicable award agreement, restricted stock awards that have not vested will be forfeited upon the participant's cessation of continuous service for any reason.

*Restricted Stock Unit Awards.* Restricted stock unit awards are granted pursuant to restricted stock unit award agreements adopted by the plan administrator. Restricted stock unit awards may be granted in consideration for any form of legal consideration. A restricted stock unit award may be settled by cash, delivery of stock, a combination of cash and stock as deemed appropriate by the plan administrator, or in any other form of consideration set forth in the restricted stock unit award agreement. Additionally, dividend equivalents may be credited in respect of shares covered by a restricted stock unit award. Except as otherwise provided in the applicable award agreement, restricted stock units that have not vested will be forfeited upon the participant's cessation of continuous service for any reason.

*Stock Appreciation Rights.* Stock appreciation rights are granted pursuant to stock appreciation grant agreements adopted by the plan administrator. The plan administrator determines the strike price for a stock appreciation right, which generally cannot be less than 100% of the fair market value of our common stock on the date of grant. Upon the exercise of a stock appreciation right, we will pay the participant an amount equal to the product of (1) the excess of the per share fair market value of our common stock on the date of exercise over the strike price, multiplied by (2) the number of shares of common stock with respect to which the stock appreciation right is exercised. A stock appreciation right granted under the 2013 plan vests at the rate specified in the stock appreciation right agreement as determined by the plan administrator.

The plan administrator determines the term of stock appreciation rights granted under the 2013 plan, up to a maximum of ten years. Unless the terms of a participant's stock appreciation right agreement provides otherwise, if a participant's service relationship with us or any of our affiliates ceases for any reason other than cause, disability or death, the participant may generally exercise any vested stock appreciation right for a period of three months following the cessation of service. The stock appreciation right term may be further extended in the event that exercise of the stock appreciation right following such a termination of service is prohibited by applicable securities laws. If a participant's service relationship with us, or any of our affiliates, ceases due to disability or death, or a participant dies within a certain period following cessation of service, the participant or a beneficiary may generally exercise any vested stock appreciation right for a period of 12 months in the event of disability and 18 months in the event of death. In the event of a termination for cause, stock appreciation rights generally terminate immediately upon the occurrence of the event giving rise to the termination of the individual for cause. In no event may a stock appreciation right be exercised beyond the expiration of its term.

*Performance Awards.* The 2013 plan permits the grant of performance-based stock and cash awards that may qualify as performance-based compensation that is not subject to the \$1,000,000 limitation on the income tax deductibility of compensation paid to a covered executive officer imposed by Section 162(m) of the Code. To help assure that the compensation attributable to performance-based awards will so qualify, our Compensation Committee can structure such awards so that stock or cash will be issued or paid pursuant to such award only after the achievement of certain pre-established performance goals during a designated performance period.

The performance goals that may be selected include one or more of the following: (1) earnings (including earnings per share and net earnings); (2) earnings before interest, taxes and depreciation; (3) earnings before interest, taxes, depreciation and amortization; (4) earnings before interest, taxes, depreciation, amortization and legal settlements; (5) earnings before interest, taxes, depreciation, amortization, legal settlements and other income (expense); (6) earnings before interest, taxes, depreciation, amortization, legal settlements, other income (expense) and stock-based compensation; (7) earnings before interest, taxes, depreciation, amortization, legal settlements, other income (expense), stock-based compensation and changes in deferred revenue; (8) total stockholder return; (9) return on equity or average stockholder's equity; (10) return on assets, investment, or capital employed; (11) stock price; (12) margin (including gross margin); (13) income (before or after taxes); (14) operating income; (15) operating income after taxes; (16) pre-tax profit; (17) operating cash flow; (18) sales or revenue targets; (19) increases in revenue or product revenue; (20) expenses and cost reduction goals; (21) improvement in or attainment of working capital levels; (22) economic value added (or an equivalent metric); (23) market share; (24) cash flow; (25) cash flow per share; (26) share price performance; (27) debt reduction; (28) implementation or completion of projects or processes; (29) user satisfaction; (30) stockholders' equity; (31) capital expenditures; (32) debt levels; (33) operating profit or net operating profit; (34) workforce diversity; (35) growth of net income or operating income; (36) billings; (37) bookings; (38) the number of users, including but not limited to unique users; (39) employee retention; (40) initiation of phases of clinical trials and/or studies by specific dates; (41) patient enrollment rates; (42) budget management; (43) submission to, or approval by, a regulatory body (including, but not limited to the U.S. Food and Drug Administration) of an applicable filing or a product candidate; (44) implementation or completion of projects or processes (including, without limitation, clinical trial initiation, clinical trial enrollment, clinical trial results, new and supplemental indications for existing products, regulatory filing submissions, regulatory filing acceptances, regulatory or advisory committee interactions, regulatory approvals, and product supply); (45) regulatory milestones; (46) progress of internal research or clinical programs; (47) progress of partnered programs; (48) implementation or completion of projects and processes; (49) partner satisfaction; (50) timely completion of clinical trials; (51) submission of INDs and NDAs and other regulatory achievements; (52) research progress, including the development of programs; (53) strategic

partnerships or transactions (including in-licensing and out-licensing of intellectual property; and (54) to the extent that an award is not intended to comply with Section 162(m) of the Code, other measures of performance selected by our Board of Directors.

The performance goals may be based on a company-wide basis, with respect to one or more business units, divisions, affiliates, or business segments, and in either absolute terms or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise (i) in the award agreement at the time the award is granted or (ii) in such other document setting forth the performance goals at the time the goals are established, we will appropriately make adjustments in the method of calculating the attainment of performance goals as follows: (1) to exclude restructuring and/or other nonrecurring charges; (2) to exclude exchange rate effects, as applicable, for non-U.S. dollar denominated goals; (3) to exclude the effects of changes to generally accepted accounting principles; (4) to exclude the effects of any statutory adjustments to corporate tax rates; (5) to exclude the effects of any "extraordinary items" as determined under generally accepted accounting principles; (6) to exclude the dilutive effects of acquisitions or joint ventures; (7) to assume that any business divested by us achieved performance objectives at targeted levels during the balance of a performance period following such divestiture; (8) to exclude the effect of any change in the outstanding shares of our common stock by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (9) to exclude the effects of stock based compensation and the award of bonuses under our bonus plans; (10) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under generally accepted accounting principles; (11) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles; (12) to exclude the effect of any other unusual, non-recurring gain or loss or other extraordinary item; and (13) to exclude the effects of the timing of acceptance for review and/or approval of submissions to the Food and Drug Administration or any other regulatory body. In addition, we retain the discretion to reduce or eliminate the compensation or economic benefit due upon attainment of the goals. The performance goals may differ from participant to participant and from award to award.

*Other Stock Awards.* The plan administrator may grant other awards based in whole or in part by reference to our common stock. The plan administrator will set the number of shares under the stock award and all other terms and conditions of such awards.

*Changes to Capital Structure.* In the event that there is a specified type of change in our capital structure, such as a stock split or recapitalization, appropriate adjustments will be made to (a) the class and maximum number of shares reserved for issuance under the 2013 plan, (b) the class and maximum number of shares by which the share reserve may increase automatically each year, (c) the class and maximum number of shares that may be issued upon the exercise of ISOs, (d) the class and maximum number of shares subject to stock awards that can be granted in a calendar year (as established under the 2013 plan pursuant to Section 162(m) of the Code) and (e) the class and number of shares and exercise price, strike price, or purchase price, if applicable, of all outstanding stock awards.

*Corporate Transactions.* In the event of certain specified significant corporate transactions, the plan administrator has the discretion to take any of the following actions with respect to stock awards:

- arrange for the assumption, continuation or substitution of a stock award by a surviving or acquiring entity or parent company;
- arrange for the assignment of any reacquisition or repurchase rights held by us to the surviving or acquiring entity or parent company;



- accelerate the vesting of the stock award and provide for its termination prior to the effective time of the corporate transaction;
- arrange for the lapse of any reacquisition or repurchase right held by us;
- cancel or arrange for the cancellation of the stock award in exchange for such cash consideration, if any, as our Board of Directors may deem appropriate; or
- make a payment equal to the excess of (a) the value of the property the participant would have received upon exercise of the stock award over (b) the exercise price otherwise payable in connection with the stock award.

Our plan administrator is not obligated to treat all stock awards, even those that are of the same type, in the same manner.

Under the 2013 plan, a corporate transaction is generally the consummation of (i) a sale or other disposition of all or substantially all of our consolidated assets, (ii) a sale or other disposition of at least 90% of our outstanding securities, (iii) a merger, consolidation or similar transaction following which we are not the surviving corporation, or (iv) a merger, consolidation or similar transaction following which we are the surviving corporation but the shares of our common stock outstanding immediately prior to such transaction are converted or exchanged into other property by virtue of the transaction.

*Change of Control.* The plan administrator may provide, in an individual award agreement or in any other written agreement between a participant and us that the stock award will be subject to additional acceleration of vesting and exercisability in the event of a change of control. Under the 2013 plan, a change of control is generally (i) the acquisition by a person or entity of more than 50% of our combined voting power other than by merger, consolidation or similar transaction; (ii) a consummated merger, consolidation or similar transaction immediately after which our stockholders cease to own more than 50% of the combined voting power of the surviving entity; or (iii) a consummated sale, lease or exclusive license or other disposition of all or substantially of our consolidated assets.

*Amendment and Termination.* Our Board of Directors has the authority to amend, suspend, or terminate our 2013 plan, provided that such action does not materially impair the existing rights of any participant without such participant's written consent. No ISOs may be granted after the tenth anniversary of the date our Board of Directors adopted our 2013 plan.

### **2010 Equity Incentive Plan**

Our Board of Directors and our stockholders approved our 2010 plan and it became effective in February 2010 and was subsequently amended by our Board of Directors and stockholders in June 2013. Our 2010 plan is a continuation of and successor to our 2000 plan and after our 2010 plan became effective, no further stock awards may be granted under our 2000 plan. As of September 30, 2013, there were 880,771 shares remaining available for the grant of stock awards under our 2010 plan and there were outstanding stock options covering a total of 1,803,685 shares that were granted under our 2010 plan. There were no outstanding stock awards under our 2000 plan as of September 30, 2013.

After the effective date of the 2013 plan, no additional awards will be granted under the 2010 plan, and all awards granted under the 2010 plan that are repurchased, forfeited, expire or are cancelled will become available for grant under the 2013 plan in accordance with its terms.

*Stock awards.* The 2010 plan provides for the grant of ISO, NSOs, stock appreciation rights, restricted stock awards and restricted stock unit awards (collectively, stock awards), all of which may be granted to employees, including officers, non-employee directors and consultants of us and our affiliates. ISOs may be granted only to employees. All other awards may be granted to employees,

including officers, and to non-employee directors and consultants. We have only granted stock options under the 2010 plan.

*Share Reserve.* The aggregate number of shares of our common stock reserved for issuance pursuant to stock awards under the 2010 plan is 2,684,506, which includes any shares subject to stock options or other stock awards granted under our 2000 plan that expire or terminate for any reason, are forfeited or repurchased by us or are reacquired, withheld or not issued to satisfy a tax withholding obligation. The maximum number of shares that may be issued upon the exercise of ISOs under our 2010 plan was 3,017,389 shares.

If a stock award granted under the 2010 plan is forfeited back to us because of the failure to meet a contingency or condition required to vest, such shares will become available for subsequent issuance under the 2010 plan. In addition, shares withheld to satisfy income or employment withholding taxes and shares used to pay the exercise price of a stock option will become available for the grant of new stock awards under the 2010 plan. Shares issued under the 2010 plan may be previously unissued shares or reacquired shares bought by us on the open market.

*Administration.* Our Board of Directors, or a duly authorized committee thereof, has the authority to administer the 2010 plan. Our Board of Directors may also delegate to one or more of our officers the authority to (1) designate employees (other than other officers) to be recipients of certain stock awards, and (2) determine the number of shares of common stock to be subject to such stock awards. Subject to the terms of the 2010 plan, our Board of Directors or the authorized committee, referred to herein as the plan administrator, determines recipients, dates of grant, the numbers and types of stock awards to be granted and the terms and conditions of the stock awards, including the period of their exercisability and vesting schedule applicable to a stock award. Subject to the limitations set forth below, the plan administrator will also determine the exercise price, strike price or purchase price of awards granted and the types of consideration to be paid for the award.

The plan administrator has the authority to modify outstanding awards under our 2010 plan. Subject to the terms of our 2010 plan, the plan administrator has the authority to reduce the exercise, purchase or strike price of any outstanding stock award, cancel any outstanding stock award in exchange for new stock awards, cash or other consideration, or take any other action that is treated as a repricing under generally accepted accounting principles, with the consent of any adversely affected participant.

*Stock Options.* Incentive and nonstatutory stock options are granted pursuant to stock option agreements adopted by the plan administrator. The plan administrator determines the exercise price for a stock option, within the terms and conditions of the 2010 plan, provided that the exercise price of a stock option generally cannot be less than 100% of the fair market value of our common stock on the date of grant. Options granted under the 2010 plan vest at the rate specified by the plan administrator.

The plan administrator determines the term of stock options granted under the 2010 plan, up to a maximum of 10 years. Unless the terms of an option holder's stock option agreement provide otherwise, if an option holder's service relationship with us, or any of our affiliates, ceases for any reason other than disability, death or cause, the option holder may generally exercise any vested options for a period of three months following the cessation of service. The option term may be extended in the event that exercise of the option following such a termination of service is prohibited by applicable securities laws or our insider trading policy. If an optionholder's service relationship with us or any of our affiliates ceases due to disability or death, or an optionholder dies within a certain period following cessation of service, the optionholder or a beneficiary may generally exercise any vested options for a period of 12 months in the event of disability and 18 months in the event of death. In the event of a termination for cause, options generally terminate immediately upon the termination of the individual for cause. In no event may an option be exercised beyond the expiration of its term.

Acceptable consideration for the purchase of common stock issued upon the exercise of a stock option will be determined by the plan administrator and may include (1) cash, check, bank draft or money order, (2) a broker-assisted cashless exercise, (3) the tender of shares of our common stock previously owned by the optionholder, (4) a net exercise of the option if it is an NSO, and (5) other legal consideration approved by the plan administrator.

Unless the plan administrator provides otherwise, options generally are not transferable except by will, the laws of descent and distribution, or pursuant to a domestic relations order. An optionholder may designate a beneficiary, however, who may exercise the option following the optionholder's death.

*Tax Limitations On Incentive Stock Options.* The aggregate fair market value, determined at the time of grant, of our common stock with respect to ISOs that are exercisable for the first time by an optionholder during any calendar year under all of our stock plans may not exceed \$100,000. Options or portions thereof that exceed such limit will generally be treated as NSOs. No ISO may be granted to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power or that of any of our affiliates unless (1) the option exercise price is at least 110% of the fair market value of the stock subject to the option on the date of grant, and (2) the option is not exercisable after the expiration of five years from the date of grant.

*Changes to Capital Structure.* In the event that there is a specified type of change in our capital structure, such as a stock split or recapitalization, appropriate adjustments will be made to (a) the class and maximum number of shares reserved for issuance under the 2010 plan, (b) the class and maximum number of shares that may be issued upon the exercise of ISOs, and (c) the class and number of shares and price per share of stock subject to all outstanding stock awards.

*Corporate Transactions.* In the event of certain specified significant corporate transactions, unless otherwise provided in a stock award or other written agreement between us and the holder of a stock award, the plan administrator has the discretion to take any of the following actions with respect to stock awards:

- arrange for the assumption, continuation or substitution of a stock award by a surviving or acquiring entity or parent company;
- arrange for the assignment of any reacquisition or repurchase rights held by us to the surviving or acquiring entity or parent company;
- accelerate the vesting of the stock award and provide for its termination at or prior to the effective time of the corporate transaction;
- arrange for the lapse of any reacquisition or repurchase right held by us;
- cancel or arrange for the cancellation of the stock award, to the extent not vested or not exercised prior to the effective time of the corporate transaction, in exchange for such cash consideration, if any, as our Board of Directors may deem appropriate; or
- make a payment equal to the excess of (a) the value of the property the participant would have received upon exercise of the stock award over (b) the exercise price otherwise payable in connection with the stock award.

Our plan administrator is not obligated to treat all stock awards, even those that are of the same type, in the same manner.

Under the 2010 plan, a corporate transaction is generally the consummation of (i) a sale or other disposition of all or substantially all of our consolidated assets, (ii) a sale or other disposition of at least 90% of our outstanding securities, (iii) a merger, consolidation or similar transaction following which we are not the surviving corporation, or (iv) a merger, consolidation or similar transaction following

which we are the surviving corporation but the shares of our common stock outstanding immediately prior to such transaction are converted or exchanged into other property by virtue of the transaction.

*Change of Control.* The plan administrator may provide, in an individual award agreement or in any other written agreement between a participant and us that the stock award will be subject to additional acceleration of vesting and exercisability in the event of a change of control. Under the 2010 plan, a change of control is generally (i) the acquisition by a person or entity of more than 50% of our combined voting power other than by merger, consolidation or similar transaction; (ii) a consummated merger, consolidation or similar transaction immediately after which our stockholders cease to own more than 50% of the combined voting power of the surviving entity or of its parent entity; (iii) approval by the stockholders or our Board of Directors of a plan of complete dissolution or liquidation of us; or (iv) a consummated sale, lease or exclusive license or other disposition of all or substantially of our consolidated assets.

*Amendment and Termination.* The 2010 plan will terminate on February 17, 2020. However, our Board of Directors has the authority to amend, suspend, or terminate our 2010 plan, provided that such action does not materially impair the existing rights of any participant without such participant's written consent.

### **2013 Employee Stock Purchase Plan**

Our Board of Directors adopted the 2013 Employee Stock Purchase Plan (the ESPP) in November 2013 and we expect our stockholders will approve the ESPP prior to the execution and delivery of the underwriting agreement for this offering. The ESPP will become effective as of the date of the effectiveness of the registration statement of which this prospectus is a part. The purpose of the ESPP is to retain the services of new employees and secure the services of new and existing employees while providing incentives for such individuals to exert maximum efforts toward our success and that of our affiliates.

*Share Reserve.* Following this offering, the ESPP authorizes the issuance of 267,741 shares of our common stock pursuant to purchase rights granted to our employees or to employees of any of our designated affiliates. The number of shares of our common stock reserved for issuance will automatically increase on January 1 of each calendar year, from January 1, 2014 (assuming the ESPP becomes effective before such date) through January 1, 2023 by the least of (a) 1% of the total number of shares of our common stock outstanding on December 31 of the preceding calendar year, (b) 621,814 shares, or (c) a number determined by our Board of Directors that is less than (a) and (b). The ESPP is intended to qualify as an "employee stock purchase plan" within the meaning of Section 423 of the Code. As of the date hereof, no shares of our common stock have been purchased under the ESPP.

*Administration.* Our Board of Directors has delegated its authority to administer the ESPP to our Compensation Committee. The ESPP is implemented through a series of offerings of purchase rights to eligible employees. Under the ESPP, we may specify offerings with durations of not more than 27 months, and may specify shorter purchase periods within each offering. Each offering will have one or more purchase dates on which shares of our common stock will be purchased for employees participating in the offering. An offering may be terminated under certain circumstances.

*Payroll Deductions.* Generally, all regular employees, including executive officers, employed by us or by any of our designated affiliates, may participate in the ESPP and may contribute, normally through payroll deductions, up to 15% of their earnings for the purchase of our common stock under the ESPP. Unless otherwise determined by our Board of Directors, common stock will be purchased for accounts of employees participating in the ESPP at a price per share equal to the lower of (a) 85% of

the fair market value of a share of our common stock on the first date of an offering or (b) 85% of the fair market value of a share of our common stock on the date of purchase.

*Limitations.* Employees may have to satisfy one or more of the following service requirements before participating in the ESPP, as determined by our Board of Directors: (a) customarily employed for more than 20 hours per week, (b) customarily employed for more than five months per calendar year or (c) continuous employment with us or one of our affiliates for a period of time (not to exceed two years). No employee may purchase shares under the ESPP at a rate in excess of \$25,000 worth of our common stock based on the fair market value per share of our common stock at the beginning of an offering for each year such a purchase right is outstanding. Finally, no employee will be eligible for the grant of any purchase rights under the ESPP if immediately after such rights are granted, such employee has voting power over 5% or more of our outstanding capital stock measured by vote or value pursuant to Section 424(d) of the Code.

*Changes to Capital Structure.* In the event that there occurs a change in our capital structure through such actions as a stock split, merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or similar transaction, the Board of Directors will make appropriate adjustments to (a) the number of shares reserved under the ESPP, (b) the maximum number of shares by which the share reserve may increase automatically each year and (c) the number of shares and purchase price of all outstanding purchase rights.

*Corporate Transactions.* In the event of certain significant corporate transactions, including: (i) a sale of all our assets, (ii) the sale or disposition of 90% of our outstanding securities, (iii) the consummation of a merger or consolidation where we do not survive the transaction, and (iv) the consummation of a merger or consolidation where we do survive the transaction but the shares of our common stock outstanding immediately prior to such transaction are converted or exchanged into other property by virtue of the transaction, any then-outstanding rights to purchase our stock under the ESPP may be assumed, continued or substituted for by any surviving or acquiring entity (or its parent company). If the surviving or acquiring entity (or its parent company) elects not to assume, continue or substitute for such purchase rights, then the participants' accumulated payroll contributions will be used to purchase shares of our common stock within 10 business days prior to such corporate transaction, and such purchase rights will terminate immediately.

*Plan Amendments, Termination.* Our Board of Directors has the authority to amend or terminate our ESPP, provided that except in certain circumstances any such amendment or termination may not materially impair any outstanding purchase rights without the holder's consent. We will obtain stockholder approval of any amendment to our ESPP as required by applicable law or listing requirements.

## **Director Compensation**

Historically, we have not paid cash or equity compensation to directors who are also our employees for service on our Board of Directors, nor have we paid cash or equity compensation to our non-employee directors who are associated with our principal stockholders for service on our Board of Directors. We have reimbursed and will continue to reimburse all of our non-employee directors for their travel, lodging and other reasonable expenses incurred in attending meetings of our Board of Directors and committees of our Board of Directors.

We provide compensation to Dr. Carter for his services as the Chairman of the Board of Directors pursuant to a letter agreement between us and Dr. Carter dated September 28, 2009, as amended on November 18, 2010. Under the offer letter agreement, we provide Dr. Carter an annual cash retainer

of \$50,000 payable monthly in arrears as well as \$1,500 for each visit to our facilities for interfacing and liaising with our management and reimbursement for his reasonable expenses incurred in attending meetings. In addition, in connection with his letter agreement with us, Dr. Carter was granted an option to purchase 96,774 shares that vest over a four-year period measured from September 30, 2009, subject to his continued service with us. In September 2013, we granted stock options to purchase 32,964 shares to Dr. Carter with an exercise price of \$4.25 per share. These options vest over a four-year period subject to Dr. Carter's continued service with us.

In November 2013, our Board of Directors approved an option to purchase 15,000 shares to Mr. Baltera under our 2013 plan which will be granted effective and contingent upon the execution and delivery of the underwriting agreement related to this offering, at an exercise price per share equal to the price per share at which our common stock is first sold to the public in this offering. This option grant will vest over three years following the grant date, subject to Mr. Baltera's continued service with us.

The following table sets forth in summary form information concerning the compensation that we paid or awarded during the year ended December 31, 2012 to each of our non-employee directors:

<u>Name(1)</u>	<u>Fees Earned or Paid in Cash (\$)</u>	<u>Option Awards(2)</u>	<u>All Other Compensation (\$)</u>	<u>Total (\$)</u>
Bruce L.A. Carter, Ph.D.(2)	50,000	—	—	50,000
Douglas Fambrough, Ph.D.	—	—	—	—
Donald C. Foster, Ph.D.	—	—	—	—
Atul Saran	—	—	—	—
John S. Stafford III	—	—	—	—
Charles K. Stewart(3)	—	—	—	—
Harold R. Werner	—	—	—	—

- (1) Dr. Dahiyat was an employee director during 2012 and his compensation is fully reflected in the "—Summary Compensation Table" above. Dr. Dahiyat did not receive any compensation in 2012 for services provided as a member of our Board of Directors. Mr. Baltera was not a director during 2012 and is not included in this table.
- (2) We did not grant any stock options to our non-employee directors in 2012. The aggregate number of shares subject to each non-employee director's outstanding option awards as of December 31, 2012 was as follows: Dr. Carter, 96,774 outstanding and unexercised options.
- (3) Mr. Stewart resigned from our Board of Directors on July 30, 2013.

In November 2013, our Board of Directors adopted a new compensation policy applicable to all of our non-employee directors that will be effective upon the execution and delivery of the underwriting agreement related to this offering. This compensation policy provides that each such non-employee director will receive the following compensation for service on our Board of Directors:

- a cash payment of \$8,750 for in person attendance at each regular meeting of the Board of Directors and an additional cash payment of \$6,250 to the chairman of the Board of Directors for such attendance, provided that the compensation committee may consider exceptions to the requirement to attend regular meetings in person;
- an annual cash retainer of \$15,000, \$10,000 and \$7,500 for service as chairman of the audit committee, compensation committee or the nominating and corporate governance committee, respectively;

- an annual cash retainer of \$7,500, \$5,000 and \$3,500 for service on (and other than than as the chairperson of) the audit committee, compensation committee and nominating and corporate governance committee, respectively;
- an annual option grant to purchase 7,500 shares of our common stock vesting one year following the grant date; and
- upon first joining our Board of Directors, an automatic initial grant of an option to purchase 15,000 shares of our common stock vesting over a three year period following the grant date.

Each of the option grants described above will vest and become exercisable subject to the director's continuous service to us, provided that each option will vest in full upon a change of control (as defined under our 2013 plan). The term of each option will be 10 years. The options will be granted under our 2013 plan, the terms of which are described in more detail above under "—Equity Benefit Plans—2013 Equity Incentive Plan."

### **Risk Assessment of Compensation Program**

In October and November 2011, the compensation committee assessed our compensation program for the purpose of reviewing and considering any risks presented by our compensation policies and practices that are reasonably likely to have a material adverse effect on us. As part of that assessment, the compensation committee reviewed the primary elements of our compensation program, including base salary, short-term incentive compensation and long-term incentive compensation. The compensation committee's risk assessment included a review of the overall design of each primary element of our compensation program, and an analysis of the various design features, controls and approval rights in place with respect to compensation paid to management and other employees that mitigate potential risks to us that could arise from our compensation program. Following the assessment, the compensation committee determined that our compensation policies and practices did not create risks that were reasonably likely to have a material adverse effect on us.

## CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following includes a summary of transactions since January 1, 2010 to which we have been a party, in which the amount involved in the transaction exceeded \$120,000, and in which any of our directors, executive officers or, to our knowledge, beneficial owners of more than 5% of our capital stock or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest, other than equity and other compensation, termination, change in control and other arrangements, which are described under "Compensation Discussion and Analysis."

### Loan Arrangements

Since January 1, 2010, we have entered into various loan arrangements pursuant to which we issued an aggregate of \$7.5 million of convertible promissory notes to investors, including one of our directors, entities affiliated with our directors and beneficial owners of more than 5% of our capital stock. The participants in these loan arrangements included the following holders of more than 5% of our capital stock or entities affiliated with them. The following table presents the aggregate principal amount of convertible promissory notes issued to these related parties in these loan arrangements:

<u>Participants</u>	<u>Aggregate Principal Amount of Notes</u>
John S. Stafford III	\$ 3,915,776
John Stafford, Jr.(1)	\$ 989,232
James Stafford	\$ 415,613
HealthCareVentures VIII, L.P.	\$ 415,997

- (1) Consists of \$870,048 aggregate principal amount of notes issued to John Stafford, Jr. and \$119,184 aggregate principal amount of notes issued to the Kimberly Susan Stafford 2005 Irrevocable Trust.

The convertible promissory notes referred to above initially carried an interest rate of 10.0% per annum, which interest rate was increased to 12.5% in June 2011. In June 2013, the noteholders waived their right to receive payment of unpaid accrued interest under these notes in exchange for an aggregate of 17,114,751 shares of our Series A-1 convertible preferred stock pursuant to a note conversion agreement.

### Series A-1 Preferred Stock Financing

In June 2013, we entered into a Series A-1 Preferred Stock Purchase Agreement (the Series A-1 Purchase Agreement), pursuant to which we issued and sold an aggregate of 7,352,940 shares of our Series A-1 convertible preferred stock at a purchase price of \$1.36 per share, for an aggregate purchase price of \$9,999,998 in two closings. The following table sets forth the number of shares of Series A-1



preferred stock purchased by our executive officers, directors and holders of more than 5% of our common stock in this preferred stock financing:

<u>Name(1)</u>	<u>Shares of Series A-1 Preferred Stock</u>	<u>Purchase Price</u>
John S. Stafford III	2,997,951	\$ 4,077,213
John Stafford, Jr.(2)	903,108	\$ 1,228,227
James Stafford	412,103	\$ 560,460
MedImmune Ventures, Inc.	544,560	\$ 740,602
HealthCare Ventures VIII, L.P.	427,308	\$ 581,139
Oxford Biosciences Partners V L.P.(3)	326,393	\$ 443,894

- (1) Additional detail regarding these stockholders and their equity holdings is provided in "Security Ownership of Certain Beneficial Owners and Management."
- (2) Consists of 564,422 shares of Series A-1 convertible preferred stock issued to John Stafford, Jr., 118,280 shares of Series A-1 convertible preferred stock issued to the Kimberly Susan Stafford 2005 Irrevocable Trust and 220,406 shares of Series A-1 convertible preferred stock issued to the Susan Yang Stafford 2010 Kimborama Trust.
- (3) Consists of 319,200 shares of Series A-1 convertible preferred stock issued to Oxford Biosciences Partners V L.P. and 7,193 shares of Series A-1 convertible preferred stock issued to MRNA Fund V L.P.

Certain of our directors participated in, or have affiliations with the investors that participated in, the loan arrangements and preferred stock financing described above, as indicated in the table below:

<u>Director</u>	<u>Investor</u>
Jonathan Fleming	Oxford Bioscience Partners V L.P.
Atul Saran	MedImmune Ventures, Inc.
Harold Werner	HealthCare Ventures VIII, L.P.

### Investor Agreements

In connection with our preferred stock financing, we entered into amended and restated investor rights agreements and an amended and restated voting, right of first refusal and co-sale agreements containing registration rights, voting rights, information rights and rights of first refusal among other things, with certain holders of our preferred stock and certain holders of our common stock, including all of the holders of more than 5% of our capital stock. Upon the closing of this offering, only the registration rights described in "Description of Capital Stock—Registration Rights" will remain in effect and the other provisions of these agreements will terminate.

### Employee Loan

In May 2011, we made a loan of \$152,333 to Dr. Dahiyat, our President and Chief Executive Officer, bearing interest at an annual rate of 0.56% pursuant to two promissory notes. On September 4, 2013 our Board of Directors authorized the forgiveness of the entire outstanding principal and interest, effective and contingent upon the filing of the registration statement for this offering, which occurred on October 11, 2013.

### Cross-License Agreement with MedImmune, LLC

In December 2012, we entered into a cross-license agreement with MedImmune, LLC, an affiliate of MedImmune Ventures, Inc., a holder of more than 5% of our capital stock. Under the terms of the

agreement, we cross-licensed certain technology relating to our Xtend Fc Domain technology. We value this agreement at approximately \$750,000 using a discounted cash flow valuation analysis. One of our directors, Atul Saran, served as senior vice president, corporate development and ventures at MedImmune, LLC from January 2011 to May 2013 and currently serves as the vice president of corporate development and ventures at AstraZeneca plc and as chairman of the MedImmune Ventures, Inc. investment committee.

### **Indemnification Agreements**

We have entered, and intend to continue to enter, into separate indemnification agreements with each of our directors and executive officers.

### **Policies and Procedures for Transactions with Related Persons**

We have adopted a written related-person transactions policy that sets forth our policies and procedures regarding the identification, review, consideration and oversight of "related-person transactions." For purposes of our policy only, a "related-person transaction" is a transaction, arrangement or relationship (or any series of similar transactions, arrangements or relationships) in which we and any "related person" are participants involving an amount that exceeds \$120,000.

Transactions involving compensation for services provided to us as an employee, consultant or director are not considered related-person transactions under this policy. A related person is any executive officer, director or a holder of more than five percent of our common stock, including any of their immediate family members and any entity owned or controlled by such persons.

Under the policy, where a transaction has been identified as a related-person transaction, management must present information regarding the proposed related-person transaction to our audit committee (or, where review by our audit committee would be inappropriate, to another independent body of our Board of Directors) for review. The presentation must include a description of, among other things, the material facts, the direct and indirect interests of the related persons, the benefits of the transaction to us and whether any alternative transactions are available. To identify related-person transactions in advance, we rely on information supplied by our executive officers, directors and certain significant stockholders. In considering related-person transactions, our audit committee or other independent body of our Board of Directors takes into account the relevant available facts and circumstances including, but not limited to:

- the risks, costs and benefits to us;
- the impact on a director's independence in the event the related person is a director, immediate family member of a director or an entity with which a director is affiliated;
- the terms of the transaction;
- the availability of other sources for comparable services or products; and
- the terms available to or from, as the case may be, unrelated third parties or to or from our employees generally.

In the event a director has an interest in the proposed transaction, the director must recuse himself or herself from the deliberations and approval.

## PRINCIPAL STOCKHOLDERS

The following table sets forth information regarding beneficial ownership of our capital stock as of September 30, 2013 by:

- each person, or group of affiliated persons, known by us to beneficially own more than 5% of our common stock;
- each of our directors;
- each of our named executive officers; and
- all of our current executive officers and directors as a group.

The percentage ownership information under the column entitled "Before offering" is based on 16,692,576 shares of common stock outstanding as of September 30, 2013, assuming conversion of all outstanding shares of our convertible preferred stock as of September 30, 2013 into 16,620,274 shares of common stock. The percentage ownership information under the column entitled "After offering" is based on the sale of 5,000,000 shares of common stock in this offering.

Information with respect to beneficial ownership has been furnished by each director, officer or beneficial owner of more than 5% of our common stock. We have determined beneficial ownership in accordance with the rules of the SEC. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to those securities. In addition, the rules include shares of common stock issuable pursuant to the exercise of stock options or warrants that are either immediately exercisable or exercisable on or before November 29, 2013, which is 60 days after September 30, 2013. These shares are deemed to be outstanding and beneficially owned by the person holding those options or warrants for the purpose of computing the percentage ownership of that person, but they are not treated as outstanding for the purpose of computing the percentage ownership of any other person. Unless otherwise indicated, the persons or entities identified in this table have sole voting and investment power with respect to all shares shown as beneficially owned by them, subject to applicable community property laws.

Except as otherwise noted below, the address for each person or entity listed in the table is c/o Xencor, Inc., 111 West Lemon Avenue, Monrovia, California.

<u>Name and address of beneficial owner</u>	<u>Number of shares beneficially owned</u>	<u>Percentage of shares beneficially owned</u>	
		<u>Before offering</u>	<u>After offering</u>
<b>5% or greater stockholders</b>			
MedImmune Ventures, Inc.(1) One MedImmune Way Gaithersburg, MD 20878	1,319,522	7.9%	6.1%
HealthCare Ventures VIII, L.P.(2) 47 Thorndike Street, Suite B1-1 Cambridge, MA 02141	1,035,407	6.2%	4.8%
John S. Stafford III(3) 1854 N. Maud Avenue Chicago, IL 60614	7,566,203	45.3%	34.9%
John Stafford, Jr.(4) 45 N. Green Bay Road Lake Forest, IL 60045	1,725,443	10.3%	8.0%
James Stafford(5) c/o RSSM 757 Third Avenue, 6 <sup>th</sup> Floor New York, NY 10017	998,690	6.0%	4.6%
<b>Directors and named executive officers</b>			
Bassil I. Dahiyat, Ph.D.(6)	606,215	3.5%	2.7%
Paul Foster, M.D.(7)	18,145	*	*
Edgardo Baracchini, Jr., Ph.D.(8)	175,539	1.0%	*
Bruce L.A. Carter, Ph.D.(9)	96,774	*	*
Jonathan Fleming(10)	790,881	4.7%	3.6%
Atul Saran(11)	1,319,522	7.9%	6.1%
John S. Stafford III(3)	7,566,203	45.3%	34.9%
Harold R. Werner(12)	1,035,407	6.2%	4.8%
All current executive officers and directors as a group (10 persons)(13)	11,853,551	66.5%	51.9%

\* Represents beneficial ownership of less than 1%.

- (1) Includes 1,319,522 shares of common stock issuable upon conversion of convertible preferred stock.
- (2) Includes 1,035,407 shares of common stock issuable upon conversion of convertible preferred stock.
- (3) Includes (a) 22,858 shares of common stock held by John S. Stafford III, (b) 7,260,773 shares of common stock issuable upon conversion of convertible preferred stock held by John S. Stafford III and (c) 282,572 shares of common stock issuable upon conversion of convertible preferred stock held by DROGHEDA, LLC.
- (4) Includes (a) 90 shares of common stock held by John Stafford, Jr., (b) 1,367,651 shares of common stock issuable upon conversion of convertible preferred stock held by John Stafford, Jr., (c) 286,604 shares of common stock issuable upon conversion of convertible preferred stock held by the Kimberly Susan Stafford 2005 Irrevocable Trust, and (d) 71,098 shares of common stock issuable upon conversion of convertible preferred stock held by the Susan Yang Stafford Kimborama Trust.
- (5) Includes 123 shares of common stock and 998,567 shares of common stock issuable upon conversion of convertible preferred stock.

- (6) Includes 12,156 shares of common stock and 594,059 shares of common stock that Dr. Dahiyat has the right to acquire from us within 60 days of September 30, 2013 pursuant to the exercise of stock options.
- (7) Includes 18,145 shares of common stock that Dr. Foster has the right to acquire from us within 60 days of September 30, 2013 pursuant to the exercise of stock options.
- (8) Includes 175,539 shares of common stock that Dr. Baracchini has the right to acquire from us within 60 days of September 30, 2013 pursuant to the exercise of stock options.
- (9) Includes 96,774 shares of common stock that Dr. Carter has the right to acquire from us within 60 days of September 30, 2013 pursuant to the exercise of stock options.
- (10) Includes (a) 773,452 shares of common stock issuable upon conversion of convertible preferred stock held by Oxford Bioscience Partners V L.P. (Oxford) and (b) 17,429 shares of common stock issuable upon conversion of convertible preferred stock held by mRNA Fund V L.P. (mRNA). Mr. Fleming and Matthew A. Gibbs are the general partners of OBP Management V L.P., the sole general partner of Oxford and mRNA. Mr. Fleming disclaims beneficial ownership of such shares of common stock except to the extent of his pecuniary interest therein.
- (11) Includes the shares held by MedImmune Ventures, Inc. referred to in footnote (1) above. Mr. Saran serves as the chairperson of the six-person investment committee of MedImmune Ventures, Inc. Mr. Saran disclaims beneficial ownership of such shares of common stock except to the extent of his pecuniary interest therein.
- (12) Includes the shares held by HealthCare Ventures VIII, L.P. referred to in footnote (2) above. Mr. Werner disclaims beneficial ownership of such shares except to the extent of his pecuniary interest therein.
- (13) Includes 10,724,291 shares held by all current executive officers and directors as a group and 1,129,260 shares that all current executive officers and directors as a group have the right to acquire from us within 60 days of September 30, 2013 pursuant to the exercise of stock options, including 19 shares of common stock and 156,565 shares of common stock that Dr. Desjarlais has the right to acquire from us within 60 days of September 30, 2013 pursuant to the exercise of stock options, 103 shares of common stock issuable upon conversion of convertible preferred stock held by Mr. Kuch and 88,178 shares of common stock that Mr. Kuch has the right to acquire from us within 60 days of September 30, 2013 pursuant to the exercise of stock options. Mr. Baltera was not a director as of September 30, 2013 and is not included in this table.

## DESCRIPTION OF CAPITAL STOCK

Upon the closing of this offering and the filing of our amended and restated certificate of incorporation, our authorized capital stock will consist of 200,000,000 shares of common stock, par value \$0.01 per share and 10,000,000 shares of preferred stock, par value \$0.01 per share. All of our authorized preferred stock upon the closing of this offering will be undesignated. The following is a summary of the rights of our common and preferred stockholders and some of the provisions of our amended and restated certificate of incorporation and amended and restated bylaws, which will become effective upon the closing of this offering and of the Delaware General Corporation Law. This summary is not complete. For more detailed information, please see our amended and restated certificate of incorporation and amended and restated bylaws, which are filed as exhibits to the registration statement of which this prospectus is a part, as well as the relevant provisions of the Delaware General Corporation Law.

### **Common Stock**

#### ***Outstanding Shares***

On September 30, 2013, there were 72,302 shares of common stock outstanding, held of record by 115 stockholders. This amount excludes our outstanding shares of convertible preferred stock as of September 30, 2013, which will convert into 16,620,274 shares of common stock upon the effectiveness of the registration statement of which this prospectus is a part. Based on the number of shares of common stock outstanding as of September 30, 2013, and assuming (1) the conversion of all outstanding shares of our preferred stock and (2) the issuance by us of 5,000,000 shares of common stock in this offering, there will be 21,692,576 shares of common stock outstanding upon the closing of this offering.

As of September 30, 2013, there were 1,803,685 shares of common stock subject to outstanding options under our equity incentive plans.

#### ***Voting***

Our common stock is entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders, including the election of directors, and does not have cumulative voting rights. Accordingly, the holders of a majority of the shares of our common stock entitled to vote in any election of directors can elect all of the directors standing for election.

#### ***Dividends***

Subject to preferences that may be applicable to any then-outstanding preferred stock, the holders of common stock are entitled to receive dividends, if any, as may be declared from time to time by our Board of Directors out of legally available funds.

#### ***Liquidation***

In the event of our liquidation, dissolution or winding-up, holders of our common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities, subject to the satisfaction of any liquidation preference granted to the holders of any outstanding shares of preferred stock.

#### ***Rights and Preferences***

Holders of our common stock have no preemptive, conversion or subscription rights, and there are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of the 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.

### ***Fully Paid and Nonassessable***

All of our outstanding shares of common stock are, and the shares of common stock to be issued in this offering will be, fully paid and nonassessable.

### **Convertible Preferred Stock**

On September 30, 2013, there were 51,523,206 shares of convertible preferred stock outstanding, held of record by 223 stockholders. Upon the effectiveness of the registration statement of which this prospectus is a part, all outstanding shares of preferred stock will be converted into 16,620,274 shares of our common stock. Upon the closing of this offering, our certificate of incorporation will be amended and restated to delete all references to such shares of preferred stock. Under the amended and restated certificate of incorporation, our Board of Directors will have the authority, without further action by the stockholders, to issue up to 10,000,000 shares of preferred stock in one or more series, to establish from time to time the number of shares to be included in each such series, to fix the rights, preferences and privileges of the shares of each wholly unissued series and any qualifications, limitations or restrictions thereon and to increase or decrease the number of shares of any such series, but not below the number of shares of such series then outstanding.

Our Board of Directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of the common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in our control that may otherwise benefit holders of our common stock and may adversely affect the market price of the common stock and the voting and other rights of the holders of common stock. We have no current plans to issue any shares of preferred stock.

### **Registration Rights**

Holders of our preferred stock have the right to require us to register with the SEC the shares of common stock issuable upon conversion of such preferred stock so that those shares of common stock may be publicly resold, or to include those shares in any registration statement we file. The shares of common stock issuable upon conversion of the outstanding shares of preferred stock are hereinafter referred to as the "Underlying Securities." We anticipate that such holders will waive their registration rights with respect to this offering.

*Demand registration rights.* At any time beginning 180 days after the effective date of this registration statement, the holders of at least a 25% of the Underlying Securities having registration rights have the right to demand that we file a registration statement under the Securities Act to register the Underlying Securities requested to be registered by the holders of Underlying Securities. These registration rights are subject to specified conditions and limitations, including a limitation on the number of such registration statements that can be demanded by the holders of Underlying Securities, restrictions on the exercise of such demand registration rights during periods of time that may be detrimental to the Company and its stockholders, and the right of the underwriters to limit the number of shares of Underlying Securities included in any such registration under certain circumstances.

*Form S-3 registration rights.* If we are eligible to file a registration statement on Form S-3, each holder of shares of Underlying Securities having registration rights has the right to demand that we file no more than one registration statement for the holders on Form S-3 in any 12-month period so long as the aggregate offering price of securities to be sold under the registration statement on Form S-3 is at least \$1,000,000, subject to specified exceptions, conditions and limitations.

*"Piggyback" registration rights.* If we register any securities for public sale, stockholders with registration rights will have the right to include their shares in the registration statement. The underwriters of any underwritten offering will have the right to limit the number of shares having registration rights to be included in the registration statement.

*Expenses of registration.* We will pay all expenses, including up to \$50,000 for the reasonable fees and costs of one counsel to the holders of Underlying Securities, relating to all demand registrations, Form S-3 registrations and piggyback registrations.

*Expiration of registration rights.* The registration rights described above will terminate, as to a given holder of Underlying Securities, at any time following the Company's initial public offering when such holder can sell all of such holder's Underlying Securities pursuant to Rule 144 promulgated under the Securities Act during any 90-day period.

## **Anti-Takeover Effects of Provisions of Our Amended and Restated Certificate of Incorporation, Our Bylaws and Delaware Law**

### ***Delaware Anti-Takeover Law***

We are subject to Section 203 of the Delaware General Corporation Law (Section 203). Section 203 generally prohibits a public Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years following the time that such stockholder became an interested stockholder, unless:

- prior to such time the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned (i) by persons who are directors and also officers and (ii) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- at or subsequent to such time the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66<sup>2</sup>/<sub>3</sub>% of the outstanding voting stock which is not owned by the interested stockholder.

Section 203 defines a business combination to include:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition involving the interested stockholder of 10% or more of the assets of the corporation;
- subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- subject to exceptions, any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; and
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.



In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by the entity or person.

***Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws***

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

- permit our Board of Directors to issue up to 10,000,000 shares of preferred stock, with any rights, preferences and privileges as they may designate (including the right to approve an acquisition or other change in our control);
- provide that the authorized number of directors may be changed only by resolution of the board of directors;
- provide that all vacancies, including newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum;
- require that any action to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders and not be taken by written consent;
- provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide notice in writing in a timely manner and also specify requirements as to the form and content of a stockholder's notice;
- do not provide for cumulative voting rights (therefore allowing the holders of a majority of the shares of common stock entitled to vote in any election of directors to elect all of the directors standing for election, if they should so choose); and
- provide that special meetings of our stockholders may be called only by the chairman of the board, our Chief Executive Officer or by our Board of Directors pursuant to a resolution adopted by a majority of the total number of authorized directors.

The amendment of any of these provisions, with the exception of the ability of our Board of Directors to issue shares of preferred stock and designate any rights, preferences and privileges thereto, would require approval by the holders of at least 66<sup>2</sup>/3% of our then-outstanding common stock.

**NASDAQ Global Market Listing**

We have applied for listing of our common stock on the NASDAQ Global Market under the symbol "XNCR."

**Transfer Agent and Registrar**

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A. The transfer agent and registrar's address is 250 Royall Street, Canton, MA, 02021.

## SHARES ELIGIBLE FOR FUTURE SALE

Immediately prior to this offering, there has been no public market for our common stock. Future sales of substantial amounts of common stock in the public market could adversely affect prevailing market prices. Furthermore, since only a limited number of shares will be available for sale shortly after this offering because of contractual and legal restrictions on resale described below, sales of substantial amounts of common stock in the public market after the restrictions lapse could adversely affect the prevailing market price for our common stock as well as our ability to raise equity capital in the future.

Based on the number of shares of common stock outstanding as of September 30, 2013, upon the closing of this offering, 21,692,576 shares of common stock will be outstanding, assuming no exercise of the underwriters' over-allotment option and no exercise of options. All of the shares sold in this offering will be freely tradable unless held by an affiliate of ours. Except as set forth below, the remaining 16,692,576 shares of common stock outstanding after this offering will be restricted as a result of securities laws or lock-up agreements. These remaining shares will generally become available for sale in the public market as follows:

- No restricted shares will be eligible for immediate sale upon the closing of this offering;
- Up to 3,526,725 restricted shares will be eligible for sale under Rule 144 or Rule 701 by non-affiliates upon expiration of lock-up agreements 180 days after the date of this offering; and
- The remainder of the restricted shares will be eligible for sale from time to time thereafter under Rule 144 or Rule 701 subject to the volume limitations and other limitations described in detail below, but could be sold earlier if the holders exercise any available registration rights.

### Rule 144

In general, under Rule 144 as currently in effect, beginning 90 days after the effective date of the registration statement of which this prospectus is a part, any person who is not an affiliate of ours and has held their shares for at least six months, including the holding period of any prior owner other than one of our affiliates, may sell shares without restriction, provided current public information about us is available. In addition, under Rule 144, any person who is not an affiliate of ours 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 effective date of the registration statement of which this prospectus is a part, a person who is an affiliate of ours 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 restricted 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 216,926 shares immediately after this offering; or
- the average weekly trading volume of our common stock on the NASDAQ Global Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

Sales of restricted shares under Rule 144 held by our affiliates are also subject to requirements regarding the manner of sale, notice and the availability of current public information about us. Rule 144 also provides that affiliates relying on Rule 144 to sell shares of our common stock that are not restricted shares must nonetheless comply with the same restrictions applicable to restricted shares, other than the holding period requirement.

Notwithstanding the availability of Rule 144, the holders of substantially all of our restricted shares have entered into lock-up agreements as described below and their restricted shares will become eligible for sale at the expiration of the restrictions set forth in those agreements.

### **Rule 701**

Under Rule 701, shares of our common stock acquired upon the exercise of currently outstanding options or pursuant to other rights granted under our stock plans may be resold by:

- persons other than affiliates, beginning 90 days after the effective date of the registration statement of which this prospectus is a part, subject only to the manner-of-sale provisions of Rule 144; and
- our affiliates, beginning 90 days after the effective date of the registration statement of which this prospectus is a part, subject to the manner-of-sale and volume limitations, current public information and filing requirements of Rule 144, in each case, without compliance with the six-month holding period requirement of Rule 144.

As of September 30, 2013, options to purchase a total of 1,803,685 shares of common stock were outstanding, of which 1,189,206 were vested. Of the total number of shares of our common stock issuable under these options, substantially all are subject to contractual lock-up agreements with us or the underwriters described below under "Underwriting" and will become eligible for sale at the expiration of those agreements unless held by an affiliate of ours.

### **Lock-Up Agreements**

We, along with our directors, executive officers and substantially all of our other stockholders and optionholders, have agreed that for a period of 180 days after the date of this prospectus, subject to specified exceptions, we or they will not offer, sell, contract to sell, pledge or otherwise dispose of, directly or indirectly, any shares of our common stock or securities convertible into or exchangeable or exercisable for any shares of our common stock. Upon expiration of the "lock-up" period, certain of our stockholders will have the right to require us to register their shares under the Securities Act. See "Registration Rights" below.

### **Registration Rights**

Upon the closing of this offering, the holders of 16,651,404 shares of our common stock will be entitled to rights with respect to the registration of their shares under the Securities Act, subject to the lock-up arrangement described above. Registration of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act, except for shares purchased by affiliates, immediately upon the effectiveness of the registration statement of which this prospectus is a part. Any sales of securities by these stockholders could have a material adverse effect on the trading price of our common stock. See "Description of Capital Stock—Registration Rights."

### **Equity Incentive Plans**

We intend to file with the SEC a registration statement on Form S-8 under the Securities Act covering the shares of common stock reserved for issuance under the 2013 plan and the 2013 purchase plan. The registration statement is expected to be filed and become effective as soon as practicable after the closing of this offering. Accordingly, shares registered under the registration statement will be available for sale in the open market following its effective date, subject to Rule 144 volume limitations and the lock-up agreements described above, if applicable.

## **MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS OF OUR COMMON STOCK**

The following summary describes the material U.S. federal income consequences of the acquisition, ownership and disposition of our common stock acquired in this offering by Non-U.S. Holders (as defined below). This discussion does not address all aspects of U.S. federal income taxes that may be relevant to Non-U.S. Holders in light of their particular circumstances, does not deal with foreign, state and local tax consequences and does not address U.S. federal tax consequences other than income taxes. Special rules different from those described below may apply to certain Non-U.S. Holders that are subject to special treatment under the Code, such as financial institutions, insurance companies, tax-exempt organizations, tax-qualified retirement plans, broker-dealers and traders in securities, commodities or currencies, U.S. expatriates, "controlled foreign corporations," "passive foreign investment companies," corporations that accumulate earnings to avoid U.S. federal income tax, persons that hold our common stock as part of a "straddle," "hedge," "conversion transaction," "synthetic security," integrated investment or other risk reduction strategy, holders deemed to sell our common stock under the constructive sale provisions of the Code, holders who hold or receive our common stock pursuant to the exercise of employee stock options or otherwise as compensation, holders who are subject to the alternative minimum tax or the Medicare Contribution tax, partnerships and other pass-through entities, including hybrid entities and investors in such entities or an entity that is treated as a disregarded entity for U.S. federal income tax purposes (regardless of its place of organization or formation). Such Non-U.S. Holders are urged to consult their own tax advisors to determine the U.S. federal, state, local and other tax consequences that may be relevant to them. Furthermore, the discussion below is based upon the provisions of the Code, and Treasury regulations, rulings and judicial decisions thereunder as of the date hereof, and such authorities may be repealed, revoked or modified, perhaps retroactively, so as to result in U.S. federal income tax consequences different from those discussed below. We have not requested a ruling from the U.S. Internal Revenue Service (IRS), with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS will agree with such statements and conclusions. This discussion assumes that the Non-U.S. Holder holds our common stock as a "capital asset" within the meaning of Section 1221 of the Code (generally, property held for investment).

Persons considering the purchase of our common stock pursuant to this offering should consult their own tax advisors concerning the U.S. federal income tax consequences of acquiring, owning and disposing of our common stock in light of their particular situations as well as any consequences arising under the laws of any other taxing jurisdiction, including any state, local or foreign tax consequences and any U.S. federal non-income tax consequences.

For the purposes of this discussion, a "Non-U.S. Holder" is, for U.S. federal income tax purposes, a beneficial owner of common stock that has not been excluded from this discussion, is not a U.S. Holder and is not a partnership for U.S. federal income tax purposes. A "U.S. Holder" means a beneficial owner of our common stock that is for U.S. federal income tax purposes (a) an individual who is a citizen or resident of the United States, (b) a corporation or other entity treated as a corporation created or organized in or under the laws of the United States, any state thereof or the District of Columbia, (c) an estate the income of which is subject to U.S. federal income taxation regardless of its source or (d) a trust if it (1) is subject to the primary supervision of a court within the United States and one or more U.S. persons have the authority to control all substantial decisions of the trust or (2) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

### **Distributions on Our Common Stock**

Subject to the discussion below regarding back-up withholding and foreign accounts, distributions, if any, made on our common stock to a Non-U.S. Holder of our common stock to the extent made out

of our current or accumulated earnings and profits (as determined under U.S. federal income tax principles) generally will constitute dividends for U.S. tax purposes and will be subject to withholding tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. To obtain a reduced rate of withholding under a treaty, a Non-U.S. Holder generally will be required to provide us with a properly executed IRS Form W-8BEN, or other appropriate form, certifying the Non-U.S. Holder's entitlement to benefits under that treaty. In the case of a Non-U.S. Holder that is an entity, Treasury regulations and the relevant tax treaty provide rules to determine whether, for purposes of determining the applicability of a tax treaty, dividends will be treated as paid to the entity or to those holding an interest in that entity. If a Non-U.S. Holder holds stock through a financial institution or other agent acting on the holder's behalf, the holder will be required to provide appropriate documentation to such agent. The holder's agent will then be required to provide certification to the applicable withholding agent, either directly or through other intermediaries. If you are eligible for a reduced rate of U.S. federal withholding tax under an income tax treaty, you should consult with your own tax advisor to determine if you are able to obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim for a refund with the IRS.

We generally are not required to withhold tax on dividends paid to a Non-U.S. Holder that are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, are attributable to a permanent establishment that such holder maintains in the United States) if a properly executed IRS Form W-8ECI, stating that the dividends are so connected, is furnished to us (or, if stock is held through a financial institution or other agent, to such agent). In general, such effectively connected dividends will be subject to U.S. federal income tax, on a net income basis at the regular graduated rates, unless a specific treaty exemption applies. A corporate Non-U.S. Holder receiving effectively connected dividends may also be subject to an additional "branch profits tax," which is imposed, under certain circumstances, at a rate of 30% (or such lower rate as may be specified by an applicable treaty) on the corporate Non-U.S. Holder's effectively connected earnings and profits, subject to certain adjustments.

To the extent distributions on our common stock, if any, exceed our current and accumulated earnings and profits, they will constitute a non-taxable return of capital and will first reduce your basis in our common stock, but not below zero, and then will be treated as gain and taxed in the same manner as gain realized from a sale or other disposition of common stock as described in the next section.

### **Gain on Disposition of Our Common Stock**

Subject to the discussion below regarding backup withholding and foreign accounts, a Non-U.S. Holder generally will not be subject to U.S. federal income tax with respect to gain realized on a sale or other disposition of our common stock unless (a) the gain is effectively connected with a trade or business of such holder in the United States (and, if required by an applicable income tax treaty, is attributable to a permanent establishment that such holder maintains in the United States), (b) the Non-U.S. Holder is a non-resident alien individual and is present in the United States for 183 or more days in the taxable year of the disposition and certain other conditions are met, or (c) we are or have been a "United States real property holding corporation" within the meaning of Code Section 897(c)(2) at any time within the shorter of the five-year period preceding such disposition or such holder's holding period. In general, we would be a United States real property holding corporation if interests in U.S. real estate comprised (by fair market value) at least half of our business assets. We believe that we are not, and do not anticipate becoming, a United States real property holding corporation. Even if we are treated as a United States real property holding corporation, gain realized by a Non-U.S. Holder on a disposition of our common stock will not be subject to U.S. federal income tax so long as (1) the Non-U.S. Holder owned, directly, indirectly and constructively, no more than 5% of our

common stock at all times within the shorter of (i) the five-year period preceding the disposition or (ii) the holder's holding period and (2) our common stock is regularly traded on an established securities market. There can be no assurance that our common stock will qualify or continue to qualify as regularly traded on an established securities market.

If you are a Non-U.S. Holder described in (a) above, you will be required to pay tax on the net gain derived from the sale at regular graduated U.S. federal income tax rates, unless a specific treaty exemption applies, and corporate Non-U.S. Holders described in (a) above may be subject to the additional branch profits tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. If you are an individual Non-U.S. Holder described in (b) above, you will be required to pay a flat 30% tax on the gain derived from the sale, which gain may be offset by U.S. source capital losses (even though you are not considered a resident of the United States).

### **Information Reporting Requirements and Backup Withholding**

Generally, we or certain financial middlemen must report information to the IRS with respect to any dividends we pay on our common stock including the amount of any such dividends, the name and address of the recipient, and the amount, if any, of tax withheld. A similar report is sent to the holder to whom any such dividends are paid. Pursuant to tax treaties or certain other agreements, the IRS may make its reports available to tax authorities in the recipient's country of residence.

Dividends paid by us (or our paying agents) to a Non-U.S. Holder may also be subject to U.S. backup withholding. U.S. backup withholding generally will not apply to a Non-U.S. Holder who provides a properly executed IRS Form W-8BEN or otherwise establishes an exemption. The current backup withholding rate is 28%.

Under current U.S. federal income tax law, U.S. information reporting and backup withholding requirements generally will apply to the proceeds from a disposition of our common stock effected by or through a U.S. office of any broker, U.S. or foreign, except that information reporting and such requirements may be avoided if the holder provides a properly executed IRS Form W-8BEN or otherwise meets documentary evidence requirements for establishing Non-U.S. Holder status or otherwise establishes an exemption. Generally, U.S. information reporting and backup withholding requirements 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 non-U.S. broker. For information reporting purposes, certain brokers with substantial U.S. ownership or operations will generally be treated in a manner similar to U.S. brokers.

If backup withholding is applied to you, you should consult with your own tax advisor to determine if you are able to obtain a tax benefit or credit with respect to such backup withholding.

### **Foreign Accounts**

A U.S. federal withholding tax of 30% may apply to dividends paid after June 30, 2014 and the gross proceeds from a disposition of our common stock paid after December 31, 2016 to a foreign financial institution (as specifically defined for this purpose), including when the foreign financial institution holds our common stock on behalf of a Non-U.S. Holder, unless such institution enters into an agreement with the U.S. government to withhold on certain payments and to collect and provide to the U.S. tax authorities substantial information regarding U.S. account holders of such institution (which may include certain equity and debt holders of such institution, as well as certain account holders that are foreign entities with U.S. owners). Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing these withholding and reporting requirements may be subject to different rules. This U.S. federal withholding tax of 30% will also apply to dividends paid after June 30, 2014 and the gross proceeds from a disposition of our common stock paid after December 31, 2016 to a non-financial foreign entity unless such entity

provides the withholding agent with either a certification that it does not have any substantial direct or indirect U.S. owners or provides information regarding direct and indirect U.S. owners of the entity. The withholding tax described above will not apply if the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from the rules. Under certain circumstances, a Non-U.S. Holder might be eligible for refunds or credits of such taxes. Holders are encouraged to consult with their own tax advisors regarding the possible implications of the legislation on their investment in our common stock.

THE PRECEDING DISCUSSION OF U.S. FEDERAL INCOME TAX CONSIDERATIONS IS FOR GENERAL INFORMATION ONLY. IT IS NOT TAX ADVICE. EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS OWN TAX ADVISOR REGARDING THE TAX CONSEQUENCES OF PURCHASING, HOLDING AND DISPOSING OF OUR COMMON STOCK, INCLUDING THE CONSEQUENCES OF ANY PROPOSED CHANGE IN APPLICABLE LAW.

**UNDERWRITING**

Under the terms and subject to the conditions contained in an underwriting agreement dated \_\_\_\_\_, 2013, we have agreed to sell to the underwriters named below, for whom Credit Suisse Securities (USA) LLC and Leerink Swann LLC are acting as representatives, the following respective numbers of shares of common stock:

<u>Underwriter</u>	<u>Number of Shares</u>
Credit Suisse Securities (USA) LLC	
Leerink Swann LLC	
Wedbush Securities Inc	
Total	<u>5,000,000</u>

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

We have granted to the underwriters a 30-day option to purchase on a pro rata basis up to 750,000 additional shares at the initial public offering price less the underwriting discounts and commissions. The option may be exercised only to cover any over-allotments of common stock.

The underwriters are offering the shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel including the validity of the shares, and subject to other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officer's certificates and legal opinions. The offering of the shares by the underwriters is also subject to the underwriters' right to reject any order in whole or in part.

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

The following table summarizes the compensation we will pay:

	<u>Per Share</u>		<u>Total</u>	
	<u>Without Over-allotment</u>	<u>With Over-allotment</u>	<u>Without Over-allotment</u>	<u>With Over-allotment</u>
Underwriting Discounts and Commissions paid by us	\$	\$	\$	\$

We estimate that our out of pocket expenses for this offering (not including any underwriting discounts and commissions) will be approximately \$2.5 million. We have agreed to reimburse the underwriters for expenses of approximately \$35,000 related to the clearance of this offering with the Financial Regulatory Authority (FINRA).

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

We have agreed that we will not offer, sell, contract to sell, pledge or otherwise dispose of, directly or indirectly, or file with the Securities and Exchange Commission a registration statement under the



Securities Act of 1933, as amended (the Securities Act) relating to, any shares of our common stock or securities convertible into or exchangeable or exercisable for any shares of our common stock, or publicly disclose the intention to make any offer, sale, pledge, disposition or filing, without the prior written consent of the representatives for a period of 180 days after the date of this prospectus except issuances pursuant to the conversion or exchange of convertible or exchangeable securities outstanding on the date hereof or the exercise of warrants or options outstanding on the date hereof, grants of employee stock options pursuant to our existing plans or issuances pursuant to the exercise of such employee options.

Our officers and directors and substantially all of our existing security holders have agreed that they will not offer, sell, contract to sell, pledge or otherwise dispose of, directly or indirectly, any shares of our common stock or securities convertible into or exchangeable or exercisable for any shares of our common stock, enter into a transaction that would have the same effect, or enter into any swap, hedge or other arrangement that transfers, in whole or in part, any of the economic consequences of ownership of our common stock, whether any of these transactions are to be settled by delivery of our common stock or other securities, in cash or otherwise, or publicly disclose the intention to make any offer, sale, pledge or disposition, or to enter into any transaction, swap, hedge or other arrangement, without, in each case, the prior written consent of the representatives, for a period of 180 days after the date of this prospectus, subject to limited exceptions.

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

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

Prior to the offering, there has been no public market for our common stock. The initial public offering price will be determined through negotiations between us and the representatives. In determining the initial public offering price, we and the representatives expect to consider a number of factors including:

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

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

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

- Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum.

- Over-allotment transactions involve sales by the underwriters of shares in excess of the number of shares the underwriters are obligated to purchase, creating a syndicate short position. The short position may be either a covered short position or a naked short position. In a covered short position, the number of shares over-allotted by the underwriters is not greater than the number of shares that they may purchase in the over-allotment option. In a naked short position, the number of shares involved is greater than the number of shares in the over-allotment option. The underwriters may close out any covered short position by either exercising their over-allotment option and/or purchasing shares in the open market.
- Syndicate covering transactions involve purchases of the common stock in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of shares to close out the short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the over-allotment option. If the underwriters sell more shares than could be covered by the over-allotment option, a naked short position, the position can only be closed out by buying shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there could be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.
- Penalty bids permit the representatives to reclaim a selling concession from a syndicate member when the common stock originally sold by the syndicate member is purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.
- In passive market making, market makers in the common stock who are underwriters or prospective underwriters may, subject to limitations, make bids for or purchases of our common stock until the time, if any, at which a stabilizing bid is made.

These stabilizing transactions, over-allotment transactions, syndicate covering transactions, penalty bids and passive market making may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of the common stock. As a result the price of our common stock may be higher than the price that might otherwise exist in the open market. These transactions may be effected on The NASDAQ Global Market or otherwise and, if commenced, may be discontinued at any time.

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

#### **Other Relationships**

Certain of the underwriters and their affiliates may provide from time to time in the future certain commercial banking, financial advisory, investment banking and other services for us and such affiliates in the ordinary course of their business, for which they may receive customary fees and commissions. In addition, from time to time, certain of the underwriters and their affiliates may effect transactions for their own account or the account of customers, and hold on behalf of themselves or their customers, long or short positions in our debt or equity securities or loans, and may do so in the future. The underwriters are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage activities.

One of our directors, Mr. Jonathan Fleming, is also a member of the Board of Managers of Leerink Swann Holdings, LLC and a trustee of Leerink Swann Massachusetts Business Trust, which are affiliates of Leerink Swann LLC, one of the representatives of the underwriters in this offering.

## **Selling Restrictions**

### ***Notice to Prospective Investors in the European Economic Area***

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a "Relevant Member State"), each underwriter represents and agrees that with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State, it has not made and will not make an offer of shares which are the subject of the offering contemplated by this prospectus to the public in that Relevant Member State other than:

- (a) to any legal entity which is a qualified investor as defined in the Prospectus Directive;
- (b) 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 representatives for any such offer; or
- (c) in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of shares shall require us or any underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an "offer to the public" in relation to any shares 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 to be offered so as to enable an investor to decide to purchase or subscribe the shares, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, the expression Prospectus Directive means Directive 2003/71/EC (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 and the expression "2010 PD Amending Directive" means Directive 2010/73/EU.

### ***Notice to Prospective Investors in the United Kingdom***

Each of the underwriters severally represents, warrants and agrees as follows:

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

## LEGAL MATTERS

The validity of the shares of common stock being offered by this prospectus will be passed upon for us by Cooley LLP, Santa Monica, California. The underwriters are being represented by Davis Polk & Wardwell LLP, Menlo Park, California.

## EXPERTS

The financial statements as of December 31, 2011 and 2012 and for the years then ended included in this Registration Statement have been so included in reliance on the report of BDO USA, LLP, an independent registered public accounting firm (the report on the financial statements contains an explanatory paragraph regarding the Company's ability to continue as a going concern), appearing elsewhere in the Registration Statement, given on the authority of said firm as experts in auditing and accounting.

## WHERE YOU CAN FIND ADDITIONAL 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 being offered by this prospectus. This prospectus does not contain all of the information in the registration statement and its exhibits. For further information with respect to us and the common stock offered by this prospectus, we refer you to the registration statement and its exhibits. Statements contained in this prospectus as to the contents of any contract or any other document that is filed as an exhibit are not necessarily complete, and in each instance, we refer you to the copy of the contract or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference.

You can read our SEC filings, including the registration statement, on the Internet at the SEC's website at [www.sec.gov](http://www.sec.gov). You may also read and copy any document we file with the SEC at its public reference facilities at 100 F Street NE, Washington, D.C. 20549. You may also obtain copies of these documents at prescribed rates by writing to the Public Reference Section of the SEC at 100 F Street N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facilities. You may also request a copy of these filings, at no cost, by writing us at 111 West Lemon Avenue, Monrovia, California 91016 Attn: Corporate Secretary or telephoning us at (626) 305-5900.

Upon the closing of this offering, we will be subject to the information reporting requirements of the Exchange Act, and we will file reports, proxy statements and other information with the SEC. These reports, proxy statements and other information will be available for inspection and copying at the public reference room and website of the SEC referred to above. We also maintain a website at [www.xencor.com](http://www.xencor.com), at which, following the closing of this offering, you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. The information contained in, or that can be accessed through, our website is not incorporated by reference in, and is not part of, this prospectus.

**Xencor, Inc.**

**Financial Statements**

**Audited Financial Statements for the Years Ended December 31, 2011 and 2012:**

<a href="#">Report of Independent Registered Public Accounting Firm</a>	<a href="#">F-2</a>
<a href="#">Balance Sheets</a>	<a href="#">F-3</a>
<a href="#">Statements of Operations</a>	<a href="#">F-4</a>
<a href="#">Statements of Mezzanine Equity and Stockholders' Deficit</a>	<a href="#">F-5</a>
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**Unaudited Interim Condensed Financial Statements for the Nine Months Ended September 30, 2012 and 2013:**

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<a href="#">Condensed Statements of Operations</a>	<a href="#">F-33</a>
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**Report of Independent Registered Public Accounting Firm**

Board of Directors and Stockholders  
Xencor, Inc.  
Monrovia, California

We have audited the accompanying balance sheets of Xencor, Inc as of December 31, 2012 and 2011 and the related statements of operations, mezzanine equity and stockholders' deficit, 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. The Company is not required to have, nor were we engaged to perform, an audit of its 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, as well as evaluating the overall presentation of the financial statements. 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 Xencor, Inc. at December 31, 2012 and 2011, and the results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note 9 to the financial statements, the financial statements as of and for the year ended December 31, 2011, have been restated to correct a misstatement related to accounting for revenue.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has recurring losses and a substantial accumulated deficit. These factors raise substantial doubt about the Company's ability to continue as a going concern. Management's plans in regard to this matter are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ BDO USA, LLP

Los Angeles, California  
September 11, 2013, except for note 10, which is  
as of November 3, 2013

**Xencor, Inc.**

**Balance Sheets**

(in thousands, except share and per share data)

	December 31,	
	2011	2012
	(Restated)	
<b>Assets</b>		
Current assets		
Cash and cash equivalents	\$ 14,537	\$ 2,312
Accounts receivable	29	354
Prepaid expenses and other current assets	81	173
Total current assets	14,647	2,839
Property and equipment		
Computers, software and equipment	4,570	3,374
Furniture and fixtures	132	107
Leasehold improvements	3,081	3,081
Less accumulated depreciation and amortization	(7,399)	(6,279)
Property and equipment, net	384	283
Other assets		
Patents, licenses, and other intangible assets, net	7,250	8,460
Other assets	93	77
Total other assets	7,343	8,537
Total assets	\$ 22,374	\$ 11,659
<b>Liabilities, mezzanine equity and stockholders' deficit</b>		
Current liabilities		
Accounts payable	\$ 1,835	\$ 1,315
Accrued expenses	826	1,286
Current portion of deferred revenue	5,063	1,948
Current portion of capital lease obligations	10	7
Convertible promissory notes payable	18,463	20,923
Total current liabilities	26,197	25,479
Deferred revenue, less current portion	7,114	5,672
Capital lease obligations, less current portion	—	10
Total liabilities	33,311	31,161
Commitments and contingencies (see note 6)		
Mezzanine Equity		
Series A convertible preferred stock, \$0.01 par value: 857,797 authorized shares; 857,792 issued and outstanding shares (liquidation preference of \$3,551)	3,550	3,550
Series B convertible preferred stock, \$0.01 par value: 1,328,946 authorized shares; 1,328,941 issued and outstanding shares (liquidation preference of \$12,399)	12,375	12,375
Series C convertible preferred stock, \$0.01 par value: 2,416,284 authorized shares; 2,416,281 issued and outstanding shares (liquidation preference of \$50,017)	50,000	50,000
Series D convertible preferred stock, \$0.01 par value: 7,966,667 authorized shares; 7,936,483 issued and outstanding shares (liquidation preference of \$20,000)	20,000	20,000
Series E convertible preferred stock, \$0.01 par value: 25,253,000 authorized shares; 25,245,566 issued and outstanding shares (liquidation preference of \$88,047 and \$95,090 at December 31 2011 and 2012, respectively)	60,841	60,841
Total mezzanine equity	146,766	146,766
Stockholders' deficit		
Common stock, \$0.01 par value: 57,225,000 authorized shares; 72,302 issued and outstanding shares at December 31, 2012 and 2011	1	1
Additional paid-in capital	1,014	1,043
Accumulated deficit	(158,718)	(167,312)
Total stockholders' deficit	(157,703)	(166,268)
Total liabilities, mezzanine equity and stockholders' deficit	\$ 22,374	\$ 11,659

See accompanying notes to the financial statements.

**Xencor, Inc.****Statements of Operations****(in thousands, except share and per share data)**

	<b>Years ended December 31,</b>	
	<b>2011</b>	<b>2012</b>
	<b>(Restated)</b>	
<b>Revenue</b>		
Collaborations, licenses and milestones, including related party revenue of zero and \$0.75 million for 2011 and 2012, respectively	\$ 6,849	\$ 9,524
<b>Costs and expenses</b>		
Research and development (includes equity-based compensation of \$(34) and \$11 for 2011 and 2012, respectively)	12,663	12,668
General and administrative (includes equity-based compensation of \$(23) and \$18 for 2011 and 2012, respectively)	3,638	3,086
<b>Total operating expenses</b>	<u>16,301</u>	<u>15,754</u>
<b>Loss from operations</b>	<u>(9,452)</u>	<u>(6,230)</u>
<b>Other income (expenses)</b>		
Interest income	34	11
Interest expense	(1,850)	(2,461)
Other (expense) income	65	86
<b>Total other income (expenses)</b>	<u>(1,751)</u>	<u>(2,364)</u>
<b>Net loss</b>	<u>\$ (11,203)</u>	<u>\$ (8,594)</u>
Net loss per share attributable to common stockholders basic and diluted	<u>\$ (154.95)</u>	<u>\$ (118.86)</u>
Weighted average shares used to compute net loss per share attributable to common stockholders, basic and diluted:	<u>72,302</u>	<u>72,302</u>

See accompanying notes to the financial statements.



**Xencor, Inc.**

**Statements of Mezzanine Equity and Stockholders' Deficit**

(in thousands, except share data)

	Series A Convertible Preferred Stock		Series B Convertible Preferred Stock		Series C Convertible Preferred Stock		Series D Convertible Preferred Stock		Series E Convertible Preferred Stock	
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount
<b>Mezzanine Equity</b>										
Balance, December 31, 2010 (Restated)	857,792	\$ 3,550	1,328,941	\$ 12,375	2,416,281	\$ 50,000	7,936,483	\$ 20,000	25,245,566	\$ 60,841
Net loss, as restated	—	—	—	—	—	—	—	—	—	—
Stock-based compensation	—	—	—	—	—	—	—	—	—	—
Balance, December 31, 2011 (Restated)	857,792	3,550	1,328,941	12,375	2,416,281	50,000	7,936,483	20,000	25,245,566	60,841
Net loss, as restated	—	—	—	—	—	—	—	—	—	—
Stock-based compensation	—	—	—	—	—	—	—	—	—	—
Balance, December 31, 2012	857,792	\$ 3,550	1,328,941	\$ 12,375	2,416,281	\$ 50,000	7,936,483	\$ 20,000	25,245,566	\$ 60,841

<b>Stockholders' Deficit</b>	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount			
	(in thousands, except share amounts)				
Balance, December 31, 2010 (Restated)	72,302	\$ 1	\$ 1,071	\$ (147,515)	\$ (146,443)
Net loss, as restated	—	—	—	(11,203)	(11,203)
Stock-based compensation	—	—	(57)	—	(57)
Balance, December 31, 2011 (Restated)	72,302	1	1,014	(158,718)	(157,703)
Net loss	—	—	—	(8,594)	(8,594)
Stock-based compensation	—	—	29	—	29
Balance, December 31, 2012	72,302	\$ 1	\$ 1,043	\$ (167,312)	\$ (166,268)

See accompanying notes to the financial statements.

**Xencor, Inc.**

**Statements of Cash Flows**

(in thousands)

	Years ended December 31,	
	2011 (Restated)	2012
<b>Cash flows from operating activities</b>		
Net loss	\$ (11,203)	\$ (8,594)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	607	527
Stock-based compensation	(57)	29
Abandonment of capitalized intangible assets	1,231	388
Gain from non-monetary exchange	—	(754)
Gain on disposal of assets	(127)	(86)
Accrued interest on convertible promissory notes	1,846	2,456
Changes in operating assets and liabilities:		
Accounts receivable	(29)	(325)
Prepaid expenses and other current assets	96	(90)
Other assets	23	15
Accounts payable	(239)	(522)
Accrued expenses	34	460
Deferred revenue	6,733	(4,556)
Net cash used in operating activities	<u>(1,085)</u>	<u>(11,052)</u>
<b>Cash flows from investing activities</b>		
Purchase of intangible assets	(1,364)	(1,217)
Purchase of property and equipment	(55)	(41)
Proceeds from sale of property and equipment	133	97
Net cash used in investing activities	<u>(1,286)</u>	<u>(1,161)</u>
<b>Cash flows from financing activities</b>		
Payments on capital lease obligations	(11)	(12)
Net cash used in financing activities	<u>(11)</u>	<u>(12)</u>
<b>Net decrease in cash and cash equivalents</b>	<u>(2,382)</u>	<u>(12,225)</u>
<b>Cash and cash equivalents, beginning of year</b>	16,919	14,537
<b>Cash and cash equivalents, end of year</b>	<u>\$ 14,537</u>	<u>\$ 2,312</u>
<b>Supplemental disclosures of cash flow information</b>		
Cash paid for:		
Interest	\$ 1	\$ 3
Taxes	—	—
<b>Supplemental Schedule of Noncash Investing Activities</b>		
Capitalization of licensing rights acquired in non-monetary exchange	\$ —	\$ 754
Equipment acquired under capital lease	—	\$ 22

See accompanying notes to the financial statements.

**Xencor, Inc.**

**Notes to Financial Statements**

**1. Summary of Significant Accounting Policies**

***Description of Business***

Xencor, Inc. ("we," "us," "our," or the "Company") was incorporated in California in 1997 and reincorporated in Delaware in September 2004. We are a clinical-stage biopharmaceutical company focused on discovering and developing engineered monoclonal antibodies to treat severe and life-threatening diseases with unmet medical needs. We use our proprietary XmAb technology platform to create next-generation antibody product candidates designed to treat autoimmune and allergic diseases, cancer, and other conditions. We focus on the portion of the antibody that interacts with multiple segments of the immune system, referred to as the Fc domain, which is constant and interchangeable among antibodies. Our engineered Fc domains, the XmAb technology, are applied to our pipeline of antibody-based drug candidates to increase immune inhibition, improve cytotoxicity, or extend half-life.

Our operations are based in Monrovia, California and we operate in one segment.

***Basis of Presentation***

The Company's audited financial statements as of December 31, 2011 and December 31, 2012 and for the years then-ended have been prepared in accordance with accounting principles generally accepted in the United States. As discussed in Note 9, the Company has restated its previously issued financial statements as of December 31, 2011 and for the year ended December 31, 2011.

***Use of Estimates***

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ materially from those estimates.

***Going Concern***

Since our inception, we have incurred losses and negative cash flows from operations, and at December 31, 2012 we have an accumulated deficit of \$167.3 million. We are forecasting continued losses and negative cash flows from operations to fund our clinical and research programs and will need additional funding to continue advancing them. Our prospects are subject to the risks and uncertainties frequently encountered by clinical-stage biopharmaceutical companies.

As of December 31, 2012, our ability to continue as a going concern is uncertain and dependent upon our ability to obtain additional financing to fund our ongoing operations. To fund future operations, we will need to raise additional capital. The amount and timing of future funding requirements will depend on many factors, including the timing and results of our ongoing development efforts, the potential expansion of our current development programs, potential new development programs and related general and administrative support. We anticipate that we will seek to fund our operations through equity or debt financings or through research collaborations and licensing agreements with third parties. We cannot assure you that such additional financing will be available to us on favorable terms, or at all. Although we have previously been successful in obtaining financing through our private securities offerings, there can be no assurance that we will be able to do so in the future. To the extent that we raise additional capital through the future sale of equity or debt, the ownership interest of our stockholders will be diluted, and the terms of these securities may include

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

**1. Summary of Significant Accounting Policies (Continued)**

liquidation or other preferences that adversely affect the rights of our existing common stockholders. If we raise additional funds through collaboration arrangements in the future, we may have to relinquish valuable rights to our technologies, future revenue streams or product candidates or grant licenses on terms that may not be favorable to us.

The results of our operations and our current financial condition raise substantial doubt about our ability to continue as a going concern. Should we not be able to successfully execute on our plans to raise additional capital or generate sufficient cash flow from operations to fund our continuing operations, we may need to significantly curtail the level of our operations. There has been no adjustment in the accompanying financial statements to reflect this uncertainty.

*Revenue Recognition*

We have, to date, earned revenue from research collaborations, which may include research and development services, licenses of our internally-developed technologies, or a combination of both. We recognize revenue when all of the following criteria are met: persuasive evidence of an arrangement exists; transfer or access of technology has been completed or services have been rendered; our price to the customer is fixed or determinable and collectability is reasonably assured.

The terms of our license and research and development agreements include nonrefundable upfront payments and license fees, milestone and other contingent payments to us for the achievement of defined collaboration objectives and certain clinical, regulatory and sales-based events, as well as royalties on sales of any commercialized products.

The terms of our licensing agreements include non-refundable upfront fees, annual licensing fees, and contingent payments and milestones for the achievement of pre-defined preclinical, clinical, regulatory and sales-based events by our partners. The licensing agreements also include royalties on sales of any commercialized products by our partners.

*Multiple-Element Revenue Arrangements.* Certain of our collaboration and license agreements represent multiple-element revenue arrangements. To account for such transactions, we determine the elements, or deliverables, included in the arrangement and determine which deliverables are separate units for accounting purposes. We consider delivered items to be separate units of accounting if the delivered items have stand-alone value to the customer. If the delivered items are separate units we allocate the consideration received or due under the arrangement to the various elements based on each elements' relative selling price. The identification of individual elements in a multiple-element arrangement and the estimation of the selling price of each element involve significant judgment, including consideration as to whether each delivered element has standalone value to the customer. We determine the estimated selling price for deliverables within each arrangement using vendor-specific objective evidence (VSOE) of selling price, if available, or third-party evidence of selling price if VSOE is not available, or our best evidence of selling price if neither VSOE nor third-party evidence is available.

Determining the best estimate of selling price for a deliverable requires significant judgment. We use our best estimate of selling price to estimate the selling price for licenses to our technologies and product candidates, since we do not have VSOE or third-party evidence of selling for these deliverables. The basis of our estimate of selling price is the arm's length negotiation with the licensee that occurs in each transaction. The potential value of our technology to a licensee in a transaction

**Xencor, Inc.****Notes to Financial Statements (Continued)****1. Summary of Significant Accounting Policies (Continued)**

depends on a variety of factors unique to each transaction. Factors that impact the negotiation and hence that we consider in our estimates center on the specific product candidate and include: the product candidate's potential market size, the product candidate's stage of development, the existence of competitive technologies that could be substituted for ours by the licensee and the scientific assessment of the product candidate's likelihood of success at various development stages. The most common deliverable is the commercial license for our technology in the product candidate, and frequently a research license with an option for commercial license. The upfront payments, annual license fees, milestones and royalties relate to these licenses and/or options and depend on the product-specific factors described above. The other significant deliverable is research and development services and the price for these depends on estimates for our personnel and supply costs and the costs of third-party contract research organizations necessary to support the services.

We recognize consideration allocated to an individual element when all other revenue recognition criteria are met for that element. Our multiple-element revenue arrangements generally include the following:

- **License arrangements:** The deliverables under our collaboration and license agreements generally include exclusive or non-exclusive licenses to one or more of our technologies. The technologies can be applied to a collaborator's product candidates for discovery, development, manufacturing and commercialization. We will also enter into agreements for the exclusive or non-exclusive licenses to our internally developed product candidates. To account for this element of the arrangement, we evaluate whether the exclusive or non-exclusive license has standalone value apart from the undelivered elements to the collaboration partner, which generally include research and development services or options for commercial licenses, based on the consideration of the facts and circumstances of each arrangement, including the research and development capabilities of the collaboration partner and other market participants. We recognize arrangement consideration allocated to licenses upon delivery of the license, if the facts and circumstances indicate the license has standalone value apart from the undelivered elements. If facts and circumstances indicate that the delivered license does not have standalone value from the undelivered elements, we recognize the revenue as a combined unit of accounting. In those circumstances we recognize revenue from non-refundable upfront fees in the same manner as the undelivered item(s), which is generally the period over which we provide research and development services.
- **Research and Development Services.** The deliverables under our collaboration and license arrangements may include deliverables related to research and development services we perform on behalf of the collaboration partner. As the provision of research and development services is an integral part of our operations and we may be principally responsible for the performance of these services under the agreements, we recognize revenue on a gross basis for research and development services as we perform those services. Additionally, we recognize research related funding under collaboration research and development efforts as revenue as we perform or deliver the related services in accordance with contract terms.

*Milestone Revenue.* Our collaboration and license agreements generally include contingent payments and milestone payments related to specific research, development and regulatory milestones and sales-based milestones. Research, development and regulatory contingent payments and milestone payments are typically payable under our collaborations when our collaborator selects a compound, or

**Xencor, Inc.****Notes to Financial Statements (Continued)****1. Summary of Significant Accounting Policies (Continued)**

initiates or advances a covered product candidate in preclinical or clinical development, upon submission for marketing approval of a covered product with regulatory authorities, upon receipt of actual marketing approvals of a covered product or for additional indications, or upon the first commercial sale of a covered product. Sales-based milestones are typically payable when annual sales of a covered product reach specific levels.

At the inception of each arrangement that includes milestone payments, we evaluate whether each milestone is substantive and at risk to both parties based on the basis of the contingent nature of the milestone. We evaluate factors such as scientific, regulatory, commercial and other risks that we must overcome to achieve the respective milestone, whether the milestone consideration is reasonable relative to all deliverables and payment terms in the arrangement in making this assessment and whether the milestone payment relates solely to past performance.

We have elected to adopt the Financial Accounting Standards Board Accounting Standards Update 2010-17, *Revenue Recognition—Milestone Method*, such that we recognize any payment that is contingent upon the achievement of a substantive milestone entirely in the period in which the milestone is achieved. A milestone is defined as an event that can only be achieved based in whole or in part either on our performance, or the performance of our collaborators, or the occurrence of a specific outcome resulting from our past performance for which there is a substantive uncertainty at the date the arrangement is entered into that the event will be achieved.

**Collaborative Research and Licensing Agreements*****MorphoSys Ag***

In June 2010, we entered into a Collaboration and License Agreement with MorphoSys AG (MorphoSys), which we subsequently amended in March 2012. The agreement provided us with an upfront payment of \$13.0 million in exchange for an exclusive worldwide license to our patents and know-how to research, develop and commercialize our XmAb5574 product candidate (subsequently renamed MOR208) with the right to sublicense under certain conditions. Under the agreement, we agreed to collaborate with MorphoSys to develop and commercialize XmAb5574/MOR208. We determined that the arrangement was one with multiple deliverables and we identified the multiple elements in the agreement as the license of XmAb5574/MOR208 and the research and development services provided by us for the initial Phase 1 clinical trial. If certain developmental, regulatory and sales milestones are achieved, we are eligible to receive future milestone payments and royalties. We determined that the future milestone payments were substantive and contingent and we did not allocate any of the upfront consideration to these milestones. Our responsibility with respect to the collaboration services is limited to completion of the Phase 1 clinical trial. MorphoSys is responsible all further development of XmAb5574/MOR208.

At inception of the arrangement, we determined that \$8.0 million of the \$13.0 million upfront payment was the value of the worldwide license rights to XmAb5574/MOR208 and \$5.0 million was the value of the research and development services. We recognized the value related to the license of XmAb5574/MOR208 in income in 2010, the period that the license was transferred. We allocated \$5.0 million of the upfront fee to research and development services to be recognized as income over the expected service period to complete the Phase 1 clinical trial which was 27 months. The March 2012 amendment to the agreement extended the length of the Phase 1 clinical trial. Under the terms of the amendment, we received additional proceeds for the additional research and development services

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

**1. Summary of Significant Accounting Policies (Continued)**

related to extension of the Phase 1 clinical trial. During 2012, we recognized \$0.4 million of revenue related to the additional services provided.

The total revenue recognized under this arrangement was \$2.2 million and \$2.0 million for the years ended December 31, 2011 and 2012, respectively.

***Amgen, Inc.***

In December 2010, we entered into a Collaboration and Option Agreement with Amgen, Inc. (Amgen), pursuant to which we agreed to collaborate with Amgen to research, develop and commercialize XmAb5871 and products based thereon. Under the agreement, we granted to Amgen an option to acquire an exclusive license to research, develop, manufacture and commercialize XmAb5871 and certain related products worldwide, which option is exercisable by Amgen only after Amgen's (1) notification to us that it is electing to exercise the option and (2) payment of an option exercise fee to us during the option period under the agreement. The term of the option began at the effective date of the Agreement and expires 90 days after delivery of the data from a Phase 2 proof-of-concept (POC) clinical trial. During the option period and prior to Amgen exercising its option under the agreement, we retain ownership of the compound and are responsible for all clinical development of the compound through completion of the Phase 2 POC clinical trial and delivery of the clinical study data for the POC clinical trial. We received a nonrefundable upfront payment of \$11.0 million upon execution of the agreement. We are eligible to receive milestone payments through the option period and following the exercise of the option by Amgen, additional milestone payments and royalties. We determined that substantially all of the future milestones and related payments were substantive and contingent and we did not allocate any of the upfront consideration to the milestones.

We determined that the arrangement is one with multiple deliverables and we identified the multiple elements at the inception of the agreement. We determined that the deliverables under the arrangement were the research and development services and the option to acquire the rights to XmAb5871. Since the option is a contingent and a substantive element, no portion of the upfront fee was allocated to it. The upfront payment was allocated to the research and development services and is being recognized ratably over the estimated service period to complete the Phase 2 POC trial and delivery of the clinical study reports to Amgen. At inception of the agreement, we originally estimated the term of the services period to be 41 months. During 2012, we corrected our original estimate of the service period from 41 months to 60 months (see note 9) and changed our estimate of the time to complete the development work through completion of the POC trial to 72 months. We are recognizing the effect of this change prospectively as a change in estimate.

The total revenue recognized under this arrangement was \$2.0 million and \$1.8 million for the years ended December 31, 2011 and 2012, respectively.

***MedImmune LLC***

In December 2012, we entered into a Cross-License Agreement with MedImmune, LLC (MedImmune). Under the agreement we provided MedImmune with a non-exclusive research license to certain technology and options to acquire commercial licenses to a limited number of compounds. The commercial licenses will be worldwide, royalty-free exclusive licenses and are subject to our review and approval. In exchange, MedImmune provided us with a worldwide, non-exclusive, royalty-free license and sub-license to certain U.S. patent rights granted to MedImmune. We determined that the exchange

**Xencor, Inc.****Notes to Financial Statements (Continued)****1. Summary of Significant Accounting Policies (Continued)**

is a non-monetary transaction as provided under ACS 845-10, Non-Monetary Transactions. The transaction did not include any cash proceeds and only the exchange of intellectual property rights between the two companies.

We could not determine a fair value of the MedImmune patent rights received by us with reasonable certainty but could establish a fair value for the transaction by estimating the fair value of the research license and options for the commercial licenses provided by us to MedImmune. We estimated the fair value of the license and options transferred to be \$0.75 million. Our estimate was based on the risk adjusted discounted cash flow that is associated with the research license and options to commercial licenses transferred to MedImmune. In determining this estimate, we compared the license and options rights transferred to MedImmune with comparable arms-length non-related party licensing and option transactions that we have entered into with third parties in recent years. The calculation of the fair value is based on our experience and judgment with similar cash transactions. We recognized licensing revenue on the exchange of \$0.75 million for the year ended December 31, 2012 equal to the fair value of the assets transferred. We also recorded an asset of \$0.75 million to reflect the licensing rights that we acquired from MedImmune in the exchange; the capitalized rights are being amortized over the shorter of the remaining patent term or the estimated useful life of the license.

MedImmune Ventures, Inc., an affiliate of MedImmune, is one of our 5% stockholders and has a designee on our Board of Directors.

***Boehringer Ingelheim International GmbH***

In 2007 we entered into a Research Licensee and Collaboration Agreement with Boehringer Ingelheim International GmbH (BI). Under the agreement, we provided BI with a three-year research license to one of our technologies and commercial options. We identified the deliverables under the agreement at inception as the research licenses and options to acquire commercial licenses to up to two compounds. Upon exercise of an option to a commercial license, we are eligible to receive future milestone payments and royalties. We determined that the future milestones and related payments were substantive and contingent and we did not allocate any of the upfront consideration to the milestones. The upfront payment and the annual license fees are being recognized ratably into income over the research license term which expired in 2011 and payments for the commercial options were recognized in the period the commercial option was exercised since the options were contingent and substantive. During 2012, BI advanced a compound that incorporates our technology into clinical development and we received a milestone payment of \$1.2 million. We have recognized the payment under the milestone method and recorded it into income during the period that the milestone event occurred.

***Janssen, Research & Development, LLC***

In 2009 we entered into a Research License and Option Agreement with Janssen, Research & Development, LLC (Janssen). Under the agreement, we provided Janssen with non-exclusive research license and options for exclusive commercial licenses to apply our technology to their compounds. We identified the deliverables under the agreement at inception as the research licenses and options to acquire commercial licenses to up to three compounds. Upon exercise of an option, we are eligible to receive future milestone and royalty payments. We determined that the options and future milestones and related payments were substantive and contingent and we did not allocate any of the upfront consideration to the options or milestones. The upfront payment of \$1.0 million received at inception



**Xencor, Inc.****Notes to Financial Statements (Continued)****1. Summary of Significant Accounting Policies (Continued)**

and the annual research license renewal payments are being recognized as revenue recorded ratably over the two-year term of the research license. During 2011, we recognized total revenue of \$1.0 million consisting in annual research license revenue. During 2012, we recognized total revenue of \$1.4 million consisting of \$0.9 million in research license revenue and \$0.5 million for the exercise of a commercial option.

**CSL Limited**

In 2009 we entered into a Research License and Commercialization Agreement with CSL Limited (CSL). Under the agreement, we provided CSL with a research license to one of our technologies and up to five commercial options. The upfront payment of \$0.75 million received at inception and the annual research license renewal payments are being recognized as revenue ratably over the five-year term of the research license. During 2011, we recognized total revenue of \$1.3 million consisting of \$0.3 million in research license revenue and \$1.0 million in milestone and option exercise payments. During 2012, we recognized total revenue of \$1.8 million consisting of \$0.3 million in annual research license revenue and \$1.5 million in milestone payments. We identified the deliverables under the agreement at inception as the five-year research licenses and options to acquire commercial licenses. Upon exercise of an option to acquire a commercial license, we are eligible to receive future milestones and royalties. The upfront payment and the annual license fees were allocated to the research license and are being recognized into income over the research term and payments for commercial options are being recognized in the period the commercial option was exercised since the options were contingent and substantive. We determined that the future milestones and related payments were substantive and contingent and we did not allocate any of the upfront consideration to the milestones. During 2011, CSL elected to take a commercial license to a compound and we received a payment of \$0.5 million related to the commercial license. The payment of \$0.5 million received for the commercial license was recognized in income in the period that the commercial license became effective, 2011.

The \$6.8 million and \$9.5 million of revenue recorded for the years ended December 31, 2011 and December 31, 2012 was earned principally from four and five licensees, respectively (following table in millions):

	Year Ended December 31,	
	2011	2012
Amgen	\$ 2.0	\$ 1.8
MorphoSys	2.2	2.0
Janssen	1.0	1.4
CSL	1.3	1.8
BI	—	1.2
Other	0.3	1.3
Total	<u>\$ 6.8</u>	<u>\$ 9.5</u>

As of December 31, 2012, our accounts receivables consisted of one receivable from a major customer, MorphoSys, for \$0.3 million.

**Xencor, Inc.****Notes to Financial Statements (Continued)****1. Summary of Significant Accounting Policies (Continued)**

As of December 31, 2012, the Company may be eligible to receive the following maximum payments from its collaborative partners and licensees based upon contractual terms in the agreements and assuming all options are exercised and all milestones are achieved:

Partner	Potential Milestones (in millions)			
	Development-based	Regulatory-based	Sales-based	Total Milestones
MorphoSys(2)	\$ 65.0	\$ 187.0	\$ 50.0	\$ 302.0
Amgen(1)	64.0	150.0	225.0	439.0
BI(2)	9.0	6.0	12.0	27.0
Janssen(2)	6.0	—	4.0	10.0
CSL(2)	38.0	27.5	25.0	90.5
Total	\$ 182.0	\$ 370.5	\$ 316.0	\$ 868.5

- (1) These potential milestones include milestones that were determined to be substantive because they require the Company to devote substantial effort to perform services for the benefit of the counterparty prior to achievement of the milestone and the payments due upon achievement of the milestone are reasonable in connection with the services provided and the remainder of the milestones in the arrangement.
- (2) The payments are solely dependent upon activities of the collaborative partner and licensees.

A substantial portion of our revenue is earned from collaboration partners outside the United States. Non-U.S. revenue is denominated in U.S. dollars. A breakdown of our revenue from U.S. and non-U.S. sources for the years ended December 31, 2011 and 2012 is as follows (in millions):

	Year Ended December 31,	
	2011	2012
U.S. Revenue	\$ 3.3	\$ 4.4
Non-U.S. Revenue	3.5	5.1
Total	\$ 6.8	\$ 9.5

**Deferred Revenue**

Deferred revenue arises from payments received in advance of the culmination of the earnings process. We have classified deferred revenue expected to be recognized within the next 12 months as a current liability. We recognize deferred revenue as revenue in future periods when the applicable revenue recognition criteria have been met. The total amounts reported as deferred revenue were \$12.2 million and \$7.6 million for the years ended December 31, 2011 and 2012, respectively.

**Research and Development Expenses**

Research and development expenses include costs we incur for our own and for our collaborators' research and development activities. Research and development costs are expensed as incurred. These costs consist primarily of salaries and benefits, including associated stock-based compensation,

**Xencor, Inc.****Notes to Financial Statements (Continued)****1. Summary of Significant Accounting Policies (Continued)**

laboratory supplies, facility costs, and applicable overhead expenses of personnel directly involved in the research and development of new technology and products, as well as fees paid to other entities that conduct certain research development activities on our behalf. We estimate preclinical study and clinical trial expenses based on the services performed pursuant to the contracts with research institutions and clinical research organizations that conduct and manage preclinical studies and clinical trials on our behalf based on the actual time and expenses incurred by them. Further, we accrue expenses related to clinical trials based on the level of patient enrollment and activity according to the related agreement. We monitor patient enrollment levels and related activity to the extent reasonably possible and adjust estimates accordingly. During 2011 and 2012, we expensed \$12.7 million and \$12.7 million, respectively, for research and development.

We capitalize acquired research and development technology licenses and third-party contract rights and amortize the costs over the shorter of the license term or the expected useful life. We review the license arrangements and the amortization period on a regular basis and adjust the carrying value or the amortization period of the licensed rights if there is evidence of a change in the carrying value or useful life of the asset. See "—Patents, licenses and other intangible assets."

***Cash and Cash Equivalents***

We consider cash equivalents to be only those investments which are highly liquid, readily convertible to cash and which mature within three months from the date of purchase.

The primary objectives for our investment portfolio are liquidity and safety of principal. Investments are made to achieve the highest rate of return for us, while maintaining consistency with these two objectives. In 2011 and 2012, we maintained our investment portfolio in money-market funds.

***Concentrations of Risk***

Cash and cash equivalents are maintained at financial institutions and, at times, balances may exceed federally insured limits. We have never experienced any losses related to these balances. All of our non-interest bearing cash balances were fully insured at December 31, 2012 due to a temporary federal program in effect from December 31, 2010 through December 31, 2012. Under the program, there was no limit to the amount of insurance for eligible accounts. Beginning in January 2013, insurance coverage reverted to \$250,000 per depositor at each financial institution, and our non-interest bearing cash balances exceeded federally insured limits. Interest-bearing amounts on deposit in excess of federally insured limits at December 31, 2011 and 2012 approximated \$14.5 and \$2.3 million, respectively.

We have payables with two service providers that represent 38.3% and 27.2% of our total payables for the years ended December 31, 2011 and 2012, respectively. We have never experienced an interruption in service related to these two vendors and also believes that there are alternative vendors available and as such do not perceive this concentration to present a significant risk to our operation. No other vendor accounted for more than 10.0% of payables.

***Fair Value of Financial Instruments***

Our financial instruments primarily consist of cash, money market funds, trade accounts receivable, accounts payable, accrued expenses and convertible notes payable. The fair value of cash, money

**Xencor, Inc.****Notes to Financial Statements (Continued)****1. Summary of Significant Accounting Policies (Continued)**

market funds, trade accounts receivable, accounts payable and accrued expenses closely approximate their carrying value due to their short maturities. The carrying amounts of convertible notes payable approximate their fair value, as the interest rates, in consideration of the conversion feature, approximate the interest rates presently available to us.

We determine the fair value of the principal amount of financial and nonfinancial assets and liabilities using the fair value hierarchy, which describes three levels of inputs that may be used to measure fair value, as follows:

*Level 1*— Quoted prices in active markets for identical assets or liabilities;

*Level 2*— Observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities, quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; and

*Level 3*— Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

Level 1 assets consist of highly-liquid money market funds. The fair value of Level 1 assets has been determined using quoted prices in active markets for identical assets. There were no transfers between Level 1 and Level 2 assets during the years presented.

The assets recorded at fair value at December 31, are classified within the hierarchy as follows for the years reported (in millions):

	2011		2012	
	Total Fair Value	Level 1	Total Fair Value	Level 1
Money Market Funds	\$ 14.5	\$ 14.5	\$ 2.3	\$ 2.3

For disclosure purposes at December 31, the fair value of the principal amount of our outstanding convertible promissory notes are classified within the hierarchy as follows (in millions):

	2011		2012	
	Total Fair Value	Level 3	Total Fair Value	Level 3
Convertible Promissory Notes	\$ 15.1	\$ 15.1	\$ 15.1	\$ 15.1

These convertible promissory notes were to mature as of December 31, 2011 and 2012 (see note 2 for further detail) and when considering the lack of time value, the absence of an established market for the convertible promissory notes, and our knowledge of the terms, rates, risk and returns provided by the convertible promissory notes as compared to financing available for privately-held biopharmaceutical companies, we determined that the carrying value of the convertible promissory notes approximates their fair value. There were no transfers between Level 3 and Level 2 or Level 1 during the year.

**Xencor, Inc.****Notes to Financial Statements (Continued)****1. Summary of Significant Accounting Policies (Continued)*****Property and Equipment***

Property and equipment are recorded at cost and depreciated using the straight-line method over the estimated useful lives of the assets, ranging from three to seven years, or the lease term, whichever is shorter. Expenditures for repairs and maintenance are charged to expense as incurred while renewals and improvements are capitalized. Useful lives by asset category are as follows:

Computers, software and equipment	3-5 years
Furniture and fixtures	5-7 years
Leasehold improvements	5-7 years or remaining lease term, whichever is less

During 2012, we entered into a capital lease for certain computer equipment for \$22,000. Total assets under capital lease were \$32,000 and \$54,000 of December 31, 2011 and 2012, respectively; accumulated depreciation for these assets was \$21,000 and \$37,000 at December 31, 2011 and 2012, respectively.

Depreciation expense in 2011 and 2012 was \$333,000 and \$154,000, respectively.

***Patents, Licenses, and Other Intangible Assets***

The cost of acquiring licenses is capitalized and amortized on the straight-line basis over the shorter of the term of the license or its estimated economic life, ranging from five to 25 years. Third-party costs incurred for acquiring patents are capitalized. Capitalized costs are accumulated until the earlier of the period that a patent is issued or we abandon the patent claims. Cumulative capitalized patent costs are amortized on a straight-line basis from the date of issuance over the shorter of the patent term or the estimated useful economic life of the patent, ranging from 13 to 20 years. Our senior management, with advice from outside patent counsel, assesses three primary criteria to determine if a patent will be capitalized initially: i) technical feasibility, ii) magnitude and scope of new technical function covered by the patent compared to the company's existing technology and patent portfolio, particularly assessing the value added to our product candidates or licensing business, and iii) legal issues, primarily assessment of patentability and prosecution cost. We review our intellectual property on a regular basis to determine if there are changes in the estimated useful life of issued patents and if any capitalized costs for unissued patents should be abandoned. Capitalized patent costs related to abandoned patent filings are charged off in the year of the decision to abandon. During 2011 and 2012, we abandoned previously capitalized patent related charges of \$714,000 and \$388,000, respectively. During 2011 and 2012, we abandoned previously capitalized licenses of \$0.5 million and \$0, respectively.

**Xencor, Inc.****Notes to Financial Statements (Continued)****1. Summary of Significant Accounting Policies (Continued)**

The carrying amount and accumulated amortization of patents, licenses, and other intangibles is as follows (in thousands):

	December 31,	
	2011	2012
Patents, definite life	\$ 3,280	\$ 4,416
Patents, pending issuance	3,698	3,293
Licenses and other amortizable intangible assets	902	1,669
Nonamortizable intangible assets (trademarks)	340	356
Total gross carrying amount	8,220	9,734
Accumulated amortization—patents	(747)	(985)
Accumulated amortization—licenses and other	(223)	(289)
Total intangible assets, net	<u>\$ 7,250</u>	<u>\$ 8,460</u>

Amortization expense for patents, licenses, and other intangible assets was \$274,000 and \$373,000 for the years ended December 31, 2011 and 2012, respectively.

Future amortization expense for patents, licenses, and other intangible assets recorded as of December 31, 2012, and for which amortization has commenced, is as follows:

	Years ending December 31, (in thousands)
	2013
2014	442
2015	440
2016	438
2017	438
Thereafter	2,564
Total	<u>\$ 4,811</u>

The above amortization expense forecast is an estimate. Actual amounts of amortization expense may differ from estimated amounts due to additional intangible asset acquisitions, impairment of intangible assets, accelerated amortization of intangible assets, and other events. As of December 31, 2012, the Company has \$3.6 million of intangible assets which are in-process and have not been placed in service and, accordingly amortization on these assets has not commenced.

**Long-Lived Assets**

Management reviews long-lived and certain identifiable intangibles for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset (or asset group) may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to undiscounted net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured as the amount by which the carrying amount of the assets exceeds the fair value of the assets. Fair value for our long-lived

**Xencor, Inc.****Notes to Financial Statements (Continued)****1. Summary of Significant Accounting Policies (Continued)**

assets is determined using the expected cash flows discounted at a rate commensurate with the risks involved.

As of December 31, 2012, we determined that our continuing losses triggered a review of the carrying value of our long-lived assets including our capitalized patent and licensing costs. We conducted an impairment analysis of the assets in accordance with ASC 360 and ASC 820 by estimating the future undiscounted cash flows as of December 31, 2012, by patent family, which included granted and pending patents and related licenses. For purposes of the analysis, we grouped our patents into the three primary technology groups, I1b, ADCC and Xtend, and compared the carrying value of the group to the undiscounted cash flows expected to be received from the patents in each group. We determined that the fair value of the potential future cash flows using this method was in excess of the carrying value of the intangible assets as of December 31, 2012. The patent groups assessed for impairment were the I1b, ADCC and Xtend patent families and represented the lowest level of cash flows for evaluation. These three patent families cover all of our current product candidates and our current license agreements. We modeled the cash flows from our internal product development programs (XmAb5871 and XmAb7195) and licensed programs that use each particular category of patent asset. We used multiple published sources of pharmaceutical product development stage failure rates to estimate failure rates at each stage of clinical development in order to probability weight the cash flows for each internal and licensed program. We did not recognize a loss from impairment for the years ended December 31, 2011 and 2012.

***Income Taxes***

We account for income taxes in accordance with accounting guidance which requires an asset and liability approach to financial accounting and reporting for income taxes. Deferred income tax assets and liabilities are computed annually for differences between the financial statement and tax bases of assets and liabilities that will result in taxable or deductible amounts in the future based on enacted tax laws and rates applicable to the periods in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized. Income tax expense is the tax payable or refundable for the period plus or minus the change during the period in deferred tax assets and liabilities.

We assess our income tax positions and record tax benefits for all years subject to examination based upon our evaluation of the facts, circumstances and information available at the reporting date. For those tax positions where there is greater than 50% likelihood that a tax benefit will be sustained, we have recorded the largest amount of tax benefit that may potentially be realized upon ultimate settlement with a taxing authority that has full knowledge of all relevant information. For those income tax positions where there is a 50% or less likelihood that a tax benefit will be sustained, no tax benefit has been recognized in the financial statements.

Our policy is to recognize interest and penalties on taxes, if any, within operations as income tax expense. We did not have any unrecognized tax positions at December 31, 2011 and 2012.

We are subject to U.S. federal and state tax authority audits for the years from December 31, 2009 to December 31, 2012.

**Xencor, Inc.****Notes to Financial Statements (Continued)****1. Summary of Significant Accounting Policies (Continued)*****Stock-Based Compensation***

We recognize compensation expense using a fair-value-based method for costs related to all share-based payments, including stock options. Stock-based compensation cost related to employees and directors is measured at the grant date, based on the fair-value—based measurement of the award using the Black-Scholes method, and is recognized as expense over the requisite service period on a straight-line basis. We are required to estimate forfeitures at the time of grant and revise those estimates in subsequent period if actual forfeitures differ from those 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. We recorded stock-based compensation (benefit) and expense for stock-based awards to employees and directors of approximately \$(57,000) and \$29,000 for the years ended December 31, 2011 and 2012, respectively.

Options granted to individual service providers that are not employees or directors are accounted for at estimated fair value using the Black-Scholes option-pricing method and are subject to periodic re-measurement over the period during which the services are rendered.

***Net Loss Per Share***

Basic net loss per common share is computed by dividing the net loss by the weighted-average number of common shares outstanding during the period. Potentially dilutive securities consisting of stock options, convertible preferred stock and convertible promissory notes were not included in the diluted net loss per common shares calculation because the inclusion of such shares would have had an antidilutive effect.

	Year Ended December 31,	
	2011	2012
	(in thousands)	
Convertible preferred stock	12,188	12,188
Convertible promissory notes	2,471	2,800
Options to purchase common stock	1,245	1,305
Total	<u>15,904</u>	<u>16,293</u>

**2. Convertible Notes Payable**

In 2009, we issued \$7.65 million of convertible promissory notes (the 2009 Notes) to existing preferred stockholders. The 2009 notes included a contingent redemption feature which provided that, upon a change of control or other liquidation event, the outstanding principal and accrued interest would be converted to shares of our Series E-1 convertible preferred stock which were entitled to a payment of liquidation preference equal to three times the per share price of \$2.41 used for the conversion in priority to any liquidation payments to be made to any other series of convertible preferred stock or common stock. Originally, the 2009 Notes had an interest rate of 10.0% per annum and original maturity date of September 30, 2009 which was subsequently extended to July 31, 2011. In June 2011, the 2009 Notes were amended to increase the interest rate on the Note from 10.0% to 12.5% and to extend the maturity date to December 31, 2012. We determined that these amendments of the 2009 Notes were not an extinguishment of debt under ASC 470-50-40, Debt Modifications and



**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

**2. Convertible Notes Payable (Continued)**

Extinguishments. Accordingly, we did not recognize a gain or loss as a result of the amendments and they were treated as a modification of the debt. The new effective interest rate was 12.5%

In December 2010, we issued an additional \$7.5 million of convertible promissory notes (the 2010 Notes) to existing preferred stockholders. The 2010 Notes included a contingent redemption feature which provided that, upon a change of control or other liquidation event, the outstanding principal and accrued interest would be converted to shares of our Series E-1 convertible preferred stock which were entitled to a payment of liquidation preference equal to three times the per share price of \$2.41 used for the conversion in priority to any liquidation payments to be made to any other series of convertible preferred stock or common stock. The 2010 Notes bear similar terms as the 2009 notes and, originally had an interest rate of 10.0% per annum and an original maturity date of December 31, 2011. In December 2011, the 2010 Notes were amended to increase the interest rate from 10.0% to 12.5% and to extend the maturity date of the Notes to December 31, 2012. We determined that these amendments of the 2010 Notes were not an extinguishment of debt under ASC 470-50-40. Accordingly, we did not recognize a gain or loss as a result of the amendments and they were treated as a modification of the debt. The new effective interest rate was 12.5%

In December 2012 the maturity dates for the 2009 Notes and the 2010 Notes were extended to April 15, 2013 and in April 2013 the maturity dates were extended again to June 15, 2013, with each such extension considered to be a modification of debt under ASC 470-50-40.

In June 2013, and prior to the maturity dates of the 2009 Notes and the 2010 Notes, our Board of Directors and the requisite stockholders and holders of the 2009 Notes and 2010 Notes agreed to exchange the outstanding principal into shares of our Series A-1 convertible preferred stock in connection with a concurrent financing (see Note 8). The exchange of the 2009 Notes and 2010 Notes was not pursuant to the terms of the applicable Notes so we accounted for the exchange as an extinguishment of the original debt instrument under ASC 470-50-40. (see Note 8).

At December 31, 2011, we had \$18.5 million of convertible notes payable which include principal of \$15.2 million and accrued interest due of \$3.3 million. At December 31, 2012, we had \$20.9 million of convertible notes payable which include principal of \$15.1 million and accrued interest due of \$5.8 million. The 2009 Notes and 2010 Notes included a contingent redemption feature which provided that, upon a change of control or other liquidation event, the outstanding principal and accrued interest of such notes would be converted in shares of our Series E-1 convertible preferred stock which were entitled to payment of a liquidation preference equal to three times the per share price of \$2.41 used for the conversion in priority to any liquidation payments to be made to any other series of convertible preferred stock or common stock. As of December 31, 2011 and 2012, \$6.5 million of convertible promissory notes were held by a director of the Company.

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

**3. Capital Structure**

*Authorized Capital Stock*

We are authorized to issue 57,225,000 shares of common stock and 45,322,694 shares of convertible preferred stock, of which 857,797 are shares of Series A convertible preferred stock (Series A), 1,328,946 are shares of Series B convertible preferred stock (Series B), 2,416,284 are shares of Series C convertible preferred stock (Series C), 7,966,667 are shares of Series D convertible preferred stock (Series D), 25,253,000 are shares of Series E convertible preferred stock (Series E) and 7,500,000 are shares of Series E-1 convertible preferred stock (Series E-1) (collectively, the Preferred Series A – E). The shares of Series E-1 convertible preferred stock were authorized for potential issuance upon conversion of the 2009 Notes and 2010 Notes. Because no shares of Series E-1 were ever issued by us, the disclosure that follows does not include the rights of the Series E-1.

*Rights of Convertible Preferred Stock*

*Anti-Dilution*

In the event we sell or issue additional shares of preferred or common stock at a price less than the Series E original conversion prices of \$2.41 per share and/or less than the Series D original conversion price of \$2.52 per share, the Series E and/or the Series D conversion prices shall be reduced to reflect the effective price of the most recent sale or issuance. Where there is a reduction in the Series E and/or the Series D conversion price, additional Series E and/or Series D shares shall be issued to the Series E, and/or Series D holders such that the product of the conversion price and the original shares issued remains constant. Such an event will result in a beneficial event for the Series E, and Series D that will be recorded as a deemed dividend.

*Conversion*

Each 3.1 shares of convertible preferred stock is convertible, at the stockholders' option, into one share of common stock. Additionally, upon written consent of 75% of the holders of the then outstanding shares of all convertible preferred stock voting together, each share of convertible preferred stock is automatically converted into common stock and, in the event of a public offering of our equity securities with a price to the public of greater than \$5.00 per share and resulting in gross proceeds to us of \$35.0 million or more, all outstanding convertible preferred stock will automatically be converted into common stock.

*Liquidation*

In the event of any liquidation, dissolution or winding up of the Company, either voluntary or involuntary, including any merger, consolidation or similar transaction:

- the holders of Series E preferred stockholders are entitled to receive preference to Series D, Series C, Series B, Series A and common stockholders to any distribution of any assets of the Company in an amount per share equal to \$2.41 per share plus all accrued and unpaid liquidation dividends on such Series E;
- the holders of Series D are entitled to receive preference to Series C, Series B, Series A and common stockholders to any distribution of assets of the Company in an amount per share equal to \$2.52 per share; and

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

**3. Capital Structure (Continued)**

- the holders of Series C, Series B, and Series A are entitled to receive preference to the common stockholders to any distribution of any assets of the Company in an amount per share equal to \$20.70, \$9.33 and \$4.14 per share, respectively (as adjusted for any stock splits, stock dividends, recapitalizations, or the like).

After full payment of the Series E, Series D, Series C, Series B and Series A convertible preferred stock liquidation preference amounts, the remaining assets are distributed ratably to the holders of shares of common stock and convertible preferred stock on an as-converted to common stock basis.

The convertible preferred stock is classified as mezzanine equity outside stockholders' equity because each series of preferred Stock A through E is subject to a deemed liquidation clause that could potentially require redemption of the preferred shares for cash as a result of events outside the control of the Company.

We have not adjusted the carrying values of the convertible preferred stock to the liquidation preferences of such shares because it is uncertain whether or when an event would occur that would obligate us to pay the liquidation preferences to holders of shares of convertible preferred stock. Subsequent adjustments to increase the carrying values to the liquidation preferences will be made if an when it becomes probable that an event would occur that would obligate us to pay the liquidation preferences to holders of shares of convertible preferred stock.

*Dividends*

Dividends will be paid if and when declared by the Board of Directors at its sole discretion. Holders of outstanding shares of Series E in preference to the holders of Series A, Series B, Series C, Series D and common stock, shall be entitled to receive cash dividends at an annual rate of 8% of the original issue price per share of Series E, as applicable, outstanding, payable only when, as and if declared by the Board of Directors. The right to such dividends on the Series E shall be cumulative and is payable in the event of a liquidation. As of December 31, 2011 and 2012, the accumulated Series E dividend was \$27.2 million and \$34.2 million, respectively.

Holders of outstanding shares of Series D in preference to the holders of Series A, Series B, Series C and common stock, shall be entitled to receive cash dividends at an annual rate of 8% of the original issue price per share of Series D outstanding, payable only when, as and if declared by the Board of Directors. Holders of Series A, Series B, and Series C, in preference to the holders of common stock, shall be entitled to receive cash dividends at an annual rate of 8% of the original issue price per share of their respective series of convertible preferred stock, payable only when, as and if declared by the Board of Directors. The right to such dividends on the Series A, Series B, Series C, and Series D shares shall not be cumulative and no right shall accrue to holders of Series A, Series B, Series C, and Series D by reason of the fact that dividends are not declared or paid in any previous fiscal year.

*Voting*

Each share of Preferred Series A – E carries one vote for each share of common stock into which such shares of convertible preferred stock may be converted.

**Xencor, Inc.****Notes to Financial Statements (Continued)****3. Capital Structure (Continued)***Redemption*

The convertible preferred stock has no date-specific mandatory redemption features.

As of December 31, 2011 and 2012, 7.5 million shares of Series A – E convertible preferred stock were held by a director of the Company.

As of December 31, 2011 and 2012, there were notes outstanding issued to one of our stockholders by us in the aggregate amount of \$0.2 million. We made the loans to facilitate the purchase by such stockholder of shares of our common stock. The notes mature on the earlier of May 2014 or the filing of a registration statement for our initial public offering and bear interest at 0.56% per annum. These notes are not reflected on the accompanying balance sheets as of December 31, 2011 and 2012 as the notes have been accounted for as an in-substance common stock option grant.

**4. Income Taxes**

Our effective tax rate differs from the statutory federal income tax rate, primarily as a result of the net operating loss carryforwards and research credit carryforwards.

A reconciliation of the federal statutory income tax rate to our effective income tax rate is as follows (in thousands):

	Year Ended December 31,	
	2011	2012
Federal statutory income tax rate	(3,809)	(2,922)
Other	338	348
Net change in valuation allowance	3,471	2,574
Net effective federal tax rate	—	—

**Xencor, Inc.****Notes to Financial Statements (Continued)****4. Income Taxes (Continued)**

The tax effect of temporary differences that give rise to a significant portion of the deferred tax assets and liabilities at December 31, 2012 and 2011, is presented below (in thousands):

	<u>2011</u>	<u>2012</u>
<b>Deferred tax assets</b>		
Net operating loss carryforwards	\$ 52,880	\$ 57,782
Research credits	20,776	22,503
Depreciation	915	892
Accrued compensation	109	163
Deferred revenue	4,871	3,048
<b>Total deferred tax assets</b>	<u>79,551</u>	<u>84,388</u>
<b>Valuation allowance</b>	<u>(76,736)</u>	<u>(81,076)</u>
<b>Net deferred tax assets</b>	<u>2,815</u>	<u>3,312</u>
<b>Deferred tax liabilities</b>		
Patent costs	(2,534)	(2,738)
Licensing costs	(162)	(455)
Capitalized legal costs	(119)	(119)
<b>Net deferred taxes</b>	<u>\$ —</u>	<u>\$ —</u>

Due to the uncertainty surrounding the timing of realization of the benefits of our deferred tax assets in future tax periods, we have placed a valuation allowance against its deferred tax assets. During the years ended December 31, 2011 and 2012, the valuation allowance increased by \$6.0 million and \$4.3 million respectively. The Company's tax returns remain open to potential inspection for the years ended 2009 and later.

As of December 31, 2012, we had cumulative net operating loss carryforwards for federal and state income tax purposes of \$146.7 million and \$131.6 million respectively, and available tax credit carryforwards of approximately \$12.9 million for federal income tax purposes and \$9.6 million for state income tax purposes, which can be carried forward to offset future taxable income, if any.

Our federal net operating loss carryforwards expire starting in 2018 and state net operating losses expire starting in 2013. Federal tax credit carryforwards expire starting in 2018 and state tax credit carryforwards expire starting in 2013. Utilization of the net operating losses and tax credits may be subject to a substantial annual limitation due to the ownership change limitations which may occur on the sale of additional common or preferred stock, provided by the Internal Revenue Code of 1986 under Section 382 and similar state provisions, which could result in the expiration of our net operating losses and tax credits before we can use them.

**5. Stock-Based Compensation**

In December 2010, the Board of Directors and the requisite stockholders approved a stock Option Plan, the 2010 Equity Incentive Plan (the 2010 Plan). All options granted under the 2010 Plan are to be made at prices not less than fair value of the stock at the date of grant. Options granted under the 2010 Plan are exercisable at various dates over their 10-year life. Generally, our Board of Directors grants options under our 2010 Plan with 100% of the shares initially subject to vesting and where 25%

**Xencor, Inc.****Notes to Financial Statements (Continued)****5. Stock-Based Compensation (Continued)**

of such shares vest on the one-year anniversary of the date of grant and  $\frac{1}{48}$  of the shares vest monthly thereafter.

The following table summarizes certain information related to options for common stock:

	Number of Shares	Weighted Average Exercise Price
Outstanding at December 31, 2010	1,298,655	\$ 0.59
Grants	1,642	0.59
Surrendered, forfeited or expired	(54,899)	0.59
Exercised	—	—
Outstanding at December 31, 2011	1,245,398	0.59
Grants	60,642	0.59
Surrendered, forfeited or expired	(1,192)	0.59
Exercised	—	—
Outstanding at December 31, 2012	<u>1,304,848</u>	<u>\$ 0.59</u>

Information with respect to stock options outstanding is as follows:

	December 31,	
	2012	2011
Exercisable options	1,094,573	914,706
Weighted average price per share of exercisable options	\$ 0.59	\$ 0.59
Weighted average grant date fair value per share of options granted during the year	\$ 0.34	\$ 0.34
Options available for future grants	753,692	813,142
Weighted average remaining contractual life	<u>7.79</u>	<u>8.70</u>

We estimated the fair value of employee and non-employee awards using the Black-Scholes valuation model. The fair value of employee stock options is being amortized on a straight-line basis over the requisite service period of the awards.

For the options granted in the years ended December 31, 2010 and 2011, we used an estimated fair value per share of \$0.59, originally determined by our Board of Directors as of December 31, 2009. We used the capital asset valuation model to determine fair value with the following key assumptions: junior nature of the common stock to outstanding convertible preferred stock and convertible preferred promissory notes, conversion dilution, minority status and the illiquid nature of our common stock.

**Xencor, Inc.****Notes to Financial Statements (Continued)****5. Stock-Based Compensation (Continued)**

The fair value of employee stock options was estimated using the following weighted average assumptions for the years ended December 31, 2011 and 2012.

	<u>2011</u>	<u>2012</u>
Common stock fair value per share	\$ 0.59	\$ 0.59
Volatility	63.7%	63.7%
Risk-free interest rate	2.68	2.68%
Dividend yield	—	—%
Expected term (in years)	<u>6.0</u>	<u>6.0</u>

The expected term of stock options represents the average period the stock options are expected to remain outstanding. The expected stock price volatility for our stock options for the years ended December 31, 2011 and 2012 was determined by examining the historical volatilities for industry peers and adjusting for differences in our life cycle and financing leverage. Industry peers consist of several public companies in the biopharmaceutical industry.

We determined the average expected life of stock options based on the simplified method because our common stock has not been publicly traded to date.

The risk-free interest rate assumption is based on the U.S. Treasury instruments whose term was consistent with the expected term of our stock options.

The expected dividend assumption is based on our history and expectation of dividend payouts.

For the years ended December 31, 2011 and 2012, stock-based compensation expense amounted to \$(57,000) and \$29,000, respectively.

At December 31, 2011 and 2012, the unamortized compensation expense related to unvested options was \$45,000 and \$26,000, respectively. The remaining unamortized compensation expense will be recognized over the next two years.

**6. Commitments and Contingencies**

Although we may be involved from time to time in litigation incidental to our business, we are not currently aware of any ongoing, pending or threatened litigation which would have a material adverse effect on our financial position, results of operations and cash flows. However, unforeseen litigation may be initiated by us or by third parties. Such litigation could adversely affect our business, financial position and results of operations and divert our attention and resources from other matters.

In 2009, we purchased certain computer equipment under a three-year capital lease. Total payments due under the capital lease are listed below.

In 2011, we entered into an agreement with its landlord to amend the terms of its existing facility lease in Monrovia, California. The new lease extends the term of the lease from January 2012 to April 2015 and provides for a new rent payment schedule. The new lease is a non-cancelable operating lease. We are responsible for other lease related costs such as personal property taxes, insurance, maintenance and utilities.

**Xencor, Inc.****Notes to Financial Statements (Continued)****6. Commitments and Contingencies (Continued)**

Future minimum payments under the non-cancelable operating and capital leases consist of the following at December 31, 2012 (in thousands):

<u>Years ending December 31,</u>	<u>Capital Equipment Lease</u>	<u>Operating Leases</u>
2013	\$ 7	\$ 550
2014	8	620
2015	2	212
Thereafter	—	—
<b>Total</b>	<b>\$ 17</b>	<b>\$ 1,382</b>

Net rent expense for the years ended December 31, 2011 and 2012 was \$689,000 and \$547,000, respectively.

**Guarantees**

In the normal course of business, we indemnify certain employees and other parties, such as collaboration partners and other parties that perform certain work on behalf of, or for the Company or take licenses to our technologies. We have agreed to hold these parties harmless against losses arising from our breach of representations or covenants, intellectual property infringement or other claims made against these parties in performance of their work with us.

These agreements typically limit the time within which the party may seek indemnification by us and the amount of the claim. It is not possible to prospectively determine the maximum potential amount of liability under these indemnification agreements since we have not had any prior indemnification claims on which to base the calculation. Further, each potential claim would be based on the unique facts and circumstances of the claim and the particular provisions of each agreement. We are not aware of any potential claims and did not record a liability as of December 31, 2011 and 2012.

**7. 401(k) Plan**

We have a 401(k) plan covering all full-time employees. Employees may make pre-tax contributions up to the maximum allowable by the Internal Revenue Code. Participants are immediately vested in their employee contributions and employer discretionary contributions, if any. No employer contributions were made for the years ended December 31, 2011 and 2012.

**8. Subsequent Events**

In June 2013, our Board of Directors and the requisite holders of the 2009 Notes and 2010 Notes and requisite preferred stockholders agreed to a series of transactions as follows:

- an exchange of the outstanding principal due on the 2009 Notes and 2010 Notes for shares of Series A-1 convertible preferred stock and cancellation of the accrued and unpaid interest thereon, pursuant to a Note Conversion Agreement;
- an exchange of the current outstanding shares of Preferred Series A – E for Series A-1 convertible preferred stock pursuant to the operation of provisions in our certificate of incorporation which was amended and restated in connection with this series of transactions;



**Xencor, Inc.****Notes to Financial Statements (Continued)****8. Subsequent Events (Continued)**

- the sale of an additional \$7.6 million in Series A-1 convertible preferred stock to existing stockholders that closed in June 2013;
- the conversion of certain shares of Series A-1 convertible preferred stock into shares of Series A-2 convertible preferred stock at a conversion rate of 1 for 3, pursuant to a mandatory conversion provision in our amended and restated certificate of incorporation; and
- the sale of an additional \$2.4 million in Series A-1 convertible preferred stock to existing stockholders in an expected second closing in September 2013.

The primary business purpose for this series of transactions was to raise an additional \$10 million of capital from the sale of shares of our Series A-1 convertible preferred stock (the financing). The exchange of Notes, cancellation of interest, restatement of our certificate of incorporation to effect the exchange of Preferred Series A – E for Series A-1 convertible preferred stock and the conversion of certain shares of Series A-1 convertible preferred stock for shares of Series A-2 convertible preferred stock were each negotiated aspects of, and conditions to, the financing. When considering the terms for the financing, our Board of Directors took these conditions into account and, ultimately, determined that the financing was in the best interests of the Company and our stockholders. Subsequent to approval of the financing by our Board of Directors, the requisite stockholders and holders of the Notes also approved this series of transactions.

Under the terms of the Note Conversion Agreement, the total outstanding principal due on the Notes as of June 13, 2013 was exchanged for 45,902,321 shares of Series A-1 convertible preferred stock, 5,303,597 of which were subsequently converted into 1,766,097 shares of Series A-2 convertible preferred stock. We determined that the per share fair value of the shares of Series A-1 convertible preferred stock issued was \$1.54 and the total fair value of the issued shares under the Note Conversion Agreement was \$70.7 million and we recognized a loss on the exchange of \$48.6 million for the difference in the fair value of the shares of Series A-1 convertible preferred stock and the carrying value of the Notes as of June 13, 2013.

After the exchange of the Notes, the outstanding shares of Preferred Series A – E were exchanged for 1,977,137 shares of Series A-1 convertible preferred stock, 257,409 of which were subsequently converted into 85,717 shares of Series A-2 convertible preferred stock. We determined the fair value of the shares of Series A-1 convertible preferred stock issued to be \$3.0 million and we recorded a deemed contribution to equity of \$140.6 million equal to the difference in the fair value of the shares issued and the carrying value of the existing shares of Preferred Series A – E. We record issuance costs related to our preferred stock sales as a reduction to paid-in capital at the time the preferred securities are issued and reflect the carrying value of the preferred stock at the aggregate issuance price. We record these issuances as a non-cash equity distribution at the date of redemption. The deemed contribution has been adjusted to reflect \$3.0 million of original issuance costs of the Preferred Series A – E.

We determined that the value of the Series A-2 convertible preferred stock to be \$0.58 per share. A total of 1,851,814 shares of Series A-2 convertible preferred stock with a fair value of \$1.1 million were issued in exchange for 5,561,006 shares of Series A-1 convertible preferred stock with the fair value of \$8.6 million. We recognized a deemed contribution of \$7.5 million for the difference in the fair value of the shares of Series A-2 convertible preferred stock issued in exchange for the shares of Series A-1 convertible preferred stock.

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

**8. Subsequent Events (Continued)**

On June 26, 2013 we sold 5,586,510 shares of additional Series A-1 convertible preferred stock to existing stockholders at a purchase price of \$1.36 per share for aggregate proceeds of \$7.6 million. We expect to issue up to an additional \$2.4 million in additional shares of Series A-1 convertible preferred stock to existing stockholders at an additional closing in the third quarter of 2013. We determined that the fair value of the shares sold to be \$8.6 million and we recorded a deemed dividend of \$1.0 million for the difference in the sales price of the Series A-1 convertible preferred stock and the fair value of the shares. The \$40,000 of transaction costs related to the sale was recorded against additional paid in capital and the shares of Series A-1 convertible preferred stock issued were recorded at their fair value on our balance sheet as of June 30, 2013.

We determined that the fair value of the Series A-1 and Series A-2 convertible preferred stock as of June 26, 2013 to be \$1.54 and \$0.58, respectively. We used the probability-weighted expected return method (PWERM) to determine the fair value of the shares of the Series A-1 and Series A-2 convertible preferred stock. PWERM is a scenario-based analysis that estimates the value per share based on the probability-weighted present value of expected future investment returns, considering each of the possible outcomes available to us, as well as the economic and control rights of each share class.

On September 4, 2013, our Board of Directors authorized the forgiveness of the outstanding principal and interest of approximately \$166,000, under the promissory note from our Chief Executive Officer, effective and contingent upon the filing of a registration statement on Form S-1 for our initial public offering with the U.S. Securities and Exchange Commission.

We completed an evaluation of all subsequent events through September 11, 2013 to ensure that this filing includes appropriate disclosure of events both recognized in the December 31, 2012 financial statements and events which occurred but were not recognized in the financial statements.

**9. Restatement of Financial Statements**

We restated certain opening balances as of December 31, 2010 to eliminate officer notes in the amount of \$166,000 that are reflected in our adjusted paid-in capital accounts and related interest income of \$54,000 as the notes are accounted for as an in-substance common stock option grant and to record the related accumulated stock compensation expense of \$102,000 and to correct the ratable recognition of revenue related to the MorphoSys arrangement in the amount of \$79,000. These adjustments were immaterial individually and in the aggregate.

As of December 31, 2011, we recorded an adjustment to reduce revenue and increase deferred revenue by \$1.5 million to correct the initial estimate of the period of service from our agreement with Amgen and recorded an adjustment to eliminate \$166,000 in officer notes and related nominal interest income that are being accounted for as an in-substance common stock option grant in prior periods and to record an increase of \$115,000 in revenue and a decrease in deferred revenue related to our agreement with MorphoSys to correctly account for the period of service.

**Xencor, Inc.****Notes to Financial Statements (Continued)****9. Restatement of Financial Statements (Continued)**

The effect of the adjustments described above are presented in the following table.

	December 31, 2011		
	As previously reported	Adjustments (in thousands)	Restated
<b>Balance Sheet Data:</b>			
Deferred revenue	\$ 10,900	\$ 1,277	\$ 12,177
Additional paid in capital	1,077	(64)	1,013
Accumulated deficit	(157,287)	(1,431)	(158,718)
<b>Statement of Operations Data:</b>			
Revenue	\$ 8,204	\$ (1,355)	\$ 6,849
Net Loss	(9,848)	(1,355)	(11,203)

During the second quarter of 2012, we had a change in estimate related to the timing of our recognition of revenue for our agreement with Amgen from 60 months to 72 months. We changed our estimated time to complete the services provide to Amgen based upon feedback received from our contract research organizations. This change in estimate resulted in a \$0.4 million decrease in revenue and increase in net loss and a \$5.07 increase in basic and diluted loss per share for the year ended December 31, 2012.

**10. Stock Split Subsequent to the Balance Sheet Date**

On November 1, 2013, the Company's board of directors and the requisite stockholders authorized the filing of a certificate of amendment to the Company's amended and restated certificate of incorporation for the purpose of effecting a 3.1-for-1 reverse split of the common stock. The certificate of amendment was filed on November 1, 2013 and the stock split became effective as of that date. Accordingly, all references to numbers of common shares, including the number of common shares on an as-if-converted basis, and per-share data in the accompanying financial statements have been adjusted to reflect the reverse stock split on a retroactive basis.

**Xencor, Inc.**

**Condensed Balance Sheet**

(in thousands, except share and per share data)

	<u>December 31, 2012</u>	<u>September 30, 2013</u> (unaudited)
<b>Assets</b>		
Current assets		
Cash and cash equivalents	\$ 2,312	\$ 9,621
Accounts receivables	354	—
Prepaid expenses and other current assets	173	1,133
Total current assets	<u>2,839</u>	<u>10,754</u>
Property and equipment		
Computers, software and equipment	3,374	3,515
Furniture and fixtures	107	89
Leasehold improvements	3,081	3,081
Less accumulated depreciation and amortization	(6,279)	(6,346)
Property and equipment, net	<u>283</u>	<u>339</u>
Other assets		
Patents, licenses and other intangible assets, net	8,460	9,013
Other assets	77	100
Total other assets	<u>8,537</u>	<u>9,113</u>
Total assets	<u>\$ 11,659</u>	<u>\$ 20,206</u>
<b>Liabilities, mezzanine equity, and stockholders' deficit</b>		
Current liabilities		
Accounts payable	\$ 1,315	\$ 3,361
Accrued expenses	1,286	789
Current portion of deferred revenue	1,948	4,470
Current portion of capital lease obligations	7	7
Convertible promissory notes payable	20,923	—
Total current liabilities	<u>25,479</u>	<u>8,627</u>
Deferred revenue, less current portion	5,672	7,000
Capital lease obligations, less current portion	10	7
Total liabilities	<u>31,161</u>	<u>15,634</u>
Mezzanine Equity		
Series A convertible preferred stock, \$0.01 par value: 857,797 authorized shares; 857,792 issued and outstanding shares (liquidation preference of \$3,551) at December 31, 2012; no shares authorized or issued and outstanding at September 30, 2013	3,550	—
Series B convertible preferred stock, \$0.01 par value: 1,328,946 authorized shares; 1,328,941 issued and outstanding shares (liquidation preference of \$12,399) at December 31, 2012; no shares authorized or issued and outstanding at September 30, 2013	12,375	—
Series C convertible preferred stock, \$0.01 par value: 2,416,284 authorized shares; 2,416,281 issued and outstanding shares (liquidation preference of \$50,017) at December 31, 2012; no shares authorized or issued and outstanding at September 30, 2013	50,000	—
Series D convertible preferred stock, \$0.01 par value: 7,966,667 authorized shares; 7,936,483 issued and outstanding shares (liquidation preference of \$20,000) at December 31, 2012; no shares authorized or issued and outstanding at September 30, 2013	20,000	—
Series E convertible preferred stock, \$0.01 par value: 25,253,000 authorized shares; 25,245,566 issued and outstanding shares (liquidation preference of \$88,047) at December 31, 2012; no shares authorized or issued and outstanding at September 30, 2013	60,841	—
Series A-1 convertible preferred stock: \$0.01 par value; no shares authorized or issued and outstanding at December 31, 2012; 55,255,479 authorized shares; 49,671,392 issued and outstanding (liquidation preference \$146,867) at September 30, 2013	—	78,526
Series A-2 convertible preferred stock; no shares authorized or issued and outstanding at December 31, 2012; 13,963,785 authorized shares; 1,851,814 issued and outstanding (liquidation preference \$5,475) at September 30, 2013	—	1,075
Total mezzanine equity	<u>146,766</u>	<u>79,601</u>
Stockholders' deficit		
Common stock; \$0.01 par value: 57,225,000 authorized shares and 72,302 issued and outstanding shares at December 31, 2012; 77,756,553 authorized shares and 72,302 shares issued and outstanding at September 30, 2013	1	1
Additional paid-in capital	1,043	148,838
Accumulated deficit	(167,312)	(223,868)
Total stockholders' deficit	<u>(166,268)</u>	<u>(75,029)</u>
Total liabilities, mezzanine equity and stockholders' deficit	<u>\$ 11,659</u>	<u>\$ 20,206</u>

See accompanying notes to financial statements.

**Xencor, Inc.**

**Condensed Statements of Operations**

**(unaudited)**

**(in thousands, except share and per share data)**

	Nine Months Ended September 30,	
	2012	2013
<b>Revenues:</b>		
Collaborations, licenses and milestones	\$ 7,099	\$ 8,428
<b>Total revenues</b>	<u>7,099</u>	<u>8,428</u>
<b>Operating expenses:</b>		
Research and development	8,725	12,857
General and administrative	2,081	2,381
<b>Total operating expenses</b>	<u>10,806</u>	<u>15,238</u>
<b>Loss from operations</b>	<u>(3,707)</u>	<u>(6,810)</u>
<b>Other income (expenses)</b>		
Interest income	11	7
Interest expense	(1,811)	(1,212)
Other income (expense)	24	15
Loss on settlement of notes	—	(48,556)
<b>Total other income (expense), net</b>	<u>(1,776)</u>	<u>(49,746)</u>
<b>Net loss</b>	<u>\$ (5,483)</u>	<u>\$ (56,556)</u>
Net deemed contribution on exchange and sale of preferred stock	—	144,765
<b>Net income (loss) attributable to common stockholders</b>	<u>\$ (5,483)</u>	<u>\$ 88,209</u>
Net income (loss) per share attributable to common stockholders:		
Basic:	<u>\$ (75.83)</u>	<u>\$ 1,220.01</u>
Diluted:	<u>\$ (75.83)</u>	<u>\$ (4.10)</u>
Weighted average shares of common stock used in computing net income (loss) per share attributable to common stockholders		
Basic	<u>72,302</u>	<u>72,302</u>
Diluted	<u>72,302</u>	<u>13,794,138</u>

See accompanying notes to financial statements.

Xencor, Inc.

Statements of Mezzanine Equity and Stockholders' Deficit

(unaudited)

(in thousands, except share data)

Mezzanine Equity	Series A Convertible Preferred Stock		Series B Convertible Preferred Stock		Series C Convertible Preferred Stock		Series D Convertible Preferred Stock		Series E Convertible Preferred Stock		Series A-1 Convertible Preferred Stock		Series A-2 Convertible Preferred Stock	
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount
<b>Balance, December 31, 2012</b>	857,792	\$ 3,550	1,328,941	\$ 12,375	2,416,281	\$ 50,000	7,936,483	\$ 20,000	25,245,566	\$ 60,841	—	\$ —	—	\$ —
Series A-1 shares issued in exchange of convertible notes	—	—	—	—	—	—	—	—	—	—	45,902,321	70,689	—	—
Exchange of Series A – E Preferred for Series A-1 preferred	(857,792)	(3,550)	(1,328,941)	(12,375)	(2,416,281)	(50,000)	(7,936,483)	(20,000)	(25,245,566)	(60,841)	1,977,137	3,045	—	—
Exchange of Series A-1 preferred for Series A-2 preferred	—	—	—	—	—	—	—	—	—	—	(5,561,006)	(8,563)	1,851,814	\$ 1,075
Sale of Series A-1 preferred	—	—	—	—	—	—	—	—	—	—	7,352,940	13,355	—	—
Net loss	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	—	—	—	—
<b>Balance, September 30, 2013</b>	<u>—</u>	<u>\$ —</u>	<u>—</u>	<u>\$ —</u>	<u>—</u>	<u>\$ —</u>	<u>—</u>	<u>\$ —</u>	<u>—</u>	<u>\$ —</u>	<u>49,671,392</u>	<u>\$ 78,526</u>	<u>1,851,814</u>	<u>\$ 1,075</u>

Stockholders' Deficit	Common Stock		Additional Paid in-Capital	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount			
<b>Balance, December 31, 2012</b>	72,302	\$ 1	\$ 1,043	\$ (167,312)	\$ (166,268)
Deemed contribution on exchange of Series A – E Preferred Stock for Series A-1	—	—	143,681	—	143,681
Deemed contribution on exchange of Series A-1 preferred for Series A-2 preferred	—	—	7,489	—	7,489
Deemed dividend on sale of Series A-1 preferred	—	—	(3,429)	—	(3,429)
Net loss	—	—	—	(56,556)	(56,556)
Stock-based compensation	—	—	54	—	54
<b>Balance, September 30, 2013</b>	<u>72,302</u>	<u>\$ 1</u>	<u>\$ 148,838</u>	<u>\$ (223,868)</u>	<u>\$ (75,029)</u>

See accompanying notes to financial statements.

**Xencor**

**Condensed Statements of Cash Flows**

(unaudited)

(in thousands)

	Nine Months Ended September 30	
	2012	2013
<b>Cash flows from operating activities:</b>		
Net loss	\$ (5,483)	\$ (56,556)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	416	433
Stock-based compensation	22	54
Gain on disposal of assets	(23)	(16)
Abandonment of capitalized intangible assets	235	241
Loss on exchange of notes for preferred stock	—	48,556
Accrued interest on notes converted to preferred stock	1,810	1,211
Changes in operating assets and liabilities:		
Accounts receivable	29	354
Deferred revenue	(3,763)	3,850
Prepaid expenses and other current assets	(8)	(960)
Accounts payable	(298)	2,046
Other assets	16	(21)
Accrued expenses	(96)	(497)
Net cash used in operating activities	<u>(7,143)</u>	<u>(1,305)</u>
<b>Cash flows from investing activities:</b>		
Purchase of intangible assets	(886)	(1,147)
Purchase of property and equipment	(37)	(136)
Proceeds from sale of assets	33	16
Net cash used in investing activities	<u>(890)</u>	<u>(1,267)</u>
<b>Cash flows from financing activities:</b>		
Preferred stock issuance costs	—	(116)
Payments on capital lease obligations	(12)	(3)
Proceeds from sale of Series A-1 preferred stock	—	10,000
Net cash (used in) provided by financing activities	<u>(12)</u>	<u>9,881</u>
Net increase (decrease) in cash and cash equivalents	(8,045)	7,309
Cash and cash equivalents at beginning of period	14,537	2,312
Cash and cash equivalents at end of period	<u>\$ 6,492</u>	<u>\$ 9,621</u>
<b>Supplemental schedule of noncash investing activities:</b>		
Equipment acquired under capital lease	<u>\$ 22</u>	<u>—</u>

See accompanying notes to financial statements.

**Xencor, Inc.**

**Notes to Financial Statements**

**1. Basis of Presentation**

The accompanying balance sheet as of September 30, 2013, and the statements of operations and cash flows for the nine months ended September 30, 2013 and 2012 and statements of mezzanine equity and stockholders' deficit are unaudited. The unaudited interim financial statements have been prepared on the same basis as the annual financial statements and, in the opinion of management, reflect all adjustments which include only normal reoccurring adjustments, necessary to present fairly our financial position as of September 30, 2013, and the statements of operations and cash flows for the nine months ended September 30, 2013 and 2012 and statements of mezzanine equity and stockholders' deficit for the nine months ended September 30, 2013. The financial data and other information disclosed in these notes to the financial statements related to the nine-month periods are unaudited. The results for the nine months ended September 30, 2013 are not necessarily indicative of the results to be expected for the year ended December 31, 2013 or for any other interim period or for any other future year. These financial statements should be read in conjunction with our audited financial statements included elsewhere in this prospectus.

**2. Capital Structure**

*Authorized Capital Stock*

We are authorized to issue 77,765,553 shares of common stock and 69,219,264 shares of convertible preferred stock, of which 55,255,479 are shares of Series A-1 convertible preferred stock (Series A-1) and 13,963,785 are shares of Series A-2 convertible preferred stock (Series A-2).

*Rights of Convertible Preferred Stock*

*Anti-Dilution*

In the event we sell or issue additional shares of preferred or common stock at a price less than the original conversion price of the convertible preferred stock of \$1.36 per share, the conversion price shall be reduced pursuant to a weighted-average anti-dilution adjustment set forth in our amended and restated certificate of incorporation.

*Conversion*

Each 3.1 shares of convertible preferred stock is convertible, at the stockholder's option, into one share of common stock. Additionally, each share of convertible preferred stock will be automatically converted into common stock, at the then-effective conversion rate, upon (i) written consent of 70% of the holders of the then outstanding shares of all convertible preferred stock voting together, (ii) in the event of a public offering of our equity securities resulting in gross proceeds to us of \$25.0 million or more and (iii) upon the effective date of any registration statement filed with the SEC under the Securities Act or Exchange Act.

*Liquidation*

In the event of any liquidation, dissolution or winding up of the Company, either voluntary or involuntary, including any merger, consolidation or similar transaction:

- the holders of Series A-1 are entitled to receive preference to Series A-2 and common stockholders to any distribution of any assets of the Company in an amount per share equal to the sum of (a) \$150,000,000, which amount shall increase by 6% per year from the date of the



**Xencor, Inc.**

**Notes to Financial Statements  
(Continued)**

**2. Capital Structure (Continued)**

filing of our amended and restated certificate of incorporation, compounded annually, divided by the aggregate number of shares of preferred stock outstanding following the final closing of the Series A-1 financing, plus (b) accrued and unpaid dividends (such per share amount referred to as the Series Preferred Liquidation Preference);

- the holders of Series A-2 are entitled to receive preference to common stockholders to any distribution of any assets of the Company in an amount per share equal to the Series Preferred Liquidation Preference; and
- the liquidation preference for the Series A-1 and A-2 Preferred Stock at September 30, 2013 was \$146.8 million and \$5.5 million, respectively.

After full payment of the Series A-1 and Series A-2 liquidation preference amounts, the remaining assets are distributed ratably to the holders of shares of common stock and convertible preferred stock on an as-converted to common stock basis.

The convertible preferred stock is classified as mezzanine equity outside stockholders' equity because each series of preferred stock is subject to a deemed liquidation clause that could potentially require redemption of the preferred shares for cash as a result of events outside the control of the Company.

We have not adjusted the carrying values of the convertible preferred stock to the liquidation preferences of such shares because it is uncertain whether or when an event would occur that would obligate us to pay the liquidation preferences to holders of shares of convertible preferred stock. Subsequent adjustments to increase the carrying values to the liquidation preferences will be made if and when it becomes probable that an event would occur that would obligate us to pay the liquidation preferences to holders of shares of convertible preferred stock.

*Dividends*

The holders of outstanding shares of convertible preferred stock are entitled to receive, when and if declared by our Board of Directors, a noncumulative dividend at an annual rate of 6% of the original issue price of \$1.36 per share. Such dividend is payable in preference to any dividends payable to holders of shares of common stock declared by our Board of Directors. No dividends have been declared to date.

*Voting*

Each share of convertible preferred stock carries one vote for each share of common stock into which such shares of convertible preferred stock may be converted.

*Redemption*

The convertible preferred stock has no date-specific mandatory redemption feature.

**Xencor, Inc.**

**Notes to Financial Statements  
(Continued)**

**3. Series A-1 Preferred Stock Financing and Note Conversion Agreement**

In 2009 and 2010, we sold a total of \$15.1 million of convertible promissory notes (the Notes) to our existing preferred stockholders. In June 2013, our Board of Directors and the requisite holders of the Notes and requisite preferred stockholders agreed to a series of transactions as follows:

- an exchange of the outstanding principal due on the Notes for shares of Series A-1 convertible preferred stock and cancellation of the accrued and unpaid interest thereon, pursuant to a Note Conversion Agreement;
- an exchange of the then-outstanding shares of preferred stock (Preferred Series A – E) for Series A-1 convertible preferred stock pursuant to the operation of provisions in our certificate of incorporation which was amended and restated in connection with this series of transactions;
- the sale of an additional \$7.6 million in Series A-1 convertible preferred stock to existing stockholders that closed in June 2013;
- the conversion of certain shares of Series A-1 convertible preferred stock into shares of Series A-2 convertible preferred stock at a conversion rate of 1 for 3, pursuant to a mandatory conversion provision in our amended and restated certificate of incorporation; and
- the sale of an additional \$2.4 million in Series A-1 convertible preferred stock to existing stockholders that closed in September 2013.

The primary business purpose for this series of transactions was to raise an additional \$10 million of capital from the sale of shares of our Series A-1 convertible preferred stock (the financing). The exchange of Notes, cancellation of interest, restatement of our certificate of incorporation to effect the exchange of Preferred Series A – E for Series A-1 convertible preferred stock and the conversion of certain shares of Series A-1 convertible preferred stock for shares of Series A-2 convertible preferred stock were each negotiated aspects of, and conditions to, the financing. When considering the terms for the financing, our Board of Directors took these conditions into account and, ultimately, determined that the financing was in the best interests of the Company and our stockholders. Subsequent to approval of the financing by our Board of Directors, the requisite stockholders and holders of the Notes also approved this series of transactions.

Under the terms of the Note Conversion Agreement, the total outstanding principal due on the Notes as of June 13, 2013 was exchanged for 45,902,321 shares of Series A-1 convertible preferred stock effective as of June 13, 2013, 5,303,597 of which were subsequently converted into 1,766,097 shares of Series A-2 convertible preferred stock. Since the exchange of the Notes was not a conversion into preferred shares under the original terms of the Notes, the exchange was an extinguishment of debt for accounting purposes, and we recognized a loss for the difference in the fair value of the shares issued and the carrying value of the Notes.

We determined that the per share fair value of the shares of Series A-1 convertible preferred stock issued under the Note Conversion Agreement was \$1.54 and the total fair value of shares of Series A-1 convertible preferred stock was \$70.7 million, and we recognized a loss on the exchange of \$48.6 million for the difference in the fair value of the shares of Series A-1 convertible preferred stock and the carrying value of the Notes as of June 13, 2013. The \$48.6 million loss is reported on our Statement of Operations as a Loss on Settlement of Notes as an Other Expense for the nine months

**Xencor, Inc.**

**Notes to Financial Statements  
(Continued)**

**3. Series A-1 Preferred Stock Financing and Note Conversion Agreement (Continued)**

ended September 30, 2013. Associated transaction costs of \$41,000 related to the exchange were expensed.

After the exchange of the Notes, all of the outstanding shares of Preferred Series A – E were exchanged for an aggregate of 1,977,137 shares of Series A-1 convertible preferred stock, 257,409 of which were subsequently converted into 85,717 shares of Series A-2 convertible preferred stock. We determined the fair value of the shares of Series A-1 convertible preferred stock issued to be \$3.0 million and we recorded a deemed contribution to equity of \$140.6 million equal to the difference in the fair value of the shares issued and the carrying value of the existing shares of Preferred Series A – E. We record issuance costs related to our preferred stock sales as a reduction to paid-in capital at the time the securities are issued. The deemed contribution has been reduced by \$3.0 million of issuance costs.

We determined that the value of the Series A-2 convertible preferred stock to be \$0.58 per share. A total of 1,851,814 shares of Series A-2 convertible preferred stock with a fair value of \$1.1 million were issued in exchange for 5,561,006 shares of Series A-1 convertible preferred stock with the fair value of \$8.6 million. We recognized a deemed contribution of \$7.5 million for the difference in the fair value of the shares of Series A-2 convertible preferred stock issued in exchange for the shares of Series A-1 convertible preferred stock.

On June 26, 2013, we sold 5,586,510 shares of Series A-1 convertible preferred stock to existing stockholders at a purchase price of \$1.36 per share, for an aggregate purchase price of \$7.6 million. We determined that the fair value of the shares sold in June 2013 to be \$8.6 million and we recorded a deemed dividend of \$1.0 million for the difference in the sales price of the Series A-1 convertible preferred stock and the fair value of the shares. The \$40,000 of transaction costs related to the sale was recorded against Additional Paid in Capital and the shares of Series A-1 convertible preferred stock issued were recorded at their fair value on our balance sheet as of September 30, 2013.

We determined that the fair value of the Series A-1 and Series A-2 convertible preferred stock as of June 26, 2013 to be \$1.54 and \$0.58, respectively. We used the probability-weighted expected return method (PWERM) to determine the fair value of the shares of the Series A-1 and Series A-2 convertible preferred stock. PWERM is a scenario-based analysis that estimates the value per share based on the probability-weighted present value of expected future investment returns, considering each of the possible outcomes available to us, as well as the economic and control rights of each share class.

On September 23, 2013 we sold 1,766,430 additional shares of Series A-1 convertible preferred stock for gross proceeds of \$2.4 million at a purchase price of \$1.36 per share. We determined the fair value of the shares of Series A-1 convertible preferred stock sold to be \$4.7 million, based on a per share fair value of \$2.69, determined by estimating the enterprise value of the Company based on a projected offering price in an initial public offering, and we recorded a deemed dividend of \$2.3 million for the difference in the sales price of the Series A-1 convertible preferred stock and the fair value of the shares. Transaction costs of \$34,000 related to the sale were recorded against Additional Paid in Capital and the shares of Series A-1 convertible preferred stock were recorded at their fair value on our balance sheet as of September 30, 2013.

**Xencor, Inc.****Notes to Financial Statements  
(Continued)****4. Fair Value of Financial Instruments**

We determine the fair value of financial and nonfinancial assets and liabilities using the fair value hierarchy, which describes three levels of inputs that may be used to measure fair value, as follows:

*Level 1*— Quoted prices in active markets for identical assets or liabilities:

*Level 2*— Observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities, quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; and,

*Level 3*— Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

Our Level 1 assets consist of highly liquid money market funds. The fair value of Level 1 assets has been determined using quoted prices in active markets for identical assets. There were no transfers between Level 1, Level 2 or Level 3 securities during the periods presented.

The assets we recorded at fair value at December 31, 2012 and September 30, 2013 are classified within the hierarchy as follows for the years reported (in millions):

	December 31, 2012		September 30, 2013	
	Total Fair Value	Level 1	Total Fair Value	Level 1
Money Market Funds	\$ 2.3	\$ 2.3	\$ 6.9	\$ 6.9

**5. Net (Loss) Income Per Share of Common Stock**

Basic net loss per common share is computed by dividing the net loss by the weighted-average number of shares of common stock outstanding during the period. Potentially dilutive securities consisting of stock options and convertible preferred stock were not included in the diluted net loss per common share calculation because the inclusion of such shares would have had an antidilutive effect.

For the nine months ended September 30, 2012, the following securities were excluded from the calculation of diluted net loss per share as the effect would have been antidilutive (in thousands):

	September 30, 2012
Convertible preferred stock	12,188
Convertible promissory notes	2,713
Options to purchase common stock	1,305
	<u>16,206</u>

The loss for the period ended September 30, 2013 was adjusted, for purposes of the diluted net income per share calculation, to reflect the deemed contribution from the exchange of convertible preferred stock of \$148.1 million. The loss was also adjusted to reflect the deemed dividends recorded for the sales of Series A-1 convertible preferred stock in June and September 2013. We determined that there was a deemed dividend of \$1.0 million for the difference between the fair value of the shares of Series A-1 convertible preferred stock and the price at which additional shares were sold in the initial closing of the Series A-1 preferred stock financing. We determined that there was an additional

**Xencor, Inc.****Notes to Financial Statements  
(Continued)****5. Net (Loss) Income Per Share of Common Stock (Continued)**

deemed dividend of \$2.35 million for the difference between the fair value of the shares of series A-1 convertible preferred stock and the price at which additional shares were sold in the subsequent Series A-1 closing in September 2013.

The unaudited diluted (loss) income per share calculation assumes the conversion of outstanding shares of convertible preferred stock into common stock using the as-if converted method (following table in thousands, except share and per share data):

	Nine Months Ended September 30,	
	2012	2013
<b>Basic:</b>		
Numerator:		
Net Loss	\$ (5,483)	\$ (56,556)
Deemed contribution, net of deemed dividends	—	144,765
Net (loss) income attributable to common stockholders for basic income per share	<u>\$ (5,483)</u>	<u>\$ 88,209</u>
Denominator:		
Weighted-average common shares outstanding	72,302	72,302
Basic net (loss) income per common share	<u>\$ (75.83)</u>	<u>\$ 1,220.01</u>
<b>Diluted:</b>		
Numerator:		
Net (loss) income attributable to common stockholders for basic net loss per share	\$ (5,483)	\$ 88,209
Deemed contribution, net of deemed dividends	—	(144,765)
Net loss attributable to common stockholders for diluted net loss per share	<u>\$ (5,483)</u>	<u>\$ (56,556)</u>
Denominator:		
Weighted average number of common shares outstanding used in computing basic net (loss) income per common share	72,302	72,302
Dilutive effect of conversion of convertible Preferred stock	—	13,721,836
Weighted average number of common shares outstanding used in computing net loss per common share	<u>72,302</u>	<u>13,794,138</u>
Diluted net loss per common share	<u>\$ (75.83)</u>	<u>\$ (4.10)</u>

The convertible preferred stock and options were not included in the computation of diluted loss per share for 2012 as the effect of doing so would have been antidilutive.

The convertible promissory notes were not included because the contingency was not met and, even had the contingency been satisfied under the if-converted method, inclusion would have been antidilutive.

**Xencor, Inc.**

**Notes to Financial Statements  
(Continued)**

**6. Equity Incentive Plans**

The following summarizes option activity under our stock plans:

	Number of Options Available for Grant	Options Outstanding	Weighted-Average Exercise price
Balances at December 31, 2012	753,692	1,304,848	\$ 0.59
Increase in shares available	625,916	—	—
2013 forfeitures	3,225	(3,225)	0.59
2013 option grants	(502,062)	502,062	4.25
Balances at September 30, 2013	<u>880,771</u>	<u>1,803,685</u>	<u>\$ 1.61</u>

**Stock Based Compensation**

Employee stock-based compensation expense recognized was calculated based on awards ultimately expected to vest and has been reduced for estimated forfeitures. Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Total stock-based compensation expense recognized was as follows (in thousands):

	Nine Months Ended September 30,	
	2012	2013
Research and development	\$ 8.0	\$ 28.1
General and administrative	14.2	26.3
Total	<u>\$ 22.2</u>	<u>\$ 54.4</u>

Information with respect to stock options outstanding is as follows:

	September 30, 2013
Exercisable options	1,189,206
Weighted average price per share of exercisable options	\$ 0.59
Weighted average grant date fair value per share of options granted during the nine months ended September 30, 2013	\$ 4.77
Options available for future grants	880,771
Weighted average remaining contractual life	<u>7.86</u>

We estimated the fair value of employee and non-employee awards using the Black-Scholes valuation model. The fair value of employee stock options is being amortized on a straight-line basis over the requisite service period of the awards.

For the options granted in the nine-month period ended September 30, 2013 we used an estimated fair value per share of \$4.25, originally determined by our Board of Directors as of the grant date. We used the PWERM to determine fair value with the following key assumptions: junior nature of the common stock to outstanding convertible preferred stock and convertible promissory notes, conversion dilution, minority status and the illiquid nature of our common stock.

**Xencor, Inc.****Notes to Financial Statements  
(Continued)****6. Equity Incentive Plans (Continued)**

The fair value of employee and non-employee stock options was estimated using the following weighted average assumptions for the nine months ended September 30, 2013.

Common Stock fair value per share	\$ 4.25
Volatility	56.8%
Risk-free interest rate	1.96%
Dividend yield	—%
Expected term (in years)	<u>5.4</u>

The expected term of stock options represents the average period of stock options are expected to remain outstanding. The expected stock price volatility for our stock options for the nine months ended September 30, 2013 was determined by examining the historical volatilities for industry peers and adjusting for differences in the life cycle and financing leverage. Industry peers consist of several public companies in the biopharmaceutical industry.

We determined the average expected life of stock options based on the simplified method because our common stock has not been publicly traded to date.

The risk-free interest rate is based on the U.S. Treasury instruments whose term was consistent with the expected term of our stock options.

The expected dividend assumption is based on our history and expectation of dividend payments.

For the nine months ended September 30, 2013, stock-based compensation expense amounted to \$54,400.

At September 30, 2013 unamortized compensation expense related to unvested options was \$1.9 million. The remaining unamortized expense will be recognized over the next four years.

**7. Collaborative Research and Licensing Agreements*****MorphoSys Ag***

In June 2010, we entered into a Collaboration and License Agreement with MorphoSys AG (MorphoSys), which we subsequently amended in March 2012. The agreement provided us an upfront payment in exchange for an exclusive worldwide license to our patents and know-how to research, develop and commercialize our XmAb5574 product candidate with the right to sublicense under certain conditions and we are eligible to receive future milestones upon further development by MorphoSys of the compound and royalties. Under the agreement, we agreed to collaborate with MorphoSys to develop and commercialize XmAb5574. We determined that the arrangement was one with multiple deliverables and we identified the multiple elements in the agreement as the license of XmAb5574/MOR208 and the research and development services provided by us for the initial Phase 1 clinical trial. We determined that the future milestone payments were substantive and contingent and we did not allocate any of the upfront consideration to these. In April and May 2013, MorphoSys initiated two Phase 2 clinical trials and we received a milestone payment of \$3.0 million. We have recognized the payment under the milestone method and recorded it into income during the period that the milestone event occurred.

**Xencor, Inc.**

**Notes to Financial Statements  
(Continued)**

**7. Collaborative Research and Licensing Agreements (Continued)**

***Alexion Pharmaceuticals, Inc.***

In January 2013, we entered into an Option and License Agreement with Alexion Pharmaceuticals, Inc. (Alexion). Under the terms of the agreement, we provided Alexion with an exclusive research license to one of our technologies over a five-year period and the rights for Alexion to take an exclusive commercial option to one or more compounds. We determined that the future milestones and related payments were substantive and contingent and we did not allocate any of the upfront consideration to the milestones. In 2013, we received an upfront payment of \$3.0 million and will receive annual license fees during the license term. Upon exercise of an option to take a commercial license we are eligible to receive future licensing and option fees.

We evaluated the proper accounting treatment for this agreement and determined that the deliverables under the agreement were the research license and the option. Since the option payment is substantive and contingent and there is no assurance we will receive it, we determined that it should not be considered a deliverable at inception and the full upfront payment should be allocated to the research license. We determined that the future milestones and related payments were substantive and contingent and we did not allocate any of the upfront consideration to milestones. Accordingly, we concluded that the arrangement should be accounted for as a single unit of accounting and that the arrangement consideration including the upfront payment should be recognized over the research term of the agreement which is five years.

Total revenue recognized under this agreement was \$0.7 million for the nine months ended September 30, 2013. As of September 30, 2013 we have deferred revenue related to this agreement of \$2.3 million.

***CSL Limited***

In March 2013, we entered into a License Agreement with CSL Limited (CSL). Under the terms of the agreement, we provided CSL with a non-exclusive commercial license to apply our technology to one of their compounds. The agreement provided for upfront payment of \$0.5 million and we are eligible to receive future milestones as CSL advances the compound into clinical development.

We determined that the deliverables under this agreement were the non-exclusive commercial license. We determined that the future milestones and related payments were substantive and contingent and we did not allocate any of the upfront consideration to the milestones. We recognized \$0.5 million in revenue under this arrangement for the nine months ended September 30, 2013.

In May 2013, we entered into an amendment to a February 2009 Research License and Commercialization Agreement with CSL, which amendment eliminated a contingent milestone and reduced the royalty rate on net sales for the licensed product CSL362. The amendment provided for a payment upon signing of \$2.5 million. We determined that the amendment was a material modification to the original agreement and evaluated the remaining deliverables at the date of the amendment. We determined that the remaining deliverables were the research license which expires in February 2014 and four additional options to take commercial licenses through the term of the research period. The options are considered to be substantive and contingent and we did not allocate any of the proceeds received in the amendment to the options. The amendment proceeds are being recognized into income



**Xencor, Inc.****Notes to Financial Statements  
(Continued)****7. Collaborative Research and Licensing Agreements (Continued)**

over the remaining research term. We recognized \$1.3 million in income for the nine months ended September 30, 2013 and we have deferred revenue related to this agreement of \$1.3 million.

**Merck**

In July 2013, we entered into a License Agreement with Merck Sharp Dohme Corp (Merck). Under the terms of the agreement, we provided Merck with a non-exclusive commercial license to certain patent rights to our Fc domains to apply to one of their compounds. We also provided Merck with contingent options to take additional non-exclusive commercial licenses. The contingent options provide Merck an opportunity to take non-exclusive commercial licenses at an amount less than the amount paid for the original license. The agreement provided for an upfront payment of \$1.0 million and annual maintenance fees totaling \$0.5 million. We are also eligible to receive future milestones and royalties as Merck advances the compound into clinical development.

We determined that the deliverables under this agreement were the non-exclusive commercial license and the options. The options are considered substantive and contingent and no amount of the upfront payment was allocated to these options. We also determined that the future milestones and related payments were substantive and contingent and did not allocate any of the upfront payment to the milestones.

We recognized \$1.0 million in revenue under this arrangement for the nine months ended September 30, 2013.

As of September 30, 2013, the Company may be eligible to receive the following maximum payments from its collaborative partners and licensees based upon contractual terms in the agreements assuming all options are exercised and all milestones are achieved:

<b>Partner</b>	<b>Potential Milestones (in millions)</b>			<b>Total Milestones</b>
	<b>Development-based</b>	<b>Regulatory-based</b>	<b>Sales-based</b>	
MorphoSys(2)	\$ 62.0	\$ 187.0	\$ 50.0	\$ 299.0
Amgen(1)	62.0	150.0	225.0	437.0
Alexion(2)	51.0	168.0	180.0	399.0
BI(2)	9.0	6.0	12.0	27.0
CSL 2009(2)	38.0	20.0	31.0	89.0
CSL 2013(2)	8.0	4.0	24.5	36.5
Janssen(2)	6.0	—	4.0	10.0
Merck(2)	4.0	6.0	—	10.0
<b>Total</b>	<b>\$ 240.0</b>	<b>\$ 541.0</b>	<b>\$ 526.5</b>	<b>\$ 1,307.5</b>

- (1) These potential milestones include milestones that were determined to be substantive because they require the company to devote substantial effort to perform services for the benefit of the counterparty prior to achievement of the milestone and the payments due upon achievement of the milestone are reasonable in connection with the services provided and the remainder of the milestones in the arrangement.
- (2) The payments are solely dependent upon activities of the collaborative partner or licensee.

**Xencor, Inc.**

**Notes to Financial Statements  
(Continued)**

**8. Subsequent Events**

The Company evaluates subsequent events in accordance with ASC 855, *Subsequent Events*. The Company evaluated subsequent events through October 25, 2013, which is when these financial statements were available to be issued.

**9. Stock Split Subsequent to the Balance Sheet Date**

On November 1, 2013, the Company's board of directors and the requisite stockholders authorized the filing of a certificate of amendment to the Company's amended and restated certificate of incorporation for the purpose of effecting a 3.1-for-1 reverse split of the common stock. The certificate of amendment was filed on November 1, 2013 and the stock split became effective as of that date. Accordingly, all references to numbers of common shares, including the number of common shares on an as-if-converted basis, and per-share data in the accompanying financial statements have been adjusted to reflect the reverse stock split on a retroactive basis.



**PART II**  
**INFORMATION NOT REQUIRED IN PROSPECTUS**

**Item 13. Other Expenses of Issuance and Distribution.**

The following table sets forth all costs and expenses, other than underwriting discounts and commissions, payable by Xencor, Inc. (the Registrant or we) in connection with the sale of the common stock being registered. All amounts shown are estimates except for the Securities and Exchange Commission (SEC) registration fee, the FINRA filing fee and the NASDAQ Global Market filing fee.

	<u>Amount</u>
SEC registration fee	\$ 11,850
FINRA filing fee	14,300
NASDAQ Global Market listing fee	125,000
Blue-sky qualification fees and expenses	35,000
Printing and engraving expenses	450,000
Legal fees and expenses	1,200,000
Accounting fees and expenses	500,000
Transfer agent and registrar fees and expenses	20,000
Miscellaneous expenses	143,850
Total	<u>\$ 2,500,000</u>

**Item 14. Indemnification of Directors and Officers.**

The Registrant is incorporated under the laws of the State of Delaware. Section 145 of the Delaware General Corporation Law provides that a Delaware corporation may indemnify any persons who were, are, or are threatened to be made, parties 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 such corporation), by reason of the fact that such person is or was an officer, director, employee or agent of such corporation, or is or was serving at the request of such corporation as an officer, director, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided that such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the corporation's best interests and, with respect to any criminal action or proceeding, had no reasonable cause to believe that his or her conduct was illegal. A Delaware corporation may indemnify any persons who were, are, or are threatened to be made, a party to any threatened, pending or completed action or suit by or in the right of the corporation by reason of the fact that such person is or was a director, officer, employee or agent of such corporation, or is or was serving at the request of such corporation as a director, officer, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit provided such person acted in good faith and in a manner that he or she reasonably believed to be in or not opposed to the corporation's best interests, except that no indemnification is permitted without judicial approval if the officer or director is adjudged to be liable to the corporation. Where an officer or director is successful on the merits or otherwise in the defense of any action referred to above, the corporation must indemnify him or her against the expenses (including attorneys' fees) actually and reasonably incurred.

The Registrant's amended and restated certificate of incorporation and amended and restated bylaws, each of which will become effective upon the closing of this offering, provide for the indemnification of its directors and officers to the fullest extent permitted under the Delaware General Corporation Law.

Section 102(b)(7) of the Delaware General Corporation Law permits a corporation to provide in its certificate of incorporation that a director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duties as a director, except for liability for any:

- transaction from which the director derives an improper personal benefit;
- act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payment of dividends or redemption of shares; or
- breach of a director's duty of loyalty to the corporation or its stockholders.

The Registrant's amended and restated certificate of incorporation includes such a provision. Expenses incurred by any officer or director in defending any such action, suit or proceeding in advance of its final disposition shall be paid by the Registrant upon delivery to it of an undertaking, by or on behalf of such director or officer, to repay all amounts so advanced if it shall ultimately be determined that such director or officer is not entitled to be indemnified by the Registrant.

Section 174 of the Delaware General Corporation Law provides, among other things, that a director who willfully or negligently approves of an unlawful payment of dividends or an unlawful stock purchase or redemption, may be held liable for such actions. A director who was either absent when the unlawful actions were approved or dissented at the time may avoid liability by causing his or her dissent to such actions to be entered in the books containing minutes of the meetings of the board of directors at the time such action occurred or immediately after such absent director receives notice of the unlawful acts.

As permitted by the Delaware General Corporation Law, the Registrant has entered into indemnity agreements with each of its directors and executive officers, that require the Registrant to indemnify such persons against any and all costs and expenses (including attorneys', witness or other professional fees) actually and reasonably incurred by such persons in connection with any action, suit or proceeding (including derivative actions), whether actual or threatened, to which any such person may be made a party by reason of the fact that such person is or was a director or officer or is or was acting or serving as an officer, director, employee or agent of the Registrant or any of its affiliated enterprises. Under these agreements, the Registrant is not required to provided indemnification for certain matters, including:

- indemnification beyond that permitted by the Delaware General Corporation Law;
- indemnification for any proceeding with respect to the unlawful payment of remuneration to the director or officer;
- indemnification for certain proceedings involving a final judgment that the director or officer is required to disgorge profits from the purchase or sale of the Registrant's stock;
- indemnification for proceedings involving a final judgment that the director's or officer's conduct was in bad faith, knowingly fraudulent or deliberately dishonest or constituted willful misconduct or a breach of his or her duty of loyalty, but only to the extent of such specific determination;
- indemnification for proceedings or claims brought by an officer or director against us or any of the Registrant's directors, officers, employees or agents, except for claims to establish a right of indemnification or proceedings or claims approved by the Registrant's board of directors or required by law;
- indemnification for settlements the director or officer enters into without the Registrant's consent; or

- indemnification in violation of any undertaking required by the Securities Act or in any registration statement filed by the Registrant.

The indemnification agreements also set forth certain procedures that will apply in the event of a claim for indemnification thereunder.

Except as otherwise disclosed under the heading "Legal Proceedings" in the "Business" section of this registration statement, there is at present no pending litigation or proceeding involving any of the Registrant's directors or executive officers as to which indemnification is required or permitted, and the Registrant is not aware of any threatened litigation or proceeding that may result in a claim for indemnification.

The Registrant has an insurance policy in place that covers its officers and directors with respect to certain liabilities, including liabilities arising under the Securities Act of 1933, as amended (the Securities Act) or otherwise.

The Registrant plans to enter into an underwriting agreement which provides that the underwriters are obligated, under some circumstances, to indemnify the Registrant's directors, officers and controlling persons against specified liabilities, including liabilities under the Securities Act.

#### **Item 15. Recent sales of unregistered securities.**

Set forth below is information regarding securities issued and options granted by us since January 1, 2010 that were not registered under the Securities Act. Also included is the consideration, if any, received by us for such securities and options and information relating to the Securities Act section, or rule of the SEC, under which exemption from registration was claimed.

- (1) In December 2010, we issued convertible promissory notes in an aggregate principal amount of \$7,500,000 to accredited investors pursuant to a note purchase agreement. These notes converted into 22,727,279 shares of Series A-1 convertible preferred stock in June 2013.
- (2) In June 2013 and September 2013, pursuant to the Series A-1 Purchase Agreement, we issued and sold an aggregate of 7,352,940 shares of Series A-1 convertible preferred stock to accredited investors at a purchase price of \$1.36 per share, for an aggregate purchase price of \$9,999,998.
- (3) From January 1, 2010 to date, we granted stock options under our 2010 Plan to purchase an aggregate of 1,367,207 shares of common stock at an exercise price of \$0.59 per share and an aggregate of 502,062 shares of common stock at an exercise price of \$4.25 per share to certain directors, officers, employees and consultants.
- (4) In July 2010, our Board of Directors approved an option re-pricing program pursuant to which holders of existing stock options with exercise prices above \$0.59 per share were offered the ability to exchange those stock options for new stock options with an exercise price of \$0.59 per share.

The offers, sales and issuances of the securities described in paragraphs (1) and (2) were deemed to be exempt from registration under the Securities Act in reliance on Section 4(2) (or Regulation D promulgated thereunder), in that the issuance of securities to the accredited investors did not involve a public offering. The recipients of securities in each of these transactions acquired the securities for investment only and not with a view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the securities issued in these transactions. Each of the recipients of securities in these transactions was an accredited investor under Rule 501 of Regulation D. No underwriters were involved in these transactions.

The offers, sales and issuances of the securities described in paragraphs (3) and (4) were deemed to be exempt from registration under the Securities Act in reliance on Rule 701 in that the transactions were under compensatory benefit plans and contracts relating to compensation as provided under

Rule 701. The recipients of such securities were our employees, directors or bona fide consultants and received the securities under our 2010 Equity Plan.

**Item 16. Exhibits and financial statement schedules.****(a) Exhibits.**

<b>Exhibit number</b>	<b>Description of document</b>
1.1#	Form of Underwriting Agreement.
3.1	Sixth Amended and Restated Certificate of Incorporation, as amended on November 1, 2013, as currently in effect.
3.2#	Form of Amended and Restated Certificate of Incorporation to become effective upon the closing of this offering.
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4.2#	Third Amended and Restated Investor Rights Agreement, dated June 26, 2013, among the Registrant and certain of its stockholders.
5.1	Opinion of Cooley LLP.
10.1+#	Form of Indemnity Agreement by and between the Registrant and its directors and officers.
10.2+#	Xencor, Inc. 2010 Equity Incentive Plan and Forms of Option Agreement, Notice of Exercise and Stock Option Grant Notice thereunder.
10.3+	Xencor, Inc. 2013 Equity Incentive Plan and Forms of Stock Option Agreement, Notice of Exercise and Stock Option Grant Notice thereunder.
10.4+	Xencor, Inc. 2013 Employee Stock Purchase Plan.
10.5+	Xencor, Inc. Non-Employee Director Compensation Policy.
10.6+#	Second Amended and Restated Executive Employment Agreement, dated January 1, 2007, by and between the Registrant and Dr. Bassil I. Dahiyat.
10.7+#	Offer Letter, dated January 12, 2010, by and between the Registrant and Dr. Edgardo Baracchini, Jr.
10.8+#	Offer Letter, dated September 28, 2009, by and between the Registrant and Dr. Bruce Carter.
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10.12+#	Amended and Restated Executive Employment Agreement, dated September 4, 2013, by and between the Registrant and Dr. Bassil I. Dahiyat.
10.13+#	Offer Letter, dated September 5, 2013, by and between the Registrant and Dr. Edgardo Baracchini, Jr.

<u>Exhibit number</u>	<u>Description of document</u>
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10.15+#	Amended and Restated Change in Control Agreement, dated September 5, 2013, by and between the Registrant and John J. Kuch.
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10.24*#	Collaboration Agreement, dated February 10, 2012, by and between the Registrant and Boehringer Ingelheim International GmbH.
10.25#	Office Building Lease, dated May 12, 2000, by and between the Registrant and BF Monrovia, LLC, as amended on November 1, 2011.
10.26*	Cross-License Agreement, dated December 19, 2012, by and between the Registrant and MedImmune, LLC.
21.1#	Subsidiaries of the Registrant.
23.1	Consent of BDO USA, LLP, an Independent Registered Public Accounting Firm.
23.2	Consent of Cooley LLP. Reference is made to Exhibit 5.1.
24.1#	Power of Attorney. Reference is made to the signature page of the registration statement filed by the Registrant on October 11, 2013.
24.2	Power of Attorney. Reference is made to the signature page hereto.

+ Indicates management contract or compensatory plan.

\* Confidential treatment has been requested with respect to certain portions of this exhibit. Omitted portions have been filed separately with the Securities and Exchange Commission.

# Previously filed.

**(b) Financial statement schedules.**

No financial statement schedules are provided because the information called for is not required or is shown either in the financial statements or the notes thereto.



**Item 17. Undertakings.**

The undersigned Registrant hereby undertakes to provide to the underwriters at the closing specified in the Underwriting Agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The Registrant hereby undertakes that:

- (a) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
- (b) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (c) For the purpose of determining liability under the Securities Act to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

## SIGNATURES

Pursuant to the requirements of the Securities Act, the Registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Monrovia, State of California, on the 4<sup>th</sup> day of November, 2013.

### XENCOR, INC.

By: /s/ BASSIL I. DAHIYAT, PH.D.

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Bassil I. Dahiyat, Ph.D.  
*President and Chief Executive Officer*

## POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Bassil I. Dahiyat, Ph.D. and John J. Kuch, and each of them, as his or her true and lawful attorneys-in-fact and agents, each with the full power of substitution, for him or her and in his or her name, place or stead, in any and all capacities, to sign any and all amendments to this registration statement (including post-effective amendments), and to sign any registration statement for the same offering covered by this registration statement that is to be effective upon filing pursuant to Rule 462(b) promulgated under the Securities Act, and all post-effective amendments thereto, and to file the same, with 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 and necessary to be done in and about the premises, as fully 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 their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
/s/ BASSIL I. DAHIYAT, PH.D.	President, Chief Executive Officer and Member of the Board of Directors (Principal Executive Officer)	November 4, 2013
<hr/> Bassil I. Dahiyat, Ph.D.		
/s/ JOHN J. KUCH	Vice President, Finance (Principal Financial and Accounting Officer)	November 4, 2013
<hr/> John J. Kuch		
/s/ BRUCE L.A. CARTER, PH.D.*	Chairman of the Board of Directors	November 4, 2013
<hr/> Bruce L.A. Carter, Ph.D.		
/s/ ROBERT F. BALTERA, JR.		
<hr/> Robert F. Baltera, Jr.	Member of the Board of Directors	November 4, 2013

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<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ JONATHAN FLEMING*</u>		
Jonathan Fleming <u>/s/ ATUL SARAN*</u>	Member of the Board of Directors	November 4, 2013
<u>Atul Saran</u>	Member of the Board of Directors	November 4, 2013
<u>/s/ JOHN S. STAFFORD III*</u>		
John S. Stafford III	Member of the Board of Directors	November 4, 2013
<u>/s/ HAROLD R. WERNER*</u>		
Harold R. Werner	Member of the Board of Directors	November 4, 2013

\*Pursuant to power of attorney

By: /s/ BASSIL I. DAHIYAT, PH.D.

Bassil I. Dahiyat, Ph.D.

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**EXHIBIT INDEX**

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# Previously filed.

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**SIXTH AMENDED AND RESTATED  
CERTIFICATE OF INCORPORATION  
OF  
XENCOR, INC.**

Bassil I. Dahiyat, Ph.D. hereby certifies that:

**ONE:** The original name of this corporation is Xencor, Inc. and the date of filing the original Certificate of Incorporation of this corporation with the Secretary of State of the State of Delaware was June 8, 2004.

**TWO:** He is the duly elected and acting President and Chief Executive Officer of Xencor, Inc., a Delaware corporation.

**THREE:** The Certificate of Incorporation of this corporation is hereby amended and restated to read as follows:

**I.**

The name of this corporation is **XENCOR, INC.** (the "**Corporation**").

**II.**

The address of the registered office of this Corporation in the State of Delaware is 1209 Orange Street, City of Wilmington, County of New Castle, State of Delaware 19801, and the name of the registered agent of this Corporation in the State of Delaware at such address is The Corporation Trust Company.

**III.**

The purpose of the Corporation is to engage in any lawful act or activity for which a corporation may be organized under the Delaware General Corporation Law (the "**DGCL**").

**IV.**

**A.** The Corporation is authorized to issue two classes of stock to be designated, respectively, "**Common Stock**" and "**Preferred Stock**." The total number of shares which the Corporation is authorized to issue is 146,984,817 shares, 77,765,553 shares of which shall be Common Stock (the "**Common Stock**") and 69,219,264 shares of which shall be Preferred Stock (the "**Preferred Stock**"). The Preferred Stock shall have a par value of \$0.01 per share and the Common Stock shall have a par value of \$0.01 per share.

**B.** 55,255,479 of the authorized shares of Preferred Stock are hereby designated "Series A-1 Preferred Stock" (the "**Series A-1 Preferred**") and 13,963,785 shares are hereby designated "Series A-2 Preferred Stock" (the "**Series A-2 Preferred**") and together with the Series A-1 Preferred, the "**Series Preferred**").

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**C.** Effective immediately upon the date and time of filing (the "**Filing Date**") of this Amended and Restated Certificate of Incorporation (the "**Restated Certificate**"), (1) each outstanding share of Series A Preferred Stock of the Corporation (the "**Series A Preferred**") shall, automatically and without any action on the part of the respective holders thereof, be combined and converted into 0.035 of one share of Series A-1 Preferred, (2) each outstanding share of Series B Preferred Stock of the Corporation (the "**Series B Preferred**") shall, automatically and without any action on the part of the respective holders thereof, be combined and converted into 0.040 of one share of Series A-1 Preferred, (3) each outstanding share of Series C Preferred Stock of the Corporation (the "**Series C Preferred**") shall, automatically and without any action on the part of the respective holders thereof, be combined and converted into 0.045 of one share of Series A-1 Preferred, (4) each outstanding share of Series D Preferred Stock of the Corporation (the "**Series D Preferred**") shall, automatically and without any action on the part of the respective holders thereof, be combined and converted into 0.050 of one share of Series A-1 Preferred, and (5) each outstanding share of Series E Preferred Stock of the Corporation (the "**Series E Preferred**") shall, automatically and without any action on the part of the respective holders thereof, be combined and converted into 0.055 of one share of Series A-1 Preferred, in each case rounded down to the nearest whole share (such conversion to be referred to herein as the "**Recapitalization**"). From and after the Filing Date, as a result of the Recapitalization, the Series A Preferred, the Series B Preferred, the Series C Preferred, the Series D Preferred and the Series E Preferred shall be deemed cancelled and shall no longer be authorized, issued or outstanding. The Corporation shall not issue any fractional shares of Series A-1 Preferred as a result of the Recapitalization, but shall instead pay to any stockholder of record of Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred or Series E Preferred, as applicable, who would be entitled to receive any fractional share of Series A-1 Preferred as a result of the Recapitalization, a sum in cash equal to the fair market value of any such fractional share as determined by the Board of Directors of the Corporation (the "**Board**"). All certificates representing shares of Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred or Series E Preferred outstanding immediately prior to the Filing Date shall immediately upon the Filing Date represent a number of shares of Series A-1 Preferred as provided above. All share and dollar amounts in this Restated Certificate have been adjusted to reflect the Recapitalization.

**D.** The rights, preferences, privileges, restrictions and other matters relating to the Common Stock and the Series Preferred are as follows:

**1. DIVIDEND RIGHTS.**

**(a)** Holders of the Series Preferred, prior and in preference to the holders of Common Stock, shall be entitled to receive, when, as and if declared by the Board, but only out of funds that are legally available therefor, dividends (whether payable in cash, in property or in securities of the Corporation) at a rate of 6% of the Series Preferred Original Issue Price (as defined below) per annum on each outstanding share of Series Preferred. In the event dividends are paid to the holders of Series Preferred that are less than the full amounts to which such holders of Series Preferred are entitled pursuant to this Section 1(a), such dividends shall be distributed among the holders of Series Preferred at the time outstanding, ratably in proportion to the full amounts to which they would otherwise be respectively entitled.

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(b) The “*Series Preferred Original Issue Price*” shall be \$1.36 per share (as adjusted for any stock dividends, combinations, splits, recapitalizations and the like with respect to such shares after the Filing Date).

(c) So long as any shares of Series Preferred are outstanding, the Corporation shall not pay or declare any dividend, whether in cash or property, or make any other distribution on the Common Stock, or purchase, redeem or otherwise acquire for value any shares of Common Stock until all dividends as set forth in Section 1(a) above on the Series Preferred have been paid or declared and set apart, except for:

(i) acquisitions of Common Stock by the Corporation pursuant to agreements approved by the Board which permit the Corporation to repurchase such shares at cost (or the lesser of cost or fair market value) upon termination of services to the Corporation;

(ii) acquisitions of Common Stock in exercise of the Corporation’s right of first refusal to repurchase such shares; or

(iii) distributions to holders of Common Stock in accordance with Section 3.

(d) In the event dividends are paid on any share of Common Stock, the Corporation shall pay an additional dividend on all outstanding shares of Series Preferred in a per share amount equal (on an as-converted to Common Stock basis) to the amount paid or set aside for each share of Common Stock.

(e) The provisions of Section 1 shall not apply to any repurchase of any outstanding securities of the Corporation that is approved by (i) the Board and (ii) the Series Preferred as may be required by this Restated Certificate.

(f) The holders of Common Stock and Series Preferred expressly waive their rights, if any, as described in California Corporations Code Sections 502, 503 and 506 as they relate to repurchases of shares of Common Stock upon termination of employment or service as a consultant or director.

## 2. VOTING RIGHTS.

(a) **General Rights.** Each holder of shares of Series Preferred shall be entitled to the number of votes equal to the number of shares of Common Stock into which such shares of Series Preferred could be converted (pursuant to Section 4 hereof) immediately after the close of business on the record date fixed for such meeting or the effective date of such written consent and shall have voting rights and powers equal to the voting rights and powers of the Common Stock and shall be entitled to notice of any stockholders’ meeting in accordance with the bylaws of the Corporation (the “*Bylaws*”). Except as otherwise provided herein or as required by law, the Series Preferred shall vote together with the Common Stock at any annual or special meeting of the stockholders and not as a separate class, and may act by written consent in the same manner as the Common Stock.

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(b) **Separate Vote of Series Preferred.** For so long as 500,000 shares of Series Preferred (subject to adjustment for any stock split, reverse stock split or other similar event affecting the Series Preferred Stock after the Filing Date) remain outstanding, in addition to any other vote or consent required herein or by law, the prior vote or prior written consent of the holders of at least 70% (hereinafter, the “*Requisite Majority*”) of the outstanding shares of Series Preferred, voting together as a single class on an as-converted basis, shall be necessary for effecting the following actions:

(i) any transfer, lease, exclusive license or disposal by the Corporation or a subsidiary thereof, of, in any 12-month period, other than in the ordinary course of business, any material assets (including any exclusive license of substantially all of the Corporation’s intellectual property rights) with a value in excess of the greater of (A) \$100,000 and (B) an amount equal to 10% of the Corporation’s budgeted revenues for the year in which such transaction would occur reflected in a current budget for the Corporation previously approved by the Board;

(ii) any amendment, alteration or repeal of any provision of the Restated Certificate or the Bylaws (including any filing of a Certificate of Designation) that alters or changes the voting or other powers, preferences, or other special rights, privileges or restrictions of the Series Preferred so as to affect them adversely or that decreases or increases the number of authorized shares of Series Preferred;

(iii) any payment or declaration of a dividend (whether payable in cash, in property or in securities of the Corporation) or any other distribution (whether payable in cash, in property or in securities of the Corporation), directly or indirectly, on the Common Stock or the Series Preferred;

(iv) any authorization or any designation, whether by reclassification or otherwise, of any new class or series of stock or any other securities convertible into equity securities of the Corporation ranking on a parity with or senior to the Series Preferred in right of redemption, liquidation preference, voting or dividend rights or any increase in the authorized or designated number of any such new class or series;

(v) any redemption, repurchase, payment or declaration of dividends or other distributions with respect to Common Stock (except for acquisitions of Common Stock by the Corporation permitted by Section 1(c) hereof);

(vi) any loan or advance to, assumption or guarantee of the obligations of any person (other than a wholly-owned subsidiary of the Corporation) by the Corporation or a subsidiary thereof the amount of which at any one time exceeds \$50,000, except as approved by a majority of the members of the Board who are disinterested in respect of such transaction (including a majority of the members elected by the holders of the Series Preferred);

(vii) any investment by the Corporation or a subsidiary thereof in any person (other than a wholly-owned subsidiary of the Corporation) the amount of which when aggregated with all other similar investments by the Corporation in the 12 months prior thereto equals or exceeds \$50,000;

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- (viii) any issuance of any equity security of any subsidiary of the Corporation to any person other than the Corporation;
- (ix) any liquidation or dissolution of the Corporation or reclassification of its outstanding capital stock;
- (x) any change of the authorized number of directors of the Corporation from the number set forth in Section 2(c) below;
- (xi) any issuance of any equity security of the Corporation in connection with the acquisition of another corporation, limited liability company, partnership or other entity by the Corporation whether such acquisition is accomplished by way of a merger, consolidation, combination, exclusive license, joint venture, collaboration, purchase of all or substantially all of the assets of such other entity or other reorganization;

(xii) any Liquidation Event (as defined below) including any merger or consolidation of the Corporation into or with another corporation in which the stockholders of the Corporation in the aggregate shall own less than a majority of the voting securities of the surviving corporation, or an Asset Sale (as defined below);

(xiii) any initial public offering of any of the Corporation's equity securities;

(xiv) any material change in the nature of the Corporation's business from a biotechnology research, development and commercialization company; or

(xv) other than transactions in the ordinary course of business involving less than (A) \$100,000 in any single transaction (or series of related transactions) or (B) \$250,000 in the aggregate among all such transactions, enter into any transaction, with any officer, director or affiliate of the Corporation or any subsidiary thereof or any members of their immediate families, unless the transaction is approved in advance by a majority of the disinterested members of the Board.

**(c) Election of Board of Directors.**

(i) **Series Preferred.** For so long as at least 500,000 shares of Series Preferred remain outstanding (subject to adjustment for any stock split, reverse stock split or similar event affecting the Series Preferred after the Filing Date), the holders of Series Preferred, voting as a separate class on an as-converted basis, shall be entitled to elect six members of the Board (the "**Series Preferred Directors**") at each meeting or pursuant to each consent of the Corporation's stockholders for the election of directors, and to remove from office such directors and to fill any vacancy caused by the resignation, death or removal of such directors.

(ii) **Common Stock.** The holders of Common Stock, voting together as a separate class, shall be entitled to elect one member of the Board at each meeting or pursuant to each consent of the Corporation's stockholders for the election of directors, and to remove from office such directors and to fill any vacancy caused by the resignation, death or removal of such directors.

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(iii) No person entitled to vote at an election for directors may cumulate votes to which such person is entitled, unless, at the time of such election, the Corporation is subject to Section 2115 of the California General Corporation Law ("**CGCL**"). During such time or times that the Corporation is subject to Section 2115(b) of the CGCL, every stockholder entitled to vote at an election for directors may cumulate such stockholder's votes and give one candidate a number of votes equal to the number of directors to be elected multiplied by the number of votes to which such stockholder's shares are otherwise entitled, or distribute the stockholder's votes on the same principle among as many candidates as such stockholder desires. No stockholder, however, shall be entitled to so cumulate such stockholder's votes unless (i) the names of such candidate or candidates have been placed in nomination prior to the voting and (ii) the stockholder has given notice at the meeting, prior to the voting, of such stockholder's intention to cumulate such stockholder's votes. If any stockholder has given proper notice to cumulate votes, all stockholders may cumulate their votes for any candidates who have been properly placed in nomination. Under cumulative voting, the candidates receiving the highest number of votes, up to the number of directors to be elected, are elected.

(iv) During such time or times that the Corporation is subject to Section 2115(b) of the CGCL, one or more directors may be removed from office at any time without cause by the affirmative vote of the holders of at least a majority of the outstanding shares entitled to vote for that director as provided above; *provided, however*, that unless the entire Board is removed, no individual director may be removed when the votes cast against such director's removal, or not consenting in writing to such removal, would be sufficient to elect that director if voted cumulatively at an election which the same total number of votes were cast (or, if such action is taken by written consent, all shares entitled to vote were voted) and the entire number of directors authorized at the time of such director's most recent election were then being elected.

(d) The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares of Common Stock then outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote (voting together as a single class on an as-converted basis).

**3. LIQUIDATION RIGHTS.**

(a) For purposes of this Restated Certificate, "**Liquidation Event**" shall mean: (i) any liquidation, dissolution or winding up of the Corporation, whether voluntary or not; or (ii) a Change of Control Transaction (as defined below). A "**Change of Control Transaction**" means (i) any merger, consolidation or similar transaction (or series of related transactions) involving (directly or indirectly) the Corporation if, immediately after the consummation of such merger, consolidation or similar transaction (or series of related transactions), the stockholders of the Corporation immediately prior thereto do not, in the aggregate, own, directly or indirectly, either (A) outstanding voting securities representing more than 50% of the combined outstanding voting power of the surviving entity in such merger,

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consolidation or similar transaction or (B) outstanding voting securities representing more than 50% of the combined outstanding voting power of the parent of the surviving entity in such merger, consolidation or similar transaction; or (ii) any sale, lease, exclusive license, assignment, transfer, conveyance or disposal of all or substantially all of the consolidated assets of the Corporation and its subsidiaries in a transaction (or series of related transactions), other than a sale, lease, exclusive license, assignment, transfer, conveyance or disposal of all or substantially all of the consolidated assets of the Corporation and its subsidiaries to an

entity, more than 50% of the combined voting power of the voting securities of which are owned by stockholders of the Corporation in substantially the same proportion as their ownership of the Corporation immediately prior to such sale, lease, exclusive license or other disposition (an “*Asset Sale*”); *provided, however*, that in no case shall a Change of Control Transaction include issuances of securities by the Corporation the primary purposes of which are to raise capital for the Corporation (as determined in good faith by the Board).

(b) Upon a Liquidation Event, before any distribution or payment shall be made to the holders of any Series A-2 Preferred or Common Stock, the holders of Series A-1 Preferred shall be entitled to be paid out of the assets of the Corporation legally available for distribution, an amount per share of Series A-1 Preferred equal to the quotient obtained by dividing (i) \$150,000,000, which shall increase commencing as of the Filing Date at a rate of 6% per annum compounded annually, by (ii) the total number of shares of Series Preferred outstanding immediately following the Rights Offering Closing (as defined in that certain Series A-1 Preferred Stock Purchase Agreement, dated on or about June 15, 2013, by and between the Corporation and the Purchasers named therein (the “*Purchase Agreement*”) (the “*Series Preferred Liquidation Preference*”) plus all declared and unpaid dividends on each such share of Series A-1 Preferred. If, upon any such Liquidation Event, the assets of the Corporation shall be insufficient to make payment in full to all holders of Series A-1 Preferred of the liquidation preference set forth in this Section 3(b), then such assets (or consideration) shall be distributed among the holders of Series A-1 Preferred at the time outstanding, ratably in proportion to the full amounts to which they would otherwise be respectively entitled.

(c) After the payment of the full liquidation preference of the Series A-1 Preferred as set forth in Section 3(b) above, before any distribution or payment shall be made to the holders of any Common Stock, the holders of Series A-2 Preferred shall be entitled to be paid out of the assets of the Corporation legally available for distribution, an amount per share of Series A-2 Preferred equal to the Series Preferred Liquidation Preference plus all declared and unpaid dividends on each such share of Series A-2 Preferred. If, upon any such Liquidation Event, the assets of the Corporation shall be insufficient to make payment in full to all holders of Series A-2 Preferred of the liquidation preference set forth in this Section 3(c), then such assets (or consideration) shall be distributed among the holders of Series A-2 Preferred at the time outstanding, ratably in proportion to the full amounts to which they would otherwise respectively be entitled.

(d) After the payment of the full liquidation preference of the Series Preferred as set forth in Sections 3(b) and 3(c) above, the remaining assets of the Corporation legally available for distribution, if any, shall be distributed ratably to the holders of Common Stock and Series Preferred on an as-converted to Common Stock basis.

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#### 4. CONVERSION RIGHTS.

The holders of the Series Preferred shall have the following rights with respect to the conversion of the Series Preferred into shares of Common Stock (the “*Conversion Rights*”):

(a) **Optional Conversion.** Subject to and in compliance with the provisions of this Section 4, any shares of Series Preferred may, at the option of the holder, be converted at any time into fully-paid and nonassessable shares of Common Stock; *provided, however*; that no shares of Series Preferred shall be converted pursuant to this Section 4(a) during the time period beginning on the Filing Date and ending on the earlier of the Initial Closing Date (as defined below) or the date that is 30 days following the Filing Date. The number of shares of Common Stock to which a holder of Series Preferred shall be entitled upon conversion shall be the product obtained by multiplying the “Series Preferred Conversion Rate” then in effect (determined as provided in Section 4(b) below) by the number of shares of Series Preferred being converted.

(b) **Series Preferred Conversion Rate.** The conversion rate in effect at any time for conversion of the Series Preferred (the “*Series Preferred Conversion Rate*”) shall be the quotient obtained by dividing the Original Issue Price of the Series Preferred by the “Series Preferred Conversion Price,” calculated as provided in Section 4(c) below.

(c) **Series Preferred Conversion Price.** The conversion price for the Series Preferred (the “*Series Preferred Conversion Price*”) shall initially be the Series Original Issue Price. Such initial Series Preferred Conversion Price shall be adjusted from time to time in accordance with this Section 4. All references to the Series Preferred Conversion Price herein shall thereafter mean the Series Preferred Conversion Price as so adjusted.

(d) **Mechanics of Optional Conversion.** Each holder of Series Preferred who desires to convert the same into shares of Common Stock pursuant to this Section 4 shall surrender the certificate or certificates therefor, duly endorsed, at the office of the Corporation or any transfer agent for the Series Preferred, and shall give written notice to the Corporation at such office that such holder elects to convert the same. Such notice shall state the number of shares of Series Preferred being converted. Thereupon, the Corporation shall promptly issue and deliver at such office to such holder a certificate or certificates for the number of shares of Common Stock to which such holder is entitled and shall promptly pay (i) in cash or, to the extent sufficient funds are not then legally available therefor, in Common Stock (at the Common Stock’s fair market value determined by the Board as of the date of such conversion), any declared and unpaid dividends on the shares of Series Preferred being converted and (ii) in cash (at the Common Stock’s fair market value determined by the Board as of the date of conversion) the value of any fractional share of Common Stock otherwise issuable to any holder of Series Preferred. Such conversion shall be deemed to have been made at the close of business on the date of such surrender of the certificates representing the shares of Series Preferred to be converted, and the person entitled to receive the shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder of such shares of Common Stock on such date.

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(e) **Adjustment for Stock Splits and Combinations.** If at any time or from time to time on or after the Filing Date the Corporation effects a subdivision of the outstanding Common Stock without a corresponding subdivision of the Series Preferred, the Series Preferred Conversion Price in effect immediately before that subdivision shall be proportionately decreased. Conversely, if at any time or from time to time on or after the Filing Date the Corporation combines the outstanding shares of Common Stock into a smaller number of shares without a corresponding combination of the Series Preferred, the Series Conversion Price in effect immediately before the combination shall be proportionately increased. Any adjustment under this Section 4(e) shall become effective at the close of business on the date the subdivision or combination becomes effective.

(f) **Adjustment for Common Stock Dividends and Distributions.** If at any time or from time to time on or after the Filing Date the Corporation pays to holders of Common Stock a dividend or other distribution in additional shares of Common Stock, the Series Preferred Conversion Price then in effect shall be decreased as of the time of such issuance, as provided below:

(i) The Series Preferred Conversion Price shall be adjusted by multiplying the Series Preferred Conversion price then in effect by a fraction equal to:

(A) the numerator of which is the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance, and

(B) the denominator of which is the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance plus the number of shares of Common Stock issuable in payment of such dividend or distribution;

(ii) If the Corporation fixes a record date to determine which holders of Common Stock are entitled to receive such dividend or other distribution, the Series Preferred Conversion Price shall be fixed as of the close of business on such record date and the number of shares of Common Stock shall be calculated immediately prior to the close of business on such record date; and

(iii) If such record date is fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, the Series Preferred Conversion Price shall be recomputed accordingly as of the close of business on such record date and thereafter the Series Preferred Conversion Price shall be adjusted pursuant to this Section 4(f) to reflect the actual payment of such dividend or distribution.

(g) **Adjustment for Reclassification, Exchange, Substitution, Reorganization, Merger or Consolidation.** If at any time or from time to time on or after the Filing Date, the Common Stock issuable upon the conversion of the Series Preferred is changed into the same or a different number of shares of any class or classes of stock, whether by

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recapitalization, reclassification, merger, consolidation or otherwise (other than a subdivision or combination of shares or stock dividend or a reorganization, merger, consolidation or sale of assets provided for elsewhere in this Section 4), in any such event each holder of Series Preferred shall then have the right to convert such stock into the kind and amount of stock and other securities and property receivable upon such recapitalization, reclassification, merger, consolidation or other change by holders of the maximum number of shares of Common Stock into which such shares of Series Preferred could have been converted immediately prior to such recapitalization, reclassification, merger, consolidation or change, all subject to further adjustment as provided herein or with respect to such other securities or property by the terms thereof. In any such case, appropriate adjustment shall be made in the application of the provisions of this Section 4 with respect to the rights of the holders of Series Preferred after the capital reorganization to the end that the provisions of this Section 4 (including adjustment of the Series Preferred Conversion Price then in effect and the number of shares issuable upon conversion of the Series Preferred) shall be applicable after that event and be as nearly equivalent as practicable.

(h) **Sale of Shares Below Series Preferred Conversion Price.**

(i) If at any time or from time to time after the Filing Date, the Corporation issues or sells, or is deemed by the express provisions of this Section 4(h) to have issued or sold, Additional Shares of Common Stock (as defined below), other than as provided in Sections 4(e), (f) or (g) hereof, for an Effective Price (as defined below), less than the Series Preferred Conversion Price (a "**Qualifying Dilutive Issuance**"), then and in each such case, the then existing Series Preferred Conversion Price shall be reduced, as of the opening of the business day on the date of such issue or sale, to a price determined by multiplying the Series Preferred Conversion Price in effect immediately prior to such issuance or sale by a fraction:

(A) the numerator of which shall be (1) the number of shares of Common Stock deemed outstanding (as determined below) immediately prior to such issue or sale, plus (2) the number of shares of Common Stock that the Aggregate Consideration (as defined below) received or deemed received by the Corporation for the total number of Additional Shares of Common Stock so issued would purchase at such then-existing Series Preferred Conversion Price, and

(B) the denominator of which shall be the number of shares of Common Stock deemed outstanding (as determined below) immediately prior to such issue or sale plus the total number of Additional Shares of Common Stock so issued.

For the purposes of the preceding sentence and all other provisions of Section 4(h), the number of shares of Common Stock deemed to be outstanding as of a given date shall be the sum of (A) the number of shares of Common Stock outstanding, (B) the number of shares of Common Stock into which the then outstanding shares of Series Preferred could be converted if fully converted on the day immediately preceding the given date, and (C) the number of shares of Common Stock that are issuable upon the exercise or conversion of any other outstanding securities, Convertible Securities (as defined below) and all outstanding Rights (as defined below).

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(ii) No adjustment shall be made to the Series Preferred Conversion Price in an amount less than \$0.01. Any adjustment otherwise required by this Section 4(h) that is not required to be made due to the preceding sentence shall be included in any subsequent adjustment to the Series Preferred Conversion Price. Any adjustment required by this Section 4(h) shall be rounded to the first decimal for which such rounding represents less than 1% of the Series Preferred Conversion Price in effect after such adjustment.

(iii) For the purpose of making any adjustment required under this Section 4(h), the aggregate consideration received by the Corporation for any issue or sale of securities (the "**Aggregate Consideration**") shall be defined as: (A) to the extent it consists of cash, the gross amount of cash received by the Corporation before deduction of any underwriting or similar commissions, compensation or concessions paid or allowed by the Corporation in connection with such issue or sale and without deduction of any expenses payable by the Corporation, (B) to the extent it consists of property other than cash, the fair market value of that property as determined in good faith by the Board, and (C) if Additional Shares of Common Stock, Convertible Securities or Rights to purchase either Additional Shares of Common Stock or Convertible Securities are issued or sold together with other stock or securities or other assets of the Corporation for a consideration that covers both, the portion of the consideration so received that may be reasonably determined in good faith by the Board to be allocable to such Additional Shares of Common Stock, Convertible Securities or Rights.

(iv) For the purpose of the adjustment required under this Section 4(h), if the Corporation issues or sells (A) Preferred Stock or other stock, options, warrants, purchase rights or other securities exercisable for or convertible into, Additional Shares of Common Stock (such convertible stock or securities being herein referred to as "**Convertible Securities**") or (y) rights or options for the purchase of Additional Shares of Common

Stock or Convertible Securities (such rights or options being hereinafter referred to as “**Rights**”) and if the Effective Price of such Additional Shares of Common Stock is less than the Series Preferred Conversion Price, in each case the Corporation shall be deemed to have issued at the time of the issuance of such rights or options or Convertible Securities the maximum number of Additional Shares of Common Stock issuable upon exercise or conversion thereof and to have received as consideration for the issuance of such shares an amount equal to the total amount of the consideration, if any, received by the Corporation for the issuance of such Rights or Convertible Securities plus:

(A) in the case of such Rights, the minimum amounts of consideration, if any, payable to the Corporation upon the exercise of such Rights; and

(B) in the case of Convertible Securities, the minimum amounts of consideration, if any, payable to the Corporation upon the conversion thereof (other than by cancellation of liabilities or obligations evidenced by such Convertible Securities); provided that if the minimum amounts of such consideration cannot be ascertained, but are a function of antidilution or similar protective clauses, the Corporation shall be deemed to have received the minimum amounts of consideration without reference to such clauses.

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(C) If the minimum amount of consideration payable to the Corporation upon the exercise or conversion of Rights or Convertible Securities is reduced over time or on the occurrence or non-occurrence of specified events other than by reason of antidilution adjustments, the Effective Price shall be recalculated using the figure to which such minimum amount of consideration is reduced; *provided further*, that if the minimum amount of consideration payable to the Corporation upon the exercise or conversion of such Rights or Convertible Securities is subsequently increased, the Effective Price shall be again recalculated using the increased minimum amount of consideration payable to the Corporation upon the exercise or conversion of such Rights or Convertible Securities.

(D) No further adjustment of the Series Preferred Conversion Price, as adjusted upon the issuance of such Rights or Convertible Securities, shall be made as a result of the actual issuance of Additional Shares of Common Stock or the exercise of any such Rights or the conversion of any such Convertible Securities. If any such Rights or the conversion privilege represented by any such Convertible Securities shall expire without having been exercised, the Series Preferred Conversion Price as adjusted upon the issuance of such Rights or Convertible Securities shall be readjusted to the Series Preferred Conversion Price that would have been in effect had an adjustment been made on the basis that the only Additional Shares of Common Stock so issued were the Additional Shares of Common Stock, if any, actually issued or sold on the exercise of such Rights or rights of conversion of such Convertible Securities, and such Additional Shares of Common Stock, if any, were issued or sold for the consideration actually received by the Corporation upon such exercise, plus the consideration, if any, actually received by the Corporation for the granting of all such Rights, whether or not exercised, plus the consideration received for issuing or selling the Convertible Securities actually converted, plus the consideration, if any, actually received by the Corporation (other than by cancellation of liabilities or obligations evidenced by such Convertible Securities) on the conversion of such Convertible Securities, provided that such readjustment shall not apply to prior conversions of Series Preferred.

(v) For the purpose of making any adjustment to the Conversion Price required under this Section 4(h), “**Additional Shares of Common Stock**” shall mean all shares of Common Stock, Convertible Securities or Rights for the purchase of Additional Shares of Common Stock or Convertible Securities issued by the Corporation or deemed to be issued pursuant to this Section 4(h) (including shares of Common Stock subsequently reacquired or retired by the Corporation), other than:

(A) shares of Common Stock issued pursuant to the conversion of Series Preferred;

(B) shares of Common Stock issued pursuant to the exercise of options, warrants or Convertible Securities outstanding as of the Filing Date;

(C) the issuance and sale of, or the grant of options to purchase shares of Common Stock, to employees, directors or officers of, or *bona fide* consultants to, the Corporation and its subsidiaries pursuant to stock plans or options or agreements adopted or approved by the Board (including shares issued or sold pursuant to the exercise of any stock option or purchased pursuant to a grant under the Corporation’s stock option plans or stock purchase plans or pursuant to agreements entered into for employee compensation purposes prior to the Filing Date);

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(D) securities or Rights issued to persons or entities with which the Corporation has business relationships as equity enhancements in bank financing, leasing or other similar transactions approved by the Board (including at least one of the Series Preferred Directors);

(E) securities issued pursuant to the acquisition of another corporation by the Corporation or issued in connection with any merger, consolidation, combination, purchase of all or substantially all of the assets or other reorganization approved by the Board (including at least one of the Series Preferred Directors);

(F) securities issued during any calendar year equal to less than 5% of the securities of the Corporation outstanding on a fully diluted basis in connection with any strategic alliance, license agreement, joint venture agreement or other agreement approved by the Board (including at least one of the Series Preferred Directors); and

(G) shares of Common Stock issued or issuable (1) as a dividend or distribution on any shares of Series Preferred or any shares of Common Stock issued pursuant to subsection (v)(A) above, or (2) pursuant to any event for which adjustments are made pursuant to Sections 4(e), 4(f) and 4(g) above.

For purposes of this Section 4(h), “on a fully diluted basis” shall mean, with respect to Common Stock, (A) all shares of Common Stock outstanding, (B) the number of shares of Common Stock into which the then outstanding shares of Series Preferred could be converted if fully converted on the day immediately preceding the given date, and (C) the number of shares of Common Stock that are issuable upon the exercise or conversion of any other outstanding securities, Convertible Securities and all outstanding Rights.

The “**Effective Price**” of Additional Shares of Common Stock shall mean the quotient determined by dividing the total number of Additional Shares of Common Stock issued or sold, or deemed to have been issued or sold by the Corporation under this Section 4(h), into the Aggregate Consideration received, or

deemed to have been received by the Corporation for such issue under this Section 4(h), for such Additional Shares of Common Stock. In the event that the number of shares of Additional Shares of Common Stock or the Effective Price cannot be ascertained at the time of issuance, such Additional Shares of Common Stock shall be deemed issued immediately upon the occurrence of the first event that makes such number of shares or the Effective Price, as applicable, ascertainable.

(vi) In the event that the Corporation issues or sells, or is deemed to have issued or sold, Additional Shares of Common Stock in a Qualifying Dilutive Issuance (the “*First Dilutive Issuance*”), then in the event that the Corporation issues or sells, or is deemed to have issued or sold, Additional Shares of Common Stock in a Qualifying Dilutive Issuance other than the First Dilutive Issuance as a part of the same transaction or series of related transactions as the First Dilutive Issuance (a “*Subsequent Dilutive Issuance*”), then and in each such case upon a Subsequent Dilutive Issuance, the Series Preferred Conversion Price shall be reduced to the Series Preferred Conversion Price that would have been in effect had the First Dilutive Issuance and each Subsequent Dilutive Issuance all occurred on the closing date of the First Dilutive Issuance.

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(i) **Certificate of Adjustment.** In each case of an adjustment or readjustment of the Series Conversion Price or the number of shares of Common Stock or other securities issuable upon conversion of the Series Preferred, if the change is greater than 1%, the Corporation, or independent public accountants selected by the Corporation, shall promptly compute such adjustment or readjustment in accordance with this Restated Certificate and prepare a certificate showing such adjustment or readjustment, and shall mail such certificate, by first-class mail, postage prepaid, to each registered holder of Series Preferred at the holder’s address as shown on the Corporation’s stock transfer books. The certificate shall set forth such adjustment or readjustment, showing in detail the facts upon which such adjustment or readjustment is based, including a statement of (A) the Series Preferred Conversion Price at the time in effect, and (ii) the number of shares of Common Stock and the type and amount, if any, of other property which at the time would be received upon conversion of the Series Preferred. Failure to request or provide such notice shall have no effect on any such adjustment.

(j) **Notices of Record Date.** In the event that this Corporation shall propose at any time:

(i) to declare any distribution upon its Common Stock, whether in cash, property, stock or other securities, whether or not a regular cash dividend and whether or not out of earnings or earned surplus;

(ii) to effect any reclassification or recapitalization of its Common Stock outstanding involving a change in the Common Stock; or

(iii) to voluntarily liquidate or dissolve or to enter into any transaction deemed to be a Liquidation Event;

then, in connection with each such event, this Corporation shall send to the holders of the Series Preferred simultaneously with any notice of such event sent to the holders of Common Stock, but in all events at least 10 days’ prior written notice of the date on which a record shall be taken for such matter (and specifying the date on which the holders of Common Stock shall be entitled thereto and, if applicable, the amount and character of such matter) or for determining rights to vote in respect of the matters referred to in (ii) and (iii) above. Such written notice shall be given by first class mail (or express courier), postage prepaid, addressed to the holders of Series Preferred at the address for each such holder as shown on the books of the Corporation and shall be deemed given on the date such notice is mailed. The notice provisions set forth in this section may be shortened or waived prospectively or retrospectively by the vote or written consent of the holders of a majority of the outstanding shares of Series Preferred, voting together as a single class.

(k) **Automatic Conversion.**

(i) Each share of Series Preferred shall automatically be converted into shares of Common Stock, based on the then-effective Series Preferred Conversion Rate, (A) at any time upon the affirmative election of the holders of the Requisite Majority, (B) immediately prior to the closing of a firm commitment underwritten public offering of Common Stock by the Corporation covering the offer and sale of Common Stock for the account of the

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Corporation in which the gross cash proceeds to the Corporation (before underwriting discounts, commissions and fees) are at least \$25,000,000, provided that that Common Stock is approved for quotation on the Nasdaq Stock Market, the New York Stock Exchange or the American Stock Exchange immediately following the consummation thereof, and (C) upon the effective date of a Registration Statement (as defined in the Purchase Agreement).

(ii) Upon the occurrence of any of the events specified in Section 4(k)(i) above, the outstanding shares of Series Preferred shall be converted automatically without any further action by the holders of such shares and whether or not the certificates representing such shares are surrendered to the Corporation or its transfer agent; *provided, however*, that the Corporation shall not be obligated to issue certificates evidencing the shares of Common Stock issuable upon such conversion unless the certificates evidencing such shares of Series Preferred are either delivered to the Corporation or its transfer agent as provided below, or the holder of such shares notifies the Corporation or its transfer agent that such certificates have been lost, stolen or destroyed and executes an agreement reasonably satisfactory to the Corporation to indemnify the Corporation from any loss incurred by it in connection with such certificates. Upon the occurrence of such automatic conversion of the Series Preferred, the holders of such shares shall surrender the certificates representing such shares at the office of the Corporation or any transfer agent for the Series Preferred. Thereupon, there shall be issued and delivered to such holder promptly at such office and in its name as shown on such surrendered certificate or certificates, a certificate or certificates for the number of shares of Common Stock into which the shares of Series Preferred surrendered were convertible on the date on which such automatic conversion occurred.

(l) **Special Mandatory Conversion.**

(i) For purposes of this Article IV, Section D.4(l), the following definitions shall apply:

(A) An “*Affiliate*” of any Major Investor shall mean (1) any general or limited partner or retired general or limited partner of any Major Investor which is a partnership, (2) any member or former member of any Major Investor which is a limited liability company, (3) any family member or trust for the benefit of any individual Major Investor or (4) any affiliated venture capital fund of a Major Investor.

(B) The “*Initial Closing*” shall have the meaning set forth in the Purchase Agreement.

(C) The “*Initial Closing Date*” shall have the meaning set forth in the Purchase Agreement.

(D) A “*Major Investor*” shall mean, any holder of Series E Preferred, who, as of immediately prior to the Filing Date, owned together with such holder’s Affiliates, at least 1,000,000 shares of Series E Preferred. For purposes of determining the number of shares of Series E Preferred held by any Major Investor under any provision of this Section D.4(l), all shares of Series E Preferred held by any of its Affiliates shall be aggregated with such Major Investor’s shares of Series E Preferred.

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(E) A Major Investor’s “*Pro Rata Allocation*” shall mean the product of \$10,000,000 multiplied by such Major Investor’s Pro Rata Share.

(F) A Major Investor’s “*Pro Rata Share*” shall mean, immediately prior to the Initial Closing, the ratio expressed as a fraction, (1) the numerator of which is the number of outstanding shares of Series A-1 Preferred held by such Major Investor, and (2) the denominator of which is the total number of shares of Series A-1 Preferred then outstanding.

(G) The “*Series A-1 Financing*” shall mean the issuance by the Corporation of Series A-1 Preferred pursuant to the Purchase Agreement.

(ii) In the event that:

(A) the Corporation proposes to consummate the Series A-1 Financing pursuant to the Purchase Agreement;

(B) the Corporation delivers a notice to the Major Investors not less than five business days prior to the Initial Closing Date that (1) states the Corporation’s intention to consummate the Series A-1 Financing pursuant to the Purchase Agreement, (2) indicates the material terms upon which the Corporation proposes to consummate the Series A-1 Financing, (3) specifies such Major Investor’s Pro Rata Allocation, and (4) offers such Major Investor the right to invest such Major Investor’s Pro Rata Allocation in the Initial Closing of the Series A-1 Financing pursuant to the Purchase Agreement; and

(C) such Major Investor, together with any Affiliates of such Major Investor, fail to collectively invest at least the Pro Rata Allocation of such Major Investor in the Initial Closing of the Series A-1 Financing pursuant to the Purchase Agreement;

then, each share of Series A-1 Preferred held by such Major Investor as of the Initial Closing Date, after giving effect to the provisions of Article IV.C. of this Restated Certificate (the “*Converted Series A-1 Preferred*”), shall automatically and without further action on the part of such Major Investor be converted, effective as of the Initial Closing Date, into 0.333 of one share of Series A-2 Preferred (the “*Special Mandatory Conversion*”). The Corporation shall not issue any fractional shares of Series A-2 Preferred as a result of the Special Mandatory Conversion, but shall instead pay to each Major Investor whose shares of Converted Series A-1 Preferred were automatically converted into shares of Series A-2 Preferred pursuant to this Article IV, Section D.4(l) who would be entitled to receive any fractional share of Series A-2 Preferred as a result of the Special Mandatory Conversion, a sum in cash equal to the fair market value of any such fractional share as determined by the Board.

(iii) Following the Initial Closing Date, the Corporation shall provide written notice to each Major Investor whose shares of Converted Series A-1 Preferred were automatically converted into shares of Series A-2 Preferred pursuant to this Article IV, Section D.4(l). Such notice shall be sent by first class or registered mail, postage prepaid, to each such Major Investor at such Major Investor’s address last shown on the records of the Corporation’s transfer agent (or the records of the Corporation, if it serves as its own transfer

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agent). Upon receipt of such notice, each such Major Investor shall surrender his or its certificate or certificates for all such shares so converted to the Corporation, and shall thereafter receive certificates for the number of shares of Series A-2 Preferred to which such Major Investor is entitled. Immediately upon such automatic conversion, all rights with respect to the Converted Series A-1 Preferred so converted shall immediately cease and terminate, except only for the rights of the holders thereof, upon surrender of their certificate or certificates therefor, to receive certificates for the number of shares of Series A-2 Preferred into which such shares of Converted Series A-1 Preferred have been converted; and provided that declared but unpaid dividends, if any, with respect to the Converted Series A-1 Preferred so converted as of the date of such conversion shall be forfeited. If so required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by a written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or his or its attorney duly authorized in writing. As soon as practicable after the Initial Closing Date and following the surrender of the duly endorsed certificate or certificates for Converted Series A-1 Preferred, the Corporation shall cause to be issued and delivered to such holder, or on his or its written order, a certificate or certificates for the number of full shares of Series A-2 Preferred issuable on such conversion in accordance with the provisions hereof.

(iv) All certificates evidencing shares of Converted Series A-1 Preferred which are required to be surrendered in accordance with the provisions hereof shall, from and after the date of their automatic conversion, be deemed to have been retired and canceled, and all applicable shares of Converted Series A-1 Preferred shall be deemed to have been converted into Series A-2 Preferred for all purposes, notwithstanding the failure of the holder or holders thereof to surrender such certificates. The Corporation may, after the Initial Closing Date, take such appropriate action (without the need for stockholder actions) as may be necessary to reduce the authorized shares of Series A-1 Preferred and increase the number of authorized shares of Series A-2 Preferred accordingly.

(m) **Reservation of Stock Issuable Upon Conversion.** The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of Series Preferred, such number of its shares of Common Stock as shall from time to time be sufficient to effect a conversion of all outstanding shares of the Series Preferred, 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 Series Preferred, the Corporation shall promptly seek such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose. In the event of the consolidation or merger of the Corporation with another corporation where the Corporation is not the surviving corporation, effective provision shall be made in the certificate or articles of incorporation, documents of merger or consolidation,

**(n) Fractional Shares.** No fractional shares of Common Stock shall be issued upon conversion of any shares of Series Preferred. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series Preferred by a holder thereof shall be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion would result in the issuance of any fractional share, the Corporation shall, in lieu of issuing any fractional share, pay cash equal to the product of such fraction multiplied by the fair market value of one share of Common Stock (as determined in good faith by the Board) on the date of conversion.

**(o) Notices.** Any notice required by the provisions of this Section 4 shall be in writing and shall be deemed effectively given: (i) upon personal delivery to the party to be notified, (ii) when sent by confirmed electronic mail or facsimile, in each case if sent during normal business hours of the recipient; if not, then on the next business day, (iii) five days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (iv) one day after deposit with a nationally recognized overnight courier, specifying next day delivery, with verification of receipt. All notices shall be addressed to each holder of record at the address of such holder appearing on the books of the Corporation.

**(p) Payment of Taxes.** The Corporation will pay all taxes (other than taxes based upon income) and other governmental charges that may be imposed with respect to the issue or delivery of shares of Common Stock upon conversion of shares of Series Preferred, excluding any tax or other charge imposed in connection with any transfer involved in the issue and delivery of shares of Common Stock in a name other than that in which the shares of Series Preferred so converted were registered.

**(q) Waiver of Adjustment to Series Preferred Conversion Price.** Notwithstanding anything contained in this Restated Certificate to the contrary, no adjustment in the Series Preferred Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives notice from the holders of a majority of the then outstanding shares of Series Preferred agreeing that no such adjustment shall be made to the Series Preferred Conversion Price for such series as the result of the issuance or deemed issuance of such Additional Shares of Common Stock.

**(r) No Impairment.** The Corporation will not through any reorganization, transfer of assets, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Corporation but will at all times in good faith assist in the carrying out of all the provisions of this Section 4 and in the taking of all such action as may be necessary or appropriate in order to protect the conversion rights of the holders of Series Preferred against impairment.

## 5. NO REISSUANCE OF SERIES PREFERRED.

No shares of Series Preferred acquired by the Corporation by reason of redemption, purchase, conversion or otherwise shall be reissued.

## V.

The Common Stock shall be subject to all of the rights, privileges, preferences and priorities of the Preferred Stock as set forth in this Restated Certificate. Each share of Common Stock shall have the same relative rights as and be identical in all respects to all the other shares of Common Stock. Each holder of shares of Common Stock shall be entitled to attend all special and annual meetings of the stockholders of the Corporation and, share for share and without regard to class, together with the holders of all other classes of stock entitled to attend such meetings and to vote (except any class or series of stock having special voting rights), to cast one vote for each outstanding share of Common Stock so held upon any matter or thing (including, without limitation, the election of one or more directors) properly considered and acted upon by the stockholders. Except for and subject to those rights expressly granted to the holders of Series Preferred, or except as may be provided by the laws of the State of Delaware, the holders of Common Stock shall have all other rights of stockholders.

## VI.

**A.** The Corporation shall indemnify each of the Corporation's directors and officers in each and every situation where, under Section 145 of the DGCL ("**Section 145**"), the Corporation is permitted or empowered to make such indemnification. The Corporation may, in the sole discretion of the Board, indemnify any other person who may be indemnified pursuant to Section 145 to the extent the Board deems advisable, as permitted by Section 145. The Corporation shall promptly make or cause to be made any determination required to be made pursuant to Section 145.

**B.** No person shall be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as director; *provided, however*, that the foregoing shall not eliminate or limit the liability of a director (1) for any breach of the director's duty of loyalty to the Corporation or its stockholders, (2) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (3) under Section 174 of the DGCL or (4) for any transaction from which the director has derived an improper personal benefit. If the DGCL is subsequently amended to further eliminate or limit the liability of a director, then a director of the Corporation, in addition to the circumstances in which a director is not personally liable as set forth in the preceding sentence, shall not be liable to the fullest extent permitted by the amended DGCL. For purposes of this Article VI, "fiduciary duty as a director" shall include any fiduciary duty arising out of serving at the Corporation's request as a director of another corporation, partnership, joint venture or other enterprise, and "personal liability to the Corporation or its stockholders" shall include any liability to such other corporation, partnership, joint venture, trust or other enterprise, and any liability to the corporation in its capacity as a security holder, joint venturer, partner, beneficiary, creditor or investor of or in any such other corporation, partnership, joint venture, trust or other enterprise.

**C.** The Corporation is authorized to provide indemnification of agents (as defined in Section 317 of the CGCL) for breach of duty to the Corporation and its stockholders through bylaw provisions or through agreements with the agents, or through stockholder resolutions, or otherwise, in excess of the indemnification otherwise permitted by Section 317 of the CGCL, subject, at any time or times that the Corporation is subject to Section 2115(b) of the CGCL, to the limits on such excess indemnification set forth in Section 204 of the CGCL.

D. Any repeal or modification of this Article VI or the adoption of any provision of this Restated Certificate inconsistent with this Article VI shall only be prospective and shall not affect the rights under this Article VI in effect at the time of the alleged occurrence of any action or omission to act giving rise to liability.

## VII.

For the management of the business and for the conduct of the affairs of the Corporation, and in further definition, limitation and regulation of the powers of the Corporation, of its directors and of its stockholders or any class thereof, as the case may be, it is further provided that:

A. The management of the business and the conduct of the affairs of the Corporation shall be vested in its Board. The number of directors which shall constitute the whole Board shall be fixed by the Board in the manner provided in the Bylaws, subject to any restrictions which may be set forth in this Restated Certificate.

B. The Board is expressly empowered to adopt, amend or repeal the Bylaws. The stockholders shall also have the power to adopt, amend or repeal the Bylaws; *provided, however*, that, in addition to any vote of the holders of any class or series of stock of the Corporation required by law or by this Restated Certificate, the affirmative vote of the holders of at least a majority of the voting power of all of the then-outstanding shares of the capital stock of the Corporation entitled to vote generally in the election of directors, voting together as a single class, shall be required to adopt, amend or repeal any provision of the Bylaws.

C. The directors of the Corporation need not be elected by written ballot unless the Bylaws so provide.

## VIII.

Whenever a compromise or arrangement is proposed between the Corporation and its creditors or any class of them and/or between the Corporation and its stockholders or any class of them, any court of equitable jurisdiction within the State of Delaware may, on the application in a summary way of the Corporation or of any creditor or stockholder thereof or on the application of any receiver or receivers appointed for the Corporation under the provisions of the DGCL, order a meeting of the creditors or class of creditors, and/or of the stockholders or class of stockholders of the Corporation, as the case may be, to be summoned in such matter as the said court directs. If a majority in number representing 75% in value of the creditors or class of creditors, and/or of the stockholders or class of stockholders of the Corporation, as the case may be, agree to any compromise or arrangement and to any reorganization of the Corporation as a consequence of such compromise or arrangement, such compromise or arrangement and such reorganization shall, if sanctioned by the court to which such application has been made, be binding on all the creditors or class of creditors, and/or on all the stockholders or class of stockholders, of the Corporation, as the case may be, and also on the Corporation.

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## IX.

The Corporation renounces, to the fullest extent permitted by law, 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 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 expressly and solely in such Covered Person’s capacity as a director of the Corporation.

**FOUR:** This Sixth Amended and Restated Certificate of Incorporation has been duly approved by the Board of Directors of the Corporation.

**FIVE:** This Sixth Amended and Restated Certificate of Incorporation was approved by the holders of the requisite number of shares of said corporation in accordance with Section 228 of the DGCL. This Sixth Amended and Restated Certificate of Incorporation has been duly adopted in accordance with the provisions of Sections 242 and 245 of the DGCL by the stockholders of the Corporation.

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IN WITNESS WHEREOF, XENCOR, INC. has caused this Sixth Amended and Restated Certificate of Incorporation to be signed by its President and Chief Executive Officer this 12th day of June, 2013.

XENCOR, INC.

Signature:           /s/ Bassil I. Dahiyat          

Print Name: Bassil I. Dahiyat

Title: President and Chief Executive Officer

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CERTIFICATE OF AMENDMENT  
TO



**SIXTH AMENDED AND RESTATED CERTIFICATE OF INCORPORATION  
OF  
XENCOR, INC.**

Xencor, Inc. (the "**Corporation**"), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "**DGCL**"), does hereby certify that:

**FIRST:** The name of the Corporation is Xencor, Inc.

**SECOND:** The date on which the Corporation's Certificate of Incorporation was originally filed with the Secretary of State of the State of Delaware was June 8, 2004.

**THIRD:** The Board of Directors of the Corporation, acting in accordance with the provisions of Sections 141 and 242 of the DGCL, adopted resolutions amending its Sixth Amended and Restated Certificate of Incorporation (the "**Certificate**") as follows:

1. The first paragraph of Article IV of the Corporation's Sixth Amended and Restated Certificate of Incorporation is hereby amended to add the following at the end of such paragraph:

"Effective at the time of filing of this Certificate of Amendment with the Secretary of State of the State of Delaware, every 3.1 shares of Common Stock issued and outstanding shall, automatically and without any action on the part of the respective holders thereof, be combined and converted into one share of Common Stock without increasing or decreasing the par value of each share of Common Stock (the "**Reverse Split**"); *provided, however,* that the Corporation shall issue no fractional shares of Common Stock as a result of the Reverse Split, but shall instead pay to any stockholder who would be entitled to receive a fractional share as a result of the actions set forth herein a sum in cash equal to the fair market value of the shares constituting such fractional share as determined by the Board of Directors of the Corporation. The Reverse Split shall occur whether or not the certificates representing such shares of Common Stock are surrendered to the Corporation or its transfer agent. The Reverse Split shall be effected on a record holder-by-record holder basis, such that any fractional shares of Common Stock resulting from the Reverse Split and held by a single record holder shall be aggregated."

**FOURTH:** Thereafter, pursuant to a resolution of the Board of Directors, this Certificate of Amendment was submitted to the stockholders of the Corporation for their approval, and was duly adopted in accordance with the provisions of Sections 228 and 242 of the DGCL.

**[SIGNATURE PAGE FOLLOWS]**

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**IN WITNESS WHEREOF**, Xencor, Inc. has caused this Certificate of Amendment to be executed by its duly authorized officer as of November 1, 2013.

/s/ Bassil I. Dahiyat  
Bassil I. Dahiyat  
*President and Chief Executive Officer*

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Kenneth J. Rollins  
T: +1 858 550 6136  
krollins@cooley.com

November 4, 2013

Xencor, Inc.  
111 West Lemon Avenue, 2<sup>nd</sup> Floor  
Monrovia, CA 91016

Ladies and Gentlemen:

You have requested our opinion with respect to certain matters in connection with the filing by Xencor, Inc., a Delaware corporation (the "**Company**"), of a Registration Statement (No. 333-191689) on Form S-1 (the "**Registration Statement**") with the Securities and Exchange Commission, including a related prospectus filed with the Registration Statement (the "**Prospectus**"), covering an underwritten public offering of up to 5,750,000 shares (the "**Shares**") of the Company's common stock, par value \$0.01, which includes up to 5,000,000 Shares to be sold by the Company (the "**Company Shares**") and up to 750,000 Shares of common stock of the Company that may be sold by the Company pursuant to the exercise of an of an over-allotment option granted to the underwriters (the "**Overallotment Shares**").

In connection with this opinion, we have examined and relied upon (a) the Registration Statement and related Prospectus, (b) the Company's Sixth Amended and Restated Certificate of Incorporation, and Bylaws, as amended, as currently in effect, (c) the Company's Amended and Restated Certificate of Incorporation, filed as Exhibit 3.2 to the Registration Statement and the Company's Amended and Restated Bylaws, filed as Exhibit 3.4 to the Registration Statement, each of which is to be in effect upon the closing of the offering contemplated by the Registration Statement, and (d) the originals or copies certified to our satisfaction of such records, documents, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. We have assumed the genuineness and authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as copies and the due execution and delivery of all documents where due execution and delivery are a prerequisite to the effectiveness thereof. As to certain factual matters, we have relied upon a certificate of officers of the Company and have not sought independently to verify such matters. Our opinion is expressed only with respect to the General Corporation Law of the State of Delaware. We express no opinion as to whether the laws of any particular jurisdiction are applicable to the subject matter hereof. We are not rendering any opinion as to compliance with any federal or state antifraud law, rule or regulation relating to securities, or to the sale or issuance thereof.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Company Shares and the Overallotment Shares, when sold and issued against payment therefor as described in the Registration Statement and the related Prospectus, will be validly issued, fully paid and non-assessable.

4401 EASTGATE MALL, SAN DIEGO, CA 92121 T: (858) 550-6000 F: (858) 550-6420 WWW.COOLEY.COM



Xencor, Inc.  
November 4, 2013  
Page Two

We consent to the reference to our firm under the caption "Legal Matters" in the Prospectus included in the Registration Statement and to the filing of this opinion as an exhibit to the Registration Statement.

Sincerely,

Cooley LLP

By: /s/ Kenneth J. Rollins  
Kenneth J. Rollins

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## XENCOR, INC.

## 2013 EQUITY INCENTIVE PLAN

ADOPTED BY THE BOARD OF DIRECTORS: NOVEMBER 1, 2013

APPROVED BY THE STOCKHOLDERS: , 2013

IPO DATE: , 2013

## 1. GENERAL.

(a) **Successor to and Continuation of Prior Plan.** The Plan is intended as the successor to and continuation of the Xencor, Inc. 2010 Equity Incentive Plan, as amended (the “*Prior Plan*”). From and after 12:01 a.m. Pacific time on the IPO Date, no additional stock awards will be granted under the Prior Plan. All Awards granted on or after 12:01 a.m. Pacific Time on the IPO Date will be granted under this Plan. All stock awards granted under the Prior Plan will remain subject to the terms of the Prior Plan.

(i) Any shares that would otherwise remain available for future grants under the Prior Plan as of 12:01 a.m. Pacific Time on the IPO Date (the “*Prior Plan’s Available Reserve*”) will cease to be available under the Prior Plan at such time. Instead, that number of shares of Common Stock equal to the Prior Plan’s Available Reserve will be added to the Share Reserve (as further described in Section 3(a) below) and will be immediately available for grants and issuance pursuant to Stock Awards hereunder, up to the maximum number set forth in Section 3(a) below.

(ii) In addition, from and after 12:01 a.m. Pacific time on the IPO Date, any shares subject, at such time, to outstanding stock awards granted under the Prior Plan that (i) expire or terminate for any reason prior to exercise or settlement; (ii) are forfeited because of the failure to meet a contingency or condition required to vest such shares or otherwise return to the Company; or (iii) are reacquired, withheld (or not issued) to satisfy a tax withholding obligation in connection with an award or to satisfy the purchase price or exercise price of a stock award (such shares the “*Returning Shares*”) will immediately be added to the Share Reserve (as further described in Section 3(a) below) as and when such shares become Returning Shares, up to the maximum number set forth in Section 3(a) below.

(b) **Eligible Award Recipients.** Employees, Directors and Consultants are eligible to receive Awards.

(c) **Available Awards.** The Plan provides for the grant of the following Awards: (i) Incentive Stock Options, (ii) Nonstatutory Stock Options, (iii) Stock Appreciation Rights (iv) Restricted Stock Awards, (v) Restricted Stock Unit Awards, (vi) Performance Stock Awards, (vii) Performance Cash Awards, and (viii) Other Stock Awards.

(d) **Purpose.** The Plan, through the grant of Awards, is intended to help the Company secure and retain the services of eligible award recipients, provide incentives for such

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persons to exert maximum efforts for the success of the Company and any Affiliate, and provide a means by which the eligible recipients may benefit from increases in value of the Common Stock.

## 2. ADMINISTRATION.

(a) **Administration by Board.** The Board will administer the Plan. The Board may delegate administration of the Plan to a Committee or Committees, as provided in Section 2(c).

(b) **Powers of Board.** The Board will have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine: (A) who will be granted Awards; (B) when and how each Award will be granted; (C) what type of Award will be granted; (D) the provisions of each Award (which need not be identical), including when a person will be permitted to exercise or otherwise receive cash or Common Stock under the Award; (E) the number of shares of Common Stock subject to, or the cash value of, an Award; and (F) the Fair Market Value applicable to a Stock Award.

(ii) To construe and interpret the Plan and Awards granted under it, and to establish, amend and revoke rules and regulations for administration of the Plan and Awards. The Board, in the exercise of these powers, may correct any defect, omission or inconsistency in the Plan or in any Award Agreement or in the written terms of a Performance Cash Award, in a manner and to the extent it will deem necessary or expedient to make the Plan or Award fully effective.

(iii) To settle all controversies regarding the Plan and Awards granted under it.

(iv) To accelerate, in whole or in part, the time at which an Award may be exercised or vest (or the time at which cash or shares of Common Stock may be issued in settlement thereof).

(v) To suspend or terminate the Plan at any time. Except as otherwise provided in the Plan or an Award Agreement, suspension or termination of the Plan will not materially impair a Participant’s rights under the Participant’s then-outstanding Award without the Participant’s written consent, except as provided in subsection (viii) below.

(vi) To amend the Plan in any respect the Board deems necessary or advisable, including, without limitation, by adopting amendments relating to Incentive Stock Options and certain nonqualified deferred compensation under Section 409A of the Code and/or bringing the Plan or Awards granted under the Plan into compliance with the requirements for Incentive Stock Options or ensuring that they are exempt from, or compliant with, the requirements for nonqualified deferred compensation under Section 409A of the Code, subject to the limitations, if any, of applicable law. If required by applicable law or listing requirements, and except as provided in Section 9(a) relating to Capitalization Adjustments, the Company will seek stockholder approval of any amendment of the Plan that (A) materially increases the number of shares of Common Stock available for issuance under the Plan, (B) materially expands the class

of individuals eligible to receive Awards under the Plan, (C) materially increases the benefits accruing to Participants under the Plan, (D) materially reduces the price at which shares of Common Stock may be issued or purchased under the Plan, (E) materially extends the term of the Plan, or (F) materially expands the types of Awards available for issuance under the Plan. Except as otherwise provided in the Plan or an Award Agreement, no amendment of the Plan will materially impair a Participant's rights under an outstanding Award without the Participant's written consent.

(vii) To submit any amendment to the Plan for stockholder approval, including, but not limited to, amendments to the Plan intended to satisfy the requirements of (A) Section 162(m) of the Code regarding the exclusion of performance-based compensation from the limit on corporate deductibility of compensation paid to Covered Employees, (B) Section 422 of the Code regarding "incentive stock options" or (C) Rule 16b-3.

(viii) To approve forms of Award Agreements for use under the Plan and to amend the terms of any one or more Awards, including, but not limited to, amendments to provide terms more favorable to the Participant than previously provided in the Award Agreement, subject to any specified limits in the Plan that are not subject to Board discretion; *provided, however*, that a Participant's rights under any Award will not be impaired by any such amendment unless (A) the Company requests the consent of the affected Participant, and (B) such Participant consents in writing. Notwithstanding the foregoing, (1) a Participant's rights will not be deemed to have been impaired by any such amendment if the Board, in its sole discretion, determines that the amendment, taken as a whole, does not materially impair the Participant's rights, and (2) subject to the limitations of applicable law, if any, the Board may amend the terms of any one or more Awards without the affected Participant's consent (A) to maintain the qualified status of the Award as an Incentive Stock Option under Section 422 of the Code; (B) to change the terms of an Incentive Stock Option, if such change results in impairment of the Award solely because it impairs the qualified status of the Award as an Incentive Stock Option under Section 422 of the Code; (C) to clarify the manner of exemption from, or to bring the Award into compliance with, Section 409A of the Code; or (D) to comply with other applicable laws or listing requirements.

(ix) Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company and that are not in conflict with the provisions of the Plan or Awards.

(x) To adopt such procedures and sub-plans as are necessary or appropriate to permit participation in the Plan by Employees, Directors or Consultants who are foreign nationals or employed outside the United States (provided that Board approval will not be necessary for immaterial modifications to the Plan or any Award Agreement that are required for compliance with the laws of the relevant foreign jurisdiction).

(xi) To effect, with the consent of any adversely affected Participant, (A) the reduction of the exercise, purchase or strike price of any outstanding Stock Award; (B) the cancellation of any outstanding Stock Award and the grant in substitution thereof of a new (1) Option or SAR, (2) Restricted Stock Award, (3) Restricted Stock Unit Award, (4) Other Stock

Award, (5) cash and/or (6) other valuable consideration determined by the Board, in its sole discretion, with any such substituted award (x) covering the same or a different number of shares of Common Stock as the cancelled Stock Award and (y) granted under the Plan or another equity or compensatory plan of the Company; or (C) any other action that is treated as a repricing under generally accepted accounting principles.

**(c) Delegation to Committee.**

(i) **General.** The Board may delegate some or all of the administration of the Plan to a Committee or Committees. If administration of the Plan is delegated to a Committee, the Committee will have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the Committee, including the power to delegate to a subcommittee of the Committee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board will thereafter be to the Committee or subcommittee, as applicable). Any delegation of administrative powers will be reflected in resolutions, not inconsistent with the provisions of the Plan, adopted from time to time by the Board or Committee (as applicable). The Board may retain the authority to concurrently administer the Plan with the Committee and may, at any time, revert in the Board some or all of the powers previously delegated.

(ii) **Section 162(m) and Rule 16b-3 Compliance.** The Committee may consist solely of two or more Outside Directors, in accordance with Section 162(m) of the Code, or solely of two or more Non-Employee Directors, in accordance with Rule 16b-3.

(d) **Delegation to an Officer.** The Board may delegate to one (1) or more Officers the authority to do one or both of the following (i) designate Employees who are not Officers to be recipients of Options and SARs (and, to the extent permitted by applicable law, other Stock Awards) and, to the extent permitted by applicable law, the terms of such Awards, and (ii) determine the number of shares of Common Stock to be subject to such Stock Awards granted to such Employees; *provided, however*, that the Board resolutions regarding such delegation will specify the total number of shares of Common Stock that may be subject to the Stock Awards granted by such Officer and that such Officer may not grant a Stock Award to himself or herself. Any such Stock Awards will be granted on the form of Stock Award Agreement most recently approved for use by the Committee or the Board, unless otherwise provided in the resolutions approving the delegation authority. The Board may not delegate authority to an Officer who is acting solely in the capacity of an Officer (and not also as a Director) to determine the Fair Market Value pursuant to Section 13(w)(iii) below.

(e) **Effect of Board's Decision.** All determinations, interpretations and constructions made by the Board in good faith will not be subject to review by any person and will be final, binding and conclusive on all persons.

**3. SHARES SUBJECT TO THE PLAN.**

(a) **Share Reserve.** Subject to Section 9(a) relating to Capitalization Adjustments, and the following sentence regarding the annual increase, the aggregate number of shares of

Common Stock that may be issued pursuant to Stock Awards will not exceed 4,194,133 shares (the “*Share Reserve*”), which number is the sum of (i) 1,509,677 new shares, *plus* (ii) the number of shares subject to the Prior Plan’s Available Reserve, *plus* (iii) the number of shares that are Returning Shares, as such shares become available from time to time.

In addition, the Share Reserve will automatically increase on January 1<sup>st</sup> of each year, for a period of not more than ten years from the date the Plan is approved by the stockholders of the Company, commencing on January 1<sup>st</sup> of the year following the year in which the IPO Date occurs and ending on (and including) January 1, 2023, in an amount equal to 4% of the total number of shares of Capital Stock outstanding on December 31<sup>st</sup> of the preceding calendar year. Notwithstanding the foregoing, the Board may act prior to January 1<sup>st</sup> of a given year to provide that there will be no January 1<sup>st</sup> increase in the Share Reserve for such year or that the increase in the Share Reserve for such year will be a lesser number of shares of Common Stock than would otherwise occur pursuant to the preceding sentence. For clarity, the Share Reserve in this Section 3(a) is a limitation on the number of shares of Common Stock that may be issued pursuant to the Plan. Accordingly, this Section 3(a) does not limit the granting of Stock Awards except as provided in Section 7(a). Shares may be issued in connection with a merger or acquisition as permitted by NASDAQ Listing Rule 5635(c) or, if applicable, NYSE Listed Company Manual Section 303A.08, AMEX Company Guide Section 711 or other applicable rule, and such issuance will not reduce the number of shares available for issuance under the Plan.

**(b) Reversion of Shares to the Share Reserve.** If a Stock Award or any portion thereof (i) expires or otherwise terminates without all of the shares covered by such Stock Award having been issued or (ii) is settled in cash (*i.e.*, the Participant receives cash rather than stock), such expiration, termination or settlement will not reduce (or otherwise offset) the number of shares of Common Stock that may be available for issuance under the Plan. If any shares of Common Stock issued pursuant to a Stock Award are forfeited back to or repurchased by the Company because of the failure to meet a contingency or condition required to vest such shares in the Participant, then the shares that are forfeited or repurchased will revert to and again become available for issuance under the Plan. Any shares reacquired by the Company in satisfaction of tax withholding obligations on a Stock Award or as consideration for the exercise or purchase price of a Stock Award will again become available for issuance under the Plan.

**(c) Incentive Stock Option Limit.** Subject to the provisions of Section 9(a) relating to Capitalization Adjustments, the aggregate maximum number of shares of Common Stock that may be issued pursuant to the exercise of Incentive Stock Options will be 8,388,266 shares of Common Stock.

**(d) Section 162(m) Limitations.** Subject to the provisions of Section 9(a) relating to Capitalization Adjustments, at such time as the Company may be subject to the applicable provisions of Section 162(m) of the Code, the following limitations shall apply.

**(i)** A maximum of 2,000,000 shares of Common Stock subject to Options, SARs and Other Stock Awards whose value is determined by reference to an increase over an exercise or strike price of at least 100% of the Fair Market Value on the date the Stock Award is

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granted may be granted to any one Participant during any one calendar year. Notwithstanding the foregoing, if any additional Options, SARs or Other Stock Awards whose value is determined by reference to an increase over an exercise or strike price of at least 100% of the Fair Market Value on the date the Stock Award are granted to any Participant during any calendar year, compensation attributable to the exercise of such additional Stock Awards will not satisfy the requirements to be considered “qualified performance-based compensation” under Section 162(m) of the Code unless such additional Stock Award is approved by the Company’s stockholders.

**(ii)** A maximum of 2,000,000 shares of Common Stock subject to Performance Stock Awards may be granted to any one Participant during any one calendar year (whether the grant, vesting or exercise is contingent upon the attainment during the Performance Period of the Performance Goals).

**(iii)** A maximum of \$3,000,000 may be granted as a Performance Cash Award to any one Participant during any one calendar year.

**(e) Source of Shares.** The stock issuable under the Plan will be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the open market or otherwise.

#### 4. ELIGIBILITY.

**(a) Eligibility for Specific Stock Awards.** Incentive Stock Options may be granted only to employees of the Company or a “parent corporation” or “subsidiary corporation” thereof (as such terms are defined in Sections 424(e) and 424(f) of the Code). Stock Awards other than Incentive Stock Options may be granted to Employees, Directors and Consultants; *provided, however*, that Stock Awards may not be granted to Employees, Directors and Consultants who are providing Continuous Service only to any “parent” of the Company, as such term is defined in Rule 405 of the Securities Act, unless (i) the stock underlying such Stock Awards is treated as “service recipient stock” under Section 409A of the Code (for example, because the Stock Awards are granted pursuant to a corporate transaction such as a spin off transaction), (ii) the Company, in consultation with its legal counsel, has determined that such Stock Awards are otherwise exempt from Section 409A of the Code, or (iii) the Company, in consultation with its legal counsel, has determined that such Stock Awards comply with the distribution requirements of Section 409A of the Code.

**(b) Ten Percent Stockholders.** A Ten Percent Stockholder will not be granted an Incentive Stock Option unless the exercise price of such Option is at least 110% of the Fair Market Value on the date of grant and the Option is not exercisable after the expiration of five years from the date of grant.

#### 5. PROVISIONS RELATING TO OPTIONS AND STOCK APPRECIATION RIGHTS.

Each Option or SAR will be in such form and will contain such terms and conditions as the Board deems appropriate. All Options will be separately designated Incentive Stock Options

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or Nonstatutory Stock Options at the time of grant, and, if certificates are issued, a separate certificate or certificates will be issued for shares of Common Stock purchased on exercise of each type of Option. If an Option is not specifically designated as an Incentive Stock Option, or if an Option is designated as an Incentive Stock Option but some portion or all of the Option fails to qualify as an Incentive Stock Option under the applicable rules, then the Option (or portion thereof) will be a Nonstatutory Stock Option. The provisions of separate Options or SARs need not be identical; *provided, however*, that each Award Agreement will conform to (through incorporation of provisions hereof by reference in the applicable Award Agreement or otherwise) the substance of each of the following provisions:

(a) **Term.** Subject to the provisions of Section 4(b) regarding Ten Percent Stockholders, no Option or SAR will be exercisable after the expiration of ten years from the date of its grant or such shorter period specified in the Award Agreement.

(b) **Exercise Price.** Subject to the provisions of Section 4(b) regarding Ten Percent Stockholders, the exercise or strike price of each Option or SAR will be not less than 100% of the Fair Market Value of the Common Stock subject to the Option or SAR on the date the Award is granted. Notwithstanding the foregoing, an Option or SAR may be granted with an exercise or strike price lower than 100% of the Fair Market Value of the Common Stock subject to the Award if such Award is granted pursuant to an assumption of or substitution for another option or stock appreciation right pursuant to a Corporate Transaction and in a manner consistent with the provisions of Section 409A and, if applicable, Section 424(a) of the Code. Each SAR will be denominated in shares of Common Stock equivalents.

(c) **Purchase Price for Options.** The purchase price of Common Stock acquired pursuant to the exercise of an Option may be paid, to the extent permitted by applicable law and as determined by the Board in its sole discretion, by any combination of the methods of payment set forth below. The Board will have the authority to grant Options that do not permit all of the following methods of payment (or otherwise restrict the ability to use certain methods) and to grant Options that require the consent of the Company to use a particular method of payment. The permitted methods of payment are as follows:

(i) by cash, check, bank draft or money order payable to the Company;

(ii) pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of the stock subject to the Option, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the aggregate exercise price to the Company from the sales proceeds;

(iii) by delivery to the Company (either by actual delivery or attestation) of shares of Common Stock;

(iv) if an Option is a Nonstatutory Stock Option, by a “net exercise” arrangement pursuant to which the Company will reduce the number of shares of Common Stock issuable upon exercise by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price; *provided, however*, that the Company will accept a cash

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or other payment from the Participant to the extent of any remaining balance of the aggregate exercise price not satisfied by such reduction in the number of whole shares to be issued. Shares of Common Stock will no longer be subject to an Option and will not be exercisable thereafter to the extent that (A) shares issuable upon exercise are used to pay the exercise price pursuant to the “net exercise,” (B) shares are delivered to the Participant as a result of such exercise, and (C) shares are withheld to satisfy tax withholding obligations; or

(v) in any other form of legal consideration that may be acceptable to the Board and specified in the applicable Award Agreement.

(d) **Exercise and Payment of a SAR.** To exercise any outstanding SAR, the Participant must provide written notice of exercise to the Company in compliance with the provisions of the Stock Appreciation Right Agreement evidencing such SAR. The appreciation distribution payable on the exercise of a SAR will be not greater than an amount equal to the excess of (A) the aggregate Fair Market Value (on the date of the exercise of the SAR) of a number of shares of Common Stock equal to the number of Common Stock equivalents in which the Participant is vested under such SAR, and with respect to which the Participant is exercising the SAR on such date, over (B) the aggregate strike price of the number of Common Stock equivalents with respect to which the Participant is exercising the SAR on such date. The appreciation distribution may be paid in Common Stock, in cash, in any combination of the two or in any other form of consideration, as determined by the Board and contained in the Award Agreement evidencing such SAR.

(e) **Transferability of Options and SARs.** The Board may, in its sole discretion, impose such limitations on the transferability of Options and SARs as the Board will determine. In the absence of such a determination by the Board to the contrary, the following restrictions on the transferability of Options and SARs will apply:

(i) **Restrictions on Transfer.** An Option or SAR will not be transferable except by will or by the laws of descent and distribution (or pursuant to subsections (ii) and (iii) below), and will be exercisable during the lifetime of the Participant only by the Participant. The Board may permit transfer of the Option or SAR in a manner that is not prohibited by applicable tax and securities laws. Except as explicitly provided in the Plan, neither an Option nor a SAR may be transferred for consideration.

(ii) **Domestic Relations Orders.** Subject to the approval of the Board or a duly authorized Officer, an Option or SAR may be transferred pursuant to the terms of a domestic relations order, official marital settlement agreement or other divorce or separation instrument as permitted by Treasury Regulations Section 1.421-1(b)(2). If an Option is an Incentive Stock Option, such Option may be deemed to be a Nonstatutory Stock Option as a result of such transfer.

(iii) **Beneficiary Designation.** Subject to the approval of the Board or a duly authorized Officer, a Participant may, by delivering written notice to the Company, in a form approved by the Company (or the designated broker), designate a third party who, on the death of the Participant, will thereafter be entitled to exercise the Option or SAR and receive the

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Common Stock or other consideration resulting from such exercise. In the absence of such a designation, upon the death of the Participant, the executor or administrator of the Participant’s estate will be entitled to exercise the Option or SAR and receive the Common Stock or other consideration resulting from such exercise. However, the Company may prohibit designation of a beneficiary at any time, including due to any conclusion by the Company that such designation would be inconsistent with the provisions of applicable laws.

(f) **Vesting Generally.** The total number of shares of Common Stock subject to an Option or SAR may vest and become exercisable in periodic installments that may or may not be equal. The Option or SAR may be subject to such other terms and conditions on the time or times when it may or may not be exercised (which may be based on the satisfaction of Performance Goals or other criteria) as the Board may deem appropriate. The vesting provisions of

individual Options or SARs may vary. The provisions of this Section 5(f) are subject to any Option or SAR provisions governing the minimum number of shares of Common Stock as to which an Option or SAR may be exercised.

**(g) Termination of Continuous Service.** Except as otherwise provided in the applicable Award Agreement or other agreement between the Participant and the Company, if a Participant's Continuous Service terminates (other than for Cause and other than upon the Participant's death or Disability), the Participant may exercise his or her Option or SAR (to the extent that the Participant was entitled to exercise such Award as of the date of termination of Continuous Service) within the period of time ending on the earlier of (i) the date three months following the termination of the Participant's Continuous Service (or such longer or shorter period specified in the applicable Award Agreement), and (ii) the expiration of the term of the Option or SAR as set forth in the Award Agreement. If, after termination of Continuous Service, the Participant does not exercise his or her Option or SAR (as applicable) within the applicable time frame, the Option or SAR will terminate.

**(h) Extension of Termination Date.** If the exercise of an Option or SAR following the termination of the Participant's Continuous Service (other than for Cause and other than upon the Participant's death or Disability) would be prohibited at any time solely because the issuance of shares of Common Stock would violate the registration requirements under the Securities Act, then the Option or SAR will terminate on the earlier of (i) the expiration of a total period of time (that need not be consecutive) equal to the applicable post termination exercise period after the termination of the Participant's Continuous Service during which the exercise of the Option or SAR would not be in violation of such registration requirements, and (ii) the expiration of the term of the Option or SAR as set forth in the applicable Award Agreement. In addition, unless otherwise provided in a Participant's Award Agreement, if the sale of any Common Stock received on exercise of an Option or SAR following the termination of the Participant's Continuous Service (other than for Cause) would violate the Company's insider trading policy, then the Option or SAR will terminate on the earlier of (i) the expiration of a period of months (that need not be consecutive) equal to the applicable post-termination exercise period after the termination of the Participant's Continuous Service during which the sale of the Common Stock received upon exercise of the Option or SAR would not be in violation of the Company's insider trading policy, or (ii) the expiration of the term of the Option or SAR as set forth in the applicable Award Agreement.

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**(i) Disability of Participant.** Except as otherwise provided in the applicable Award Agreement or other agreement between the Participant and the Company, if a Participant's Continuous Service terminates as a result of the Participant's Disability, the Participant may exercise his or her Option or SAR (to the extent that the Participant was entitled to exercise such Option or SAR as of the date of termination of Continuous Service), but only within such period of time ending on the earlier of (i) the date 12 months following such termination of Continuous Service (or such longer or shorter period specified in the Award Agreement), and (ii) the expiration of the term of the Option or SAR as set forth in the Award Agreement. If, after termination of Continuous Service, the Participant does not exercise his or her Option or SAR within the applicable time frame, the Option or SAR (as applicable) will terminate.

**(j) Death of Participant.** Except as otherwise provided in the applicable Award Agreement or other agreement between the Participant and the Company, if (i) a Participant's Continuous Service terminates as a result of the Participant's death, or (ii) the Participant dies within the period (if any) specified in the Award Agreement for exercisability after the termination of the Participant's Continuous Service for a reason other than death, then the Option or SAR may be exercised (to the extent the Participant was entitled to exercise such Option or SAR as of the date of death) by the Participant's estate, by a person who acquired the right to exercise the Option or SAR by bequest or inheritance or by a person designated to exercise the Option or SAR upon the Participant's death, but only within the period ending on the earlier of (i) the date 18 months following the date of death (or such longer or shorter period specified in the Award Agreement), and (ii) the expiration of the term of such Option or SAR as set forth in the Award Agreement. If, after the Participant's death, the Option or SAR is not exercised within the applicable time frame, the Option or SAR (as applicable) will terminate.

**(k) Termination for Cause.** Except as explicitly provided otherwise in a Participant's Award Agreement or other individual written agreement between the Company or any Affiliate and the Participant, if a Participant's Continuous Service is terminated for Cause, the Option or SAR will terminate immediately upon such Participant's termination of Continuous Service, and the Participant will be prohibited from exercising his or her Option or SAR from and after the date of such termination of Continuous Service.

**(l) Non-Exempt Employees.** If an Option or SAR is granted to an Employee who is a non-exempt employee for purposes of the Fair Labor Standards Act of 1938, as amended, the Option or SAR will not be first exercisable for any shares of Common Stock until at least six months following the date of grant of the Option or SAR (although the Award may vest prior to such date). Consistent with the provisions of the Worker Economic Opportunity Act, (i) if such non-exempt Employee dies or suffers a Disability, (ii) upon a Corporate Transaction in which such Option or SAR is not assumed, continued, or substituted, (iii) upon a Change in Control, or (iv) upon the Participant's retirement (as such term may be defined in the Participant's Award Agreement in another agreement between the Participant and the Company, or, if no such definition, in accordance with the Company's then current employment policies and guidelines), the vested portion of any Options and SARs may be exercised earlier than six months following the date of grant. The foregoing provision is intended to operate so that any income derived by a non-exempt employee in connection with the exercise or vesting of an Option or SAR will be exempt from his or her regular rate of pay. To the extent permitted and/or required for

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compliance with the Worker Economic Opportunity Act to ensure that any income derived by a non-exempt employee in connection with the exercise, vesting or issuance of any shares under any other Stock Award will be exempt from the employee's regular rate of pay, the provisions of this Section 5(l) will apply to all Stock Awards and are hereby incorporated by reference into such Stock Award Agreements.

## 6. PROVISIONS OF STOCK AWARDS OTHER THAN OPTIONS AND SARs.

**(a) Restricted Stock Awards.** Each Restricted Stock Award Agreement will be in such form and will contain such terms and conditions as the Board will deem appropriate. To the extent consistent with the Company's bylaws, at the Board's election, shares of Common Stock may be (x) held in book entry form subject to the Company's instructions until any restrictions relating to the Restricted Stock Award lapse; or (y) evidenced by a certificate, which certificate will be held in such form and manner as determined by the Board. The terms and conditions of Restricted Stock Award Agreements may change from time to time, and the terms and conditions of separate Restricted Stock Award Agreements need not be identical. Each Restricted Stock Award Agreement will conform to (through incorporation of the provisions hereof by reference in the agreement or otherwise) the substance of each of the following provisions:

**(i) Consideration.** A Restricted Stock Award may be awarded in consideration for (A) cash, check, bank draft or money order payable to the Company, (B) past services to the Company or an Affiliate, or (C) any other form of legal consideration that may be acceptable to the Board, in its sole discretion, and permissible under applicable law.



(ii) **Vesting.** Shares of Common Stock awarded under the Restricted Stock Award Agreement may be subject to forfeiture to the Company in accordance with a vesting schedule to be determined by the Board.

(iii) **Termination of Participant's Continuous Service.** If a Participant's Continuous Service terminates, the Company may receive through a forfeiture condition or a repurchase right any or all of the shares of Common Stock held by the Participant that have not vested as of the date of termination of Continuous Service under the terms of the Restricted Stock Award Agreement.

(iv) **Transferability.** Rights to acquire shares of Common Stock under the Restricted Stock Award Agreement will be transferable by the Participant only upon such terms and conditions as are set forth in the Restricted Stock Award Agreement, as the Board will determine in its sole discretion, so long as Common Stock awarded under the Restricted Stock Award Agreement remains subject to the terms of the Restricted Stock Award Agreement.

(v) **Dividends.** A Restricted Stock Award Agreement may provide that any dividends paid on Restricted Stock will be subject to the same vesting and forfeiture restrictions as apply to the shares subject to the Restricted Stock Award to which they relate.

(b) **Restricted Stock Unit Awards.** Each Restricted Stock Unit Award Agreement will be in such form and will contain such terms and conditions as the Board will deem

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appropriate. The terms and conditions of Restricted Stock Unit Award Agreements may change from time to time, and the terms and conditions of separate Restricted Stock Unit Award Agreements need not be identical. Each Restricted Stock Unit Award Agreement will conform to (through incorporation of the provisions hereof by reference in the Agreement or otherwise) the substance of each of the following provisions:

(i) **Consideration.** At the time of grant of a Restricted Stock Unit Award, the Board will determine the consideration, if any, to be paid by the Participant upon delivery of each share of Common Stock subject to the Restricted Stock Unit Award. The consideration to be paid (if any) by the Participant for each share of Common Stock subject to a Restricted Stock Unit Award may be paid in any form of legal consideration that may be acceptable to the Board, in its sole discretion, and permissible under applicable law.

(ii) **Vesting.** At the time of the grant of a Restricted Stock Unit Award, the Board may impose such restrictions on or conditions to the vesting of the Restricted Stock Unit Award as it, in its sole discretion, deems appropriate.

(iii) **Payment.** A Restricted Stock Unit Award may be settled by the delivery of shares of Common Stock, their cash equivalent, any combination thereof or in any other form of consideration, as determined by the Board and contained in the Restricted Stock Unit Award Agreement.

(iv) **Additional Restrictions.** At the time of the grant of a Restricted Stock Unit Award, the Board, as it deems appropriate, may impose such restrictions or conditions that delay the delivery of the shares of Common Stock (or their cash equivalent) subject to a Restricted Stock Unit Award to a time after the vesting of such Restricted Stock Unit Award.

(v) **Dividend Equivalents.** Dividend equivalents may be credited in respect of shares of Common Stock covered by a Restricted Stock Unit Award, as determined by the Board and contained in the Restricted Stock Unit Award Agreement. At the sole discretion of the Board, such dividend equivalents may be converted into additional shares of Common Stock covered by the Restricted Stock Unit Award in such manner as determined by the Board. Any additional shares covered by the Restricted Stock Unit Award credited by reason of such dividend equivalents will be subject to all of the same terms and conditions of the underlying Restricted Stock Unit Award Agreement to which they relate.

(vi) **Termination of Participant's Continuous Service.** Except as otherwise provided in the applicable Restricted Stock Unit Award Agreement, such portion of the Restricted Stock Unit Award that has not vested will be forfeited upon the Participant's termination of Continuous Service.

(c) **Performance Awards.**

(i) **Performance Stock Awards.** A Performance Stock Award is a Stock Award (covering a number of shares not in excess of that set forth in Section 3(d) above) that is payable (including that may be granted, may vest or may be exercised) contingent upon the

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attainment during a Performance Period of certain Performance Goals. A Performance Stock Award may, but need not, require the Participant's completion of a specified period of Continuous Service. The length of any Performance Period, the Performance Goals to be achieved during the Performance Period, and the measure of whether and to what degree such Performance Goals have been attained will be conclusively determined by the Committee (or, if not required for compliance with Section 162(m) of the Code, the Board), in its sole discretion. In addition, to the extent permitted by applicable law and the applicable Award Agreement, the Board may determine that cash may be used in payment of Performance Stock Awards.

(ii) **Performance Cash Awards.** A Performance Cash Award is a cash award (for a dollar value not in excess of that set forth in Section 3(d) above) that is payable contingent upon the attainment during a Performance Period of certain Performance Goals. A Performance Cash Award may also require the completion of a specified period of Continuous Service. At the time of grant of a Performance Cash Award, the length of any Performance Period, the Performance Goals to be achieved during the Performance Period, and the measure of whether and to what degree such Performance Goals have been attained will be conclusively determined by the Committee (or, if not required for compliance with Section 162(m) of the Code, the Board), in its sole discretion. The Board may specify the form of payment of Performance Cash Awards, which may be cash or other property, or may provide for a Participant to have the option for his or her Performance Cash Award, or such portion thereof as the Board may specify, to be paid in whole or in part in cash or other property.

(iii) **Board Discretion.** The Board retains the discretion to reduce or eliminate the compensation or economic benefit due upon attainment of Performance Goals and to define the manner of calculating the Performance Criteria it selects to use for a Performance Period. Partial achievement of the specified criteria may result in the payment or vesting corresponding to the degree of achievement as specified in the Stock Award Agreement or the written terms of a Performance Cash Award.

**(iv) Section 162(m) Compliance.** Unless otherwise permitted in compliance with the requirements of Section 162(m) of the Code with respect to an Award intended to qualify as “performance-based compensation” thereunder, the Committee will establish the Performance Goals applicable to, and the formula for calculating the amount payable under, the Award no later than the earlier of (a) the date 90 days after the commencement of the applicable Performance Period, and (b) the date on which 25% of the Performance Period has elapsed, and in any event at a time when the achievement of the applicable Performance Goals remains substantially uncertain. Prior to the payment of any compensation under an Award intended to qualify as “performance-based compensation” under Section 162(m) of the Code, the Committee will certify the extent to which any Performance Goals and any other material terms under such Award have been satisfied (other than in cases where such Performance Goals relate solely to the increase in the value of the Common Stock). Notwithstanding satisfaction of, or completion of any Performance Goals, the number of shares of Common Stock, Options, cash or other benefits granted, issued, retainable and/or vested under an Award on account of satisfaction of such Performance Goals may be reduced by the Committee on the basis of such further considerations as the Committee, in its sole discretion, will determine.

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**(d) Other Stock Awards.** Other forms of Stock Awards valued in whole or in part by reference to, or otherwise based on, Common Stock, including the appreciation in value thereof (e.g., options or stock rights with an exercise price or strike price less than 100% of the Fair Market Value of the Common Stock at the time of grant) may be granted either alone or in addition to Stock Awards provided for under Section 5 and the preceding provisions of this Section 6. Subject to the provisions of the Plan, the Board will have sole and complete authority to determine the persons to whom and the time or times at which such Other Stock Awards will be granted, the number of shares of Common Stock (or the cash equivalent thereof) to be granted pursuant to such Other Stock Awards and all other terms and conditions of such Other Stock Awards.

## 7. COVENANTS OF THE COMPANY.

**(a) Availability of Shares.** The Company will keep available at all times the number of shares of Common Stock reasonably required to satisfy then-outstanding Awards.

**(b) Securities Law Compliance.** The Company will seek to obtain from each regulatory commission or agency having jurisdiction over the Plan such authority as may be required to grant Stock Awards and to issue and sell shares of Common Stock upon exercise of the Stock Awards; *provided, however*, that this undertaking will not require the Company to register under the Securities Act the Plan, any Stock Award or any Common Stock issued or issuable pursuant to any such Stock Award. If, after reasonable efforts and at a reasonable cost, the Company is unable to obtain from any such regulatory commission or agency the authority that counsel for the Company deems necessary for the lawful issuance and sale of Common Stock under the Plan, the Company will be relieved from any liability for failure to issue and sell Common Stock upon exercise of such Stock Awards unless and until such authority is obtained. A Participant will not be eligible for the grant of an Award or the subsequent issuance of cash or Common Stock pursuant to the Award if such grant or issuance would be in violation of any applicable securities law.

**(c) No Obligation to Notify or Minimize Taxes.** The Company will have no duty or obligation to any Participant to advise such holder as to the time or manner of exercising such Stock Award. Furthermore, the Company will have no duty or obligation to warn or otherwise advise such holder of a pending termination or expiration of an Award or a possible period in which the Award may not be exercised. The Company has no duty or obligation to minimize the tax consequences of an Award to the holder of such Award.

## 8. MISCELLANEOUS.

**(a) Use of Proceeds from Sales of Common Stock.** Proceeds from the sale of shares of Common Stock pursuant to Awards will constitute general funds of the Company.

**(b) Corporate Action Constituting Grant of Awards.** Corporate action constituting a grant by the Company of an Award to any Participant will be deemed completed as of the date of such corporate action, unless otherwise determined by the Board, regardless of when the instrument, certificate, or letter evidencing the Award is communicated to, or actually

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received or accepted by, the Participant. In the event that the corporate records (e.g., Board consents, resolutions or minutes) documenting the corporate action constituting the grant contain terms (e.g., exercise price, vesting schedule or number of shares) that are inconsistent with those in the Award Agreement or related grant documents as a result of a clerical error in the papering of the Award Agreement or related grant documents, the corporate records will control and the Participant will have no legally binding right to the incorrect term in the Award Agreement or related grant documents.

**(c) Stockholder Rights.** No Participant will be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Common Stock subject to an Award unless and until (i) such Participant has satisfied all requirements for exercise of, or the issuance of shares of Common Stock under, the Award pursuant to its terms, and (ii) the issuance of the Common Stock subject to such Award has been entered into the books and records of the Company.

**(d) No Employment or Other Service Rights.** Nothing in the Plan, any Award Agreement or any other instrument executed thereunder or in connection with any Award granted pursuant thereto will confer upon any Participant any right to continue to serve the Company or an Affiliate in the capacity in effect at the time the Award was granted or will affect the right of the Company or an Affiliate to terminate (i) the employment of an Employee with or without notice and with or without cause, (ii) the service of a Consultant pursuant to the terms of such Consultant’s agreement with the Company or an Affiliate, or (iii) the service of a Director pursuant to the bylaws of the Company or an Affiliate, and any applicable provisions of the corporate law of the state in which the Company or the Affiliate is incorporated, as the case may be.

**(e) Change in Time Commitment.** In the event a Participant’s regular level of time commitment in the performance of his or her services for the Company and any Affiliates is reduced (for example, and without limitation, if the Participant is an Employee of the Company and the Employee has a change in status from a full-time Employee to a part-time Employee or takes an extended leave of absence) after the date of grant of any Award to the Participant, the Board has the right in its sole discretion to (x) make a corresponding reduction in the number of shares or cash amount subject to any portion of such Award that is scheduled to vest or become payable after the date of such change in time commitment, and (y) in lieu of or in combination with such a reduction, extend the vesting or payment schedule applicable to such Award. In the event of any such reduction, the Participant will have no right with respect to any portion of the Award that is so reduced or extended.

(f) **Incentive Stock Option Limitations.** To the extent that the aggregate Fair Market Value (determined at the time of grant) of Common Stock with respect to which Incentive Stock Options are exercisable for the first time by any Optionholder during any calendar year (under all plans of the Company and any Affiliates) exceeds \$100,000 (or such other limit established in the Code) or otherwise does not comply with the rules governing Incentive Stock Options, the Options or portions thereof that exceed such limit (according to the order in which they were granted) or otherwise do not comply with such rules will be treated as

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Nonstatutory Stock Options, notwithstanding any contrary provision of the applicable Option Agreement(s).

(g) **Investment Assurances.** The Company may require a Participant, as a condition of exercising or acquiring Common Stock under any Award, (i) to give written assurances satisfactory to the Company as to the Participant's knowledge and experience in financial and business matters and/or to employ a purchaser representative reasonably satisfactory to the Company who is knowledgeable and experienced in financial and business matters and that such Participant is capable of evaluating, alone or together with the purchaser representative, the merits and risks of exercising the Award; and (ii) to give written assurances satisfactory to the Company stating that the Participant is acquiring Common Stock subject to the Award for the Participant's own account and not with any present intention of selling or otherwise distributing the Common Stock. The foregoing requirements, and any assurances given pursuant to such requirements, will be inoperative if (A) the issuance of the shares upon the exercise or acquisition of Common Stock under the Award has been registered under a then currently effective registration statement under the Securities Act, or (B) as to any particular requirement, a determination is made by counsel for the Company that such requirement need not be met in the circumstances under the then applicable securities laws. The Company may, upon advice of counsel to the Company, place legends on stock certificates issued under the Plan as such counsel deems necessary or appropriate in order to comply with applicable securities laws, including, but not limited to, legends restricting the transfer of the Common Stock.

(h) **Withholding Obligations.** Unless prohibited by the terms of an Award Agreement, the Company may, in its sole discretion, satisfy any federal, state or local tax withholding obligation relating to an Award by any of the following means or by a combination of such means: (i) causing the Participant to tender a cash payment; (ii) withholding shares of Common Stock from the shares of Common Stock issued or otherwise issuable to the Participant in connection with the Award; *provided, however*, that no shares of Common Stock are withheld with a value exceeding the minimum amount of tax required to be withheld by law (or such lesser amount as may be necessary to avoid classification of the Stock Award as a liability for financial accounting purposes); (iii) withholding cash from an Award settled in cash; (iv) withholding payment from any amounts otherwise payable to the Participant; or (v) by such other method as may be set forth in the Award Agreement.

(i) **Electronic Delivery.** Any reference herein to a "written" agreement or document will include any agreement or document delivered electronically, filed publicly at [www.sec.gov](http://www.sec.gov) (or any successor website thereto) or posted on the Company's intranet (or other shared electronic medium controlled by the Company to which the Participant has access).

(j) **Deferrals.** To the extent permitted by applicable law, the Board, in its sole discretion, may determine that the delivery of Common Stock or the payment of cash, upon the exercise, vesting or settlement of all or a portion of any Award may be deferred and may establish programs and procedures for deferral elections to be made by Participants. Deferrals by Participants will be made in accordance with Section 409A of the Code. Consistent with Section 409A of the Code, the Board may provide for distributions while a Participant is still an employee or otherwise providing services to the Company. The Board is authorized to make

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deferrals of Awards and determine when, and in what annual percentages, Participants may receive payments, including lump sum payments, following the Participant's termination of Continuous Service, and implement such other terms and conditions consistent with the provisions of the Plan and in accordance with applicable law.

(k) **Compliance with Section 409A of the Code.** Unless otherwise expressly provided for in an Award Agreement, the Plan and Award Agreements will be interpreted to the greatest extent possible in a manner that makes the Plan and the Awards granted hereunder exempt from Section 409A of the Code, and, to the extent not so exempt, in compliance with Section 409A of the Code. If the Board determines that any Award granted hereunder is not exempt from and is therefore subject to Section 409A of the Code, the Award Agreement evidencing such Award will incorporate the terms and conditions necessary to avoid the consequences specified in Section 409A(a)(1) of the Code, and to the extent an Award Agreement is silent on terms necessary for compliance, such terms are hereby incorporated by reference into the Award Agreement. Notwithstanding anything to the contrary in this Plan (and unless the Award Agreement specifically provides otherwise), if the shares of Common Stock are publicly traded, and if a Participant holding an Award that constitutes "deferred compensation" under Section 409A of the Code is a "specified employee" for purposes of Section 409A of the Code, no distribution or payment of any amount that is due because of a "separation from service" (as defined in Section 409A of the Code without regard to alternative definitions thereunder) will be issued or paid before the date that is six months following the date of such Participant's "separation from service" (as defined in Section 409A of the Code without regard to alternative definitions thereunder) or, if earlier, the date of the Participant's death, unless such distribution or payment can be made in a manner that complies with Section 409A of the Code, and any amounts so deferred will be paid in a lump sum on the day after such six month period elapses, with the balance paid thereafter on the original schedule.

(l) **Clawback/Recovery.** All Awards granted under the Plan will be subject to recoupment in accordance with any clawback policy that the Company is required to adopt pursuant to the listing standards of any national securities exchange or association on which the Company's securities are listed or as is otherwise required by the Dodd-Frank Wall Street Reform and Consumer Protection Act or other applicable law. In addition, the Board may impose such other clawback, recovery or recoupment provisions in an Award Agreement as the Board determines necessary or appropriate, including but not limited to a reacquisition right in respect of previously acquired shares of Common Stock or other cash or property upon the occurrence of an event constituting Cause. No recovery of compensation under such a clawback policy will be an event giving rise to a right to resign for "good reason" or "constructive termination" (or similar term) under any agreement with the Company.

## 9. ADJUSTMENTS UPON CHANGES IN COMMON STOCK; OTHER CORPORATE EVENTS.

(a) **Capitalization Adjustments.** In the event of a Capitalization Adjustment, the Board will appropriately and proportionately adjust: (i) the class(es) and maximum number of securities subject to the Plan pursuant to Section 3(a), (ii) the class(es) and maximum number of securities that may be issued pursuant to the exercise of Incentive Stock Options pursuant to Section 3(c), (iii) the class(es) and maximum number of securities that may be awarded to any

person pursuant to Sections 3(d), and (iv) the class(es) and number of securities and price per share of stock subject to outstanding Stock Awards. The Board will make such adjustments, and its determination will be final, binding and conclusive.

**(b) Dissolution or Liquidation.** Except as otherwise provided in the Stock Award Agreement, in the event of a dissolution or liquidation of the Company, all outstanding Stock Awards (other than Stock Awards consisting of vested and outstanding shares of Common Stock not subject to a forfeiture condition or the Company's right of repurchase) will terminate immediately prior to the completion of such dissolution or liquidation, and the shares of Common Stock subject to the Company's repurchase rights or subject to a forfeiture condition may be repurchased or reacquired by the Company notwithstanding the fact that the holder of such Stock Award is providing Continuous Service; *provided, however*, that the Board may, in its sole discretion, cause some or all Stock Awards to become fully vested, exercisable and/or no longer subject to repurchase or forfeiture (to the extent such Stock Awards have not previously expired or terminated) before the dissolution or liquidation is completed but contingent on its completion.

**(c) Corporate Transaction.** The following provisions will apply to Stock Awards in the event of a Corporate Transaction unless otherwise provided in the instrument evidencing the Stock Award or any other written agreement between the Company or any Affiliate and the Participant or unless otherwise expressly provided by the Board at the time of grant of a Stock Award. In the event of a Corporate Transaction, then, notwithstanding any other provision of the Plan, the Board will take one or more of the following actions with respect to Stock Awards, contingent upon the closing or completion of the Corporate Transaction:

**(i)** arrange for the surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company) to assume or continue the Stock Award or to substitute a similar stock award for the Stock Award (including, but not limited to, an award to acquire the same consideration paid to the stockholders of the Company pursuant to the Corporate Transaction);

**(ii)** arrange for the assignment of any reacquisition or repurchase rights held by the Company in respect of Common Stock issued pursuant to the Stock Award to the surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company);

**(iii)** accelerate the vesting, in whole or in part, of the Stock Award (and, if applicable, the time at which the Stock Award may be exercised) to a date prior to the effective time of such Corporate Transaction as the Board determines (or, if the Board does not determine such a date, to the date that is five days prior to the effective date of the Corporate Transaction), with such Stock Award terminating if not exercised (if applicable) at or prior to the effective time of the Corporate Transaction;

**(iv)** arrange for the lapse, in whole or in part, of any reacquisition or repurchase rights held by the Company with respect to the Stock Award;

**(v)** cancel or arrange for the cancellation of the Stock Award, to the extent not vested or not exercised prior to the effective time of the Corporate Transaction, in exchange for such cash consideration, if any, as the Board, in its sole discretion, may consider appropriate; and

**(vi)** make a payment, in such form as may be determined by the Board equal to the excess, if any, of (A) the value of the property the Participant would have received upon the exercise of the Stock Award immediately prior to the effective time of the Corporate Transaction, over (B) any exercise price payable by such holder in connection with such exercise.

The Board need not take the same action or actions with respect to all Stock Awards or portions thereof or with respect to all Participants. The Board may take different actions with respect to the vested and unvested portions of a Stock Award.

**(d) Change in Control.** A Stock Award may be subject to additional acceleration of vesting and exercisability upon or after a Change in Control as may be provided in the Stock Award Agreement for such Stock Award or as may be provided in any other written agreement between the Company or any Affiliate and the Participant, but in the absence of such provision, no such acceleration will occur.

## 10. PLAN TERM; EARLIER TERMINATION OR SUSPENSION OF THE PLAN.

The Board may suspend or terminate the Plan at any time. No Incentive Stock Options may be granted after the tenth anniversary of the earlier of (i) the date the Plan is adopted by the Board (the "*Adoption Date*"), or (ii) the date the Plan is approved by the stockholders of the Company. No Awards may be granted under the Plan while the Plan is suspended or after it is terminated.

## 11. EXISTENCE OF THE PLAN; TIMING OF FIRST GRANT OR EXERCISE.

The Plan will come into existence on the Adoption Date; *provided, however*, that no Award may be granted prior to the IPO Date. In addition, no Stock Award will be exercised (or, in the case of a Restricted Stock Award, Restricted Stock Unit Award, Performance Stock Award, or Other Stock Award, no Stock Award will be granted) and no Performance Cash Award will be settled unless and until the Plan has been approved by the stockholders of the Company, which approval will be within 12 months after the date the Plan is adopted by the Board.

## 12. CHOICE OF LAW.

The law of the State of California will govern all questions concerning the construction, validity and interpretation of this Plan, without regard to that state's conflict of laws rules.

**13. DEFINITIONS.** As used in the Plan, the following definitions will apply to the capitalized terms indicated below:

(a) “*Affiliate*” means, at the time of determination, any “parent” or “subsidiary” of the Company as such terms are defined in Rule 405 of the Securities Act. The Board will have the authority to determine the time or times at which “parent” or “subsidiary” status is determined within the foregoing definition.

(b) “*Award*” means a Stock Award or a Performance Cash Award.

(c) “*Award Agreement*” means a written agreement between the Company and a Participant evidencing the terms and conditions of an Award.

(d) “*Board*” means the Board of Directors of the Company.

(e) “*Capital Stock*” means each and every class of common stock of the Company, regardless of the number of votes per share.

(f) “*Capitalization Adjustment*” means any change that is made in, or other events that occur with respect to, the Common Stock subject to the Plan or subject to any Stock Award after the Adoption Date without the receipt of consideration by the Company through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, stock split, reverse stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or any similar equity restructuring transaction, as that term is used in Statement of Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any successor thereto). Notwithstanding the foregoing, the conversion of any convertible securities of the Company will not be treated as a Capitalization Adjustment.

(g) “*Cause*” will have the meaning ascribed to such term in any written agreement between the Participant and the Company defining such term and, in the absence of such agreement, such term means, with respect to a Participant, the occurrence of any of the following events: (i) such Participant’s failure to satisfactorily perform his or her duties to the Company; (ii) such Participant’s commission of an act of misconduct or dishonesty that injures or is potentially injurious to the business, reputation or business relationships of the Company; (iii) such Participant’s conviction of, or pleading guilty or nolo contendere to, a felony; (iv) such Participant’s commission of any act of fraud against the Company or such Participant’s use or misappropriation for his or her personal use or benefit of any funds or properties of the Company; (v) such Participant’s refusal or failure to follow lawful directions of the Company after written notice thereof; or (vi) such Participant’s engaging or in any manner participating in any activity which is directly competitive with or injurious or potentially injurious to the Company or which violates any material provisions of such Participant’s Proprietary Information and Inventions Agreement or similar agreement with the Company after written notice thereof. The determination that a termination is for Cause shall be made by the Company, in its sole, good faith and exclusive judgment and discretion. Any determination by the Company that the Continuous Service of a Participant was terminated with or without Cause for the purposes of outstanding Awards held by such Participant shall have no effect upon any determination of the rights or obligations of the Company or such Participant for any other purpose.

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(h) “*Change in Control*” means the occurrence, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) any Exchange Act Person becomes the Owner, directly or indirectly, of securities of the Company representing more than 50% of the combined voting power of the Company’s then outstanding securities other than by virtue of a merger, consolidation or similar transaction. Notwithstanding the foregoing, a Change in Control will not be deemed to occur (A) on account of the acquisition of securities of the Company directly from the Company, (B) on account of the acquisition of securities of the Company by an investor, any affiliate thereof or any other Exchange Act Person that acquires the Company’s securities in a transaction or series of related transactions the primary purpose of which is to obtain financing for the Company through the issuance of equity securities, (C) on account of the acquisition of securities of the Company by any individual who is, on the IPO Date, either an executive officer or a Director (either, an “*IPO Investor*”) and/or any entity in which an IPO Investor has a direct or indirect interest (whether in the form of voting rights or participation in profits or capital contributions) of more than 50% (collectively, the “*IPO Entities*”) or on account of the IPO Entities continuing to hold shares that come to represent more than 50% of the combined voting power of the Company’s then outstanding securities as a result of the conversion of any class of the Company’s securities into another class of the Company’s securities having a different number of votes per share pursuant to the conversion provisions set forth in the Company’s Amended and Restated Certificate of Incorporation; or (D) solely because the level of Ownership held by any Exchange Act Person (the “*Subject Person*”) exceeds the designated percentage threshold of the outstanding voting securities as a result of a repurchase or other acquisition of voting securities by the Company reducing the number of shares outstanding, provided that if a Change in Control would occur (but for the operation of this sentence) as a result of the acquisition of voting securities by the Company, and after such share acquisition, the Subject Person becomes the Owner of any additional voting securities that, assuming the repurchase or other acquisition had not occurred, increases the percentage of the then outstanding voting securities Owned by the Subject Person over the designated percentage threshold, then a Change in Control will be deemed to occur;

(ii) there is consummated a merger, consolidation or similar transaction involving (directly or indirectly) the Company and, immediately after the consummation of such merger, consolidation or similar transaction, the stockholders of the Company immediately prior thereto do not Own, directly or indirectly, either (A) outstanding voting securities representing more than 50% of the combined outstanding voting power of the surviving Entity in such merger, consolidation or similar transaction or (B) more than 50% of the combined outstanding voting power of the parent of the surviving Entity in such merger, consolidation or similar transaction, in each case in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such transaction; *provided, however*, that a merger, consolidation or similar transaction will not constitute a Change in Control under this prong of the definition if the outstanding voting securities representing more than 50% of the combined voting power of the surviving Entity or its parent are owned by the IPO Entities;

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(iii) there is consummated a sale, lease, exclusive license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries, other than a sale, lease, license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries to an Entity, more than 50% of the combined voting power of the voting securities of which are Owned by stockholders of the Company in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such sale, lease, license or other disposition; *provided, however*, that a sale, lease, exclusive license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries will not constitute a Change in Control under this prong of the definition if the outstanding voting securities representing more than 50% of the combined voting power of the acquiring Entity or its parent are owned by the IPO Entities; or

(iv) the stockholders of the Company approve or the Board approves a plan of complete dissolution or liquidation of the Company, or a complete dissolution or liquidation of the Company will otherwise occur, except for a liquidation into a parent corporation.

Notwithstanding the foregoing definition or any other provision of the Plan, the term Change in Control will not include a sale of assets, merger or other transaction effected exclusively for the purpose of changing the domicile of the Company and the definition of Change in Control (or any analogous term) in an individual written agreement between the Company or any Affiliate and the Participant will supersede the foregoing definition with respect to Awards subject to such agreement; *provided, however*, that if no definition of Change in Control or any analogous term is set forth in such an individual written agreement, the foregoing definition will apply.

- (i) “**Code**” means the Internal Revenue Code of 1986, as amended, including any applicable regulations and guidance thereunder.
- (j) “**Committee**” means a committee of one or more Directors to whom authority has been delegated by the Board in accordance with Section 2(c).
- (k) “**Common Stock**” means, as of the IPO Date, the common stock of the Company, having one vote per share.
- (l) “**Company**” means Xencor, Inc., a Delaware corporation.
- (m) “**Consultant**” means any person, including an advisor, who is (i) engaged by the Company or an Affiliate to render consulting or advisory services and is compensated for such services, or (ii) serving as a member of the board of directors of an Affiliate and is compensated for such services. However, service solely as a Director, or payment of a fee for such service, will not cause a Director to be considered a “Consultant” for purposes of the Plan. Notwithstanding the foregoing, a person is treated as a Consultant under this Plan only if a Form S-8 Registration Statement under the Securities Act is available to register either the offer or the sale of the Company’s securities to such person.

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(n) “**Continuous Service**” means that the Participant’s service with the Company or an Affiliate, whether as an Employee, Director or Consultant, is not interrupted or terminated. A change in the capacity in which the Participant renders service to the Company or an Affiliate as an Employee, Consultant or Director or a change in the entity for which the Participant renders such service, provided that there is no interruption or termination of the Participant’s service with the Company or an Affiliate, will not terminate a Participant’s Continuous Service; *provided, however*, that if the Entity for which a Participant is rendering services ceases to qualify as an Affiliate, as determined by the Board, in its sole discretion, such Participant’s Continuous Service will be considered to have terminated on the date such Entity ceases to qualify as an Affiliate. To the extent permitted by law, the Board or the chief executive officer of the Company, in that party’s sole discretion, may determine whether Continuous Service will be considered interrupted in the case of (i) any leave of absence approved by the Board or chief executive officer, including sick leave, military leave or any other personal leave, or (ii) transfers between the Company, an Affiliate, or their successors. Notwithstanding the foregoing, a leave of absence will be treated as Continuous Service for purposes of vesting in an Award only to such extent as may be provided in the Company’s leave of absence policy, in the written terms of any leave of absence agreement or policy applicable to the Participant, or as otherwise required by law.

(o) “**Corporate Transaction**” means the consummation, in a single transaction or in a series of related transactions, of any one or more of the following events:

- (i) a sale or other disposition of all or substantially all, as determined by the Board, in its sole discretion, of the consolidated assets of the Company and its Subsidiaries;
- (ii) a sale or other disposition of at least 90% of the outstanding securities of the Company;
- (iii) a merger, consolidation or similar transaction following which the Company is not the surviving corporation; or
- (iv) a merger, consolidation or similar transaction following which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger, consolidation or similar transaction are converted or exchanged by virtue of the merger, consolidation or similar transaction into other property, whether in the form of securities, cash or otherwise.

(p) “**Covered Employee**” will have the meaning provided in Section 162(m)(3) of the Code.

(q) “**Director**” means a member of the Board.

(r) “**Disability**” means, with respect to a Participant, the inability of such Participant to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment that can be expected to result in death or that has lasted or can be expected to last for a continuous period of not less than 12 months, as provided in Sections 22(e)(3) and

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409A(a)(2)(c)(i) of the Code, and will be determined by the Board on the basis of such medical evidence as the Board deems warranted under the circumstances.

(s) “**Employee**” means any person employed by the Company or an Affiliate. However, service solely as a Director, or payment of a fee for such services, will not cause a Director to be considered an “Employee” for purposes of the Plan.

(t) “**Entity**” means a corporation, partnership, limited liability company or other entity.

(u) “**Exchange Act**” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

(v) “**Exchange Act Person**” means any natural person, Entity or “group” (within the meaning of Section 13(d) or 14(d) of the Exchange Act), except that “Exchange Act Person” will not include (i) the Company or any Subsidiary of the Company, (ii) any employee benefit plan of the Company or any Subsidiary of the Company or any trustee or other fiduciary holding securities under an employee benefit plan of the Company or any Subsidiary of the Company, (iii) an underwriter temporarily holding securities pursuant to a registered public offering of such securities, (iv) an Entity Owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their Ownership of stock of the Company; or (v) any natural person, Entity or “group”

(within the meaning of Section 13(d) or 14(d) of the Exchange Act) that, as of the IPO Date, is the Owner, directly or indirectly, of securities of the Company representing more than 50% of the combined voting power of the Company's then outstanding securities.

(w) **"Fair Market Value"** means, as of any date, the value of the Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or traded on any established market, the Fair Market Value of a share of Common Stock will be, unless otherwise determined by the Board, the closing sales price for such stock as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) on the date of determination, as reported in a source the Board deems reliable.

(ii) Unless otherwise provided by the Board, if there is no closing sales price for the Common Stock on the date of determination, then the Fair Market Value will be the closing selling price on the last preceding date for which such quotation exists.

(iii) In the absence of such markets for the Common Stock, the Fair Market Value will be determined by the Board in good faith and in a manner that complies with Sections 409A and 422 of the Code.

(x) **"Incentive Stock Option"** means an option granted pursuant to Section 5 of the Plan that is intended to be, and qualifies as, an "incentive stock option" within the meaning of Section 422 of the Code.

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(y) **"IPO Date"** means the date of the underwriting agreement between the Company and the underwriter(s) managing the initial public offering of the Common Stock, pursuant to which the Common Stock is priced for the initial public offering.

(z) **"Non-Employee Director"** means a Director who either (i) is not a current employee or officer of the Company or an Affiliate, does not receive compensation, either directly or indirectly, from the Company or an Affiliate for services rendered as a consultant or in any capacity other than as a Director (except for an amount as to which disclosure would not be required under Item 404(a) of Regulation S-K promulgated pursuant to the Securities Act ("**Regulation S-K**")), does not possess an interest in any other transaction for which disclosure would be required under Item 404(a) of Regulation S-K, and is not engaged in a business relationship for which disclosure would be required pursuant to Item 404(b) of Regulation S-K; or (ii) is otherwise considered a "non-employee director" for purposes of Rule 16b-3.

(aa) **"Nonstatutory Stock Option"** means any Option granted pursuant to Section 5 of the Plan that does not qualify as an Incentive Stock Option.

(bb) **"Officer"** means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act.

(cc) **"Option"** means an Incentive Stock Option or a Nonstatutory Stock Option to purchase shares of Common Stock granted pursuant to the Plan.

(dd) **"Option Agreement"** means a written agreement between the Company and an Optionholder evidencing the terms and conditions of an Option grant. Each Option Agreement will be subject to the terms and conditions of the Plan.

(ee) **"Optionholder"** means a person to whom an Option is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Option.

(ff) **"Other Stock Award"** means an award based in whole or in part by reference to the Common Stock which is granted pursuant to the terms and conditions of Section 6(d).

(gg) **"Other Stock Award Agreement"** means a written agreement between the Company and a holder of an Other Stock Award evidencing the terms and conditions of an Other Stock Award grant. Each Other Stock Award Agreement will be subject to the terms and conditions of the Plan.

(hh) **"Outside Director"** means a Director who either (i) is not a current employee of the Company or an "affiliated corporation" (within the meaning of Treasury Regulations promulgated under Section 162(m) of the Code), is not a former employee of the Company or an "affiliated corporation" who receives compensation for prior services (other than benefits under a tax-qualified retirement plan) during the taxable year, has not been an officer of the Company or an "affiliated corporation," and does not receive remuneration from the Company or an "affiliated corporation," either directly or indirectly, in any capacity other than as a Director, or (ii) is otherwise considered an "outside director" for purposes of Section 162(m) of the Code.

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(ii) **"Own," "Owned," "Owner," "Ownership"** means a person or Entity will be deemed to "Own," to have "Owned," to be the "Owner" of, or to have acquired "Ownership" of securities if such person or Entity, directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise, has or shares voting power, which includes the power to vote or to direct the voting, with respect to such securities.

(jj) **"Participant"** means a person to whom an Award is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Stock Award.

(kk) **"Performance Cash Award"** means an award of cash granted pursuant to the terms and conditions of Section 6(c)(ii).

(ll) **"Performance Criteria"** means the one or more criteria that the Board will select for purposes of establishing the Performance Goals for a Performance Period. The Performance Criteria that will be used to establish such Performance Goals may be based on any one of, or combination of, the following as determined by the Board: (i) earnings (including earnings per share and net earnings); (ii) earnings before interest, taxes and depreciation; (iii) earnings before interest, taxes, depreciation and amortization; (iv) earnings before interest, taxes, depreciation, amortization and legal settlements; (v) earnings before interest, taxes, depreciation, amortization, legal settlements and other income (expense); (vi) earnings before interest, taxes, depreciation, amortization, legal settlements, other income (expense) and stock-based compensation; (vii) earnings before interest, taxes, depreciation, amortization, legal settlements, other income (expense), stock-based compensation and changes in deferred revenue; (viii) total stockholder return; (ix) return on equity or average stockholder's equity; (x) return on assets, investment, or capital employed; (xi) stock price; (xii) margin (including gross margin); (xiii) income (before or after taxes); (xiv) operating income; (xv) operating income after taxes; (xvi) pre-tax profit; (xvii) operating cash flow; (xviii) sales or revenue targets; (xix) increases in revenue or product

revenue; (xx) expenses and cost reduction goals; (xxi) improvement in or attainment of working capital levels; (xxii) economic value added (or an equivalent metric); (xxiii) market share; (xxiv) cash flow; (xxv) cash flow per share; (xxvi) share price performance; (xxvii) debt reduction; (xxviii) implementation or completion of projects or processes; (xxix) user satisfaction; (xxx) stockholders' equity; (xxxi) capital expenditures; (xxxii) debt levels; (xxxiii) operating profit or net operating profit; (xxxiv) workforce diversity; (xxxv) growth of net income or operating income; (xxxvi) billings; (xxxvii) bookings; (xxxviii) the number of users, including but not limited to unique users; (xxxix) employee retention; (xl) initiation of phases of clinical trials and/or studies by specific dates; (xli) patient enrollment rates; (xlii) budget management; (xliii) submission to, or approval by, a regulatory body (including, but not limited to the U.S. Food and Drug Administration) of an applicable filing or a product candidate; (xliv) implementation or completion of projects or processes (including, without limitation, clinical trial initiation, clinical trial enrollment, clinical trial results, new and supplemental indications for existing products, regulatory filing submissions, regulatory filing acceptances, regulatory or advisory committee interactions, regulatory approvals, and product supply); (xlv) regulatory milestones; (xlvi) progress of internal research or clinical programs; (xlvii) progress of partnered programs; (xlviii) implementation or completion of projects and processes; (xlix) partner satisfaction; (l) timely completion of clinical trials; (li) submission of INDs and NDAs and other regulatory achievements; (lii) research progress, including the development of programs; (liii) strategic

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partnerships or transactions (including in-licensing and out-licensing of intellectual property; and (liv) and to the extent that an Award is not intended to comply with Section 162(m) of the Code, other measures of performance selected by the Board.

**(mm)** *“Performance Goals”* means, for a Performance Period, the one or more goals established by the Board for the Performance Period based upon the Performance Criteria. Performance Goals may be based on a Company-wide basis, with respect to one or more business units, divisions, Affiliates, or business segments, and in either absolute terms or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise by the Board (i) in the Award Agreement at the time the Award is granted or (ii) in such other document setting forth the Performance Goals at the time the Performance Goals are established, the Board will appropriately make adjustments in the method of calculating the attainment of Performance Goals for a Performance Period as follows: (1) to exclude restructuring and/or other nonrecurring charges; (2) to exclude exchange rate effects; (3) to exclude the effects of changes to generally accepted accounting principles; (4) to exclude the effects of any statutory adjustments to corporate tax rates; (5) to exclude the effects of any “extraordinary items” as determined under generally accepted accounting principles; (6) to exclude the dilutive effects of acquisitions or joint ventures; (7) to assume that any business divested by the Company achieved performance objectives at targeted levels during the balance of a Performance Period following such divestiture; (8) to exclude the effect of any change in the outstanding shares of common stock of the Company by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (9) to exclude the effects of stock based compensation and the award of bonuses under the Company’s bonus plans; (10) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under generally accepted accounting principles; (11) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles; (12) to exclude the effect of any other unusual, non-recurring gain or loss or other extraordinary item; and (13) to exclude the effects of the timing of acceptance for review and/or approval of submissions to the Food and Drug Administration or any other regulatory body. In addition, the Board retains the discretion to reduce or eliminate the compensation or economic benefit due upon attainment of Performance Goals and to define the manner of calculating the Performance Criteria it selects to use for such Performance Period. Partial achievement of the specified criteria may result in the payment or vesting corresponding to the degree of achievement as specified in the Stock Award Agreement or the written terms of a Performance Cash Award.

**(nn)** *“Performance Period”* means the period of time selected by the Board over which the attainment of one or more Performance Goals will be measured for the purpose of determining a Participant’s right to and the payment of a Stock Award or a Performance Cash Award. Performance Periods may be of varying and overlapping duration, at the sole discretion of the Board.

**(oo)** *“Performance Stock Award”* means a Stock Award granted under the terms and conditions of Section 6(c)(i).

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**(pp)** *“Plan”* means this Xencor, Inc. 2013 Equity Incentive Plan.

**(qq)** *“Restricted Stock Award”* means an award of shares of Common Stock which is granted pursuant to the terms and conditions of Section 6(a).

**(rr)** *“Restricted Stock Award Agreement”* means a written agreement between the Company and a holder of a Restricted Stock Award evidencing the terms and conditions of a Restricted Stock Award grant. Each Restricted Stock Award Agreement will be subject to the terms and conditions of the Plan.

**(ss)** *“Restricted Stock Unit Award”* means a right to receive shares of Common Stock which is granted pursuant to the terms and conditions of Section 6(b).

**(tt)** *“Restricted Stock Unit Award Agreement”* means a written agreement between the Company and a holder of a Restricted Stock Unit Award evidencing the terms and conditions of a Restricted Stock Unit Award grant. Each Restricted Stock Unit Award Agreement will be subject to the terms and conditions of the Plan.

**(uu)** *“Rule 16b-3”* means Rule 16b-3 promulgated under the Exchange Act or any successor to Rule 16b-3, as in effect from time to time.

**(vv)** *“Securities Act”* means the Securities Act of 1933, as amended.

**(ww)** *“Stock Appreciation Right”* or *“SAR”* means a right to receive the appreciation on Common Stock that is granted pursuant to the terms and conditions of Section 5.

**(xx)** *“Stock Appreciation Right Agreement”* means a written agreement between the Company and a holder of a Stock Appreciation Right evidencing the terms and conditions of a Stock Appreciation Right grant. Each Stock Appreciation Right Agreement will be subject to the terms and conditions of the Plan.

**(yy)** *“Stock Award”* means any right to receive Common Stock granted under the Plan, including an Incentive Stock Option, a Nonstatutory Stock Option, a Restricted Stock Award, a Restricted Stock Unit Award, a Stock Appreciation Right, a Performance Stock Award or any Other Stock Award.



(zz) “*Stock Award Agreement*” means a written agreement between the Company and a Participant evidencing the terms and conditions of a Stock Award grant. Each Stock Award Agreement will be subject to the terms and conditions of the Plan.

(aaa) “*Subsidiary*” means, with respect to the Company, (i) any corporation of which more than 50% of the outstanding capital stock having ordinary voting power to elect a majority of the board of directors of such corporation (irrespective of whether, at the time, stock of any other class or classes of such corporation will have or might have voting power by reason of the happening of any contingency) is at the time, directly or indirectly, Owned by the Company, and (ii) any partnership, limited liability company or other entity in which the Company has a direct

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or indirect interest (whether in the form of voting or participation in profits or capital contribution) of more than 50%.

(bbb) “*Ten Percent Stockholder*” means a person who Owns (or is deemed to Own pursuant to Section 424(d) of the Code) stock possessing more than 10% of the total combined voting power of all classes of stock of the Company or any Affiliate.

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**XENCOR, INC.**  
**2013 EQUITY INCENTIVE PLAN**

**OPTION AGREEMENT**  
**(INCENTIVE STOCK OPTION OR NONSTATUTORY STOCK OPTION)**

Pursuant to your Stock Option Grant Notice (“*Grant Notice*”) and this Option Agreement, Xencor, Inc. (the “*Company*”) has granted you an option under its 2013 Equity Incentive Plan (the “*Plan*”) to purchase the number of shares of the Company’s Common Stock indicated in your Grant Notice at the exercise price indicated in your Grant Notice. The option is granted to you effective as of the date of grant set forth in the Grant Notice (the “*Date of Grant*”). If there is any conflict between the terms in this Option Agreement and the Plan, the terms of the Plan will control. Capitalized terms not explicitly defined in this Option Agreement or in the Grant Notice but defined in the Plan will have the same definitions as in the Plan.

The details of your option, in addition to those set forth in the Grant Notice and the Plan, are as follows:

1. **VESTING.** Subject to the provisions contained herein, your option will vest as provided in your Grant Notice. Vesting will cease upon the termination of your Continuous Service.
2. **NUMBER OF SHARES AND EXERCISE PRICE.** The number of shares of Common Stock subject to your option and your exercise price per share in your Grant Notice will be adjusted for Capitalization Adjustments.
3. **EXERCISE RESTRICTION FOR NON-EXEMPT EMPLOYEES.** If you are an Employee eligible for overtime compensation under the Fair Labor Standards Act of 1938, as amended (that is, a “*Non-Exempt Employee*”), and except as otherwise provided in the Plan, you may not exercise your option until you have completed at least six (6) months of Continuous Service measured from the Date of Grant, even if you have already been an employee for more than six (6) months. Consistent with the provisions of the Worker Economic Opportunity Act, you may exercise your option as to any vested portion prior to such six (6) month anniversary in the case of (i) your death or disability, (ii) a Corporate Transaction in which your option is not assumed, continued or substituted, (iii) a Change in Control or (iv) your termination of Continuous Service on your “retirement” (as defined in the Company’s benefit plans).
4. **EXERCISE PRIOR TO VESTING (“EARLY EXERCISE”).** If permitted in your Grant Notice (*i.e.*, the “Exercise Schedule” indicates “Early Exercise Permitted”) and subject to the provisions of your option, you may elect at any time that is both (i) during the period of your Continuous Service and (ii) during the term of your option, to exercise all or part of your option, including the unvested portion of your option; *provided, however*, that:

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- a. a partial exercise of your option will be deemed to cover first vested shares of Common Stock and then the earliest vesting installment of unvested shares of Common Stock;
- b. any shares of Common Stock so purchased from installments that have not vested as of the date of exercise will be subject to the purchase option in favor of the Company as described in the Company’s form of Early Exercise Stock Purchase Agreement;
- c. you will enter into the Company’s form of Early Exercise Stock Purchase Agreement with a vesting schedule that will result in the same vesting as if no early exercise had occurred; and
- d. if your option is an Incentive Stock Option, then, to the extent that the aggregate Fair Market Value (determined at the Date of Grant) of the shares of Common Stock with respect to which your option plus all other Incentive Stock Options you hold are exercisable for the first time by you during any calendar year (under all plans of the Company and its Affiliates) exceeds one hundred thousand dollars (\$100,000), your option(s) or portions thereof that exceed such limit (according to the order in which they were granted) will be treated as Nonstatutory Stock Options.

5. **METHOD OF PAYMENT.** You must pay the full amount of the exercise price for the shares you wish to exercise. You may pay the exercise price in cash or by check, bank draft or money order payable to the Company or in any other manner *permitted by your Grant Notice*, which may include one or more of the following:

- a. Provided that at the time of exercise the Common Stock is publicly traded, pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of Common Stock, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the aggregate exercise price to the Company from the sales proceeds. This manner of payment is also known as a “broker-assisted exercise”, “same day sale”, or “sell to cover”.

b. Provided that at the time of exercise the Common Stock is publicly traded, by delivery to the Company (either by actual delivery or attestation) of already-owned shares of Common Stock that are owned free and clear of any liens, claims, encumbrances or security interests, and that are valued at Fair Market Value on the date of exercise. "Delivery" for these purposes, in the sole discretion of the Company at the time you exercise your option, will include delivery to the Company of your attestation of ownership of such shares of Common Stock in a form approved by the Company. You may not exercise your option by delivery to the Company of Common Stock if doing so would violate the provisions of any law, regulation or agreement restricting the redemption of the Company's stock.

c. If this option is a Nonstatutory Stock Option, subject to the consent of the Company at the time of exercise, by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Common Stock issued upon exercise of your option by the largest whole number of shares with a Fair Market Value that does not exceed the

aggregate exercise price. You must pay any remaining balance of the aggregate exercise price not satisfied by the "net exercise" in cash or other permitted form of payment. Shares of Common Stock will no longer be outstanding under your option and will not be exercisable thereafter if those shares (i) are used to pay the exercise price pursuant to the "net exercise," (ii) are delivered to you as a result of such exercise, and (iii) are withheld to satisfy your tax withholding obligations.

6. **WHOLE SHARES.** You may exercise your option only for whole shares of Common Stock.

7. **SECURITIES LAW COMPLIANCE.** In no event may you exercise your option unless the shares of Common Stock issuable upon exercise are then registered under the Securities Act or, if not registered, the Company has determined that your exercise and the issuance of the shares would be exempt from the registration requirements of the Securities Act. The exercise of your option also must comply with all other applicable laws and regulations governing your option, and you may not exercise your option if the Company determines that such exercise would not be in material compliance with such laws and regulations (including any restrictions on exercise required for compliance with Treas. Reg. 1.401(k)-1(d)(3), if applicable).

8. **TERM.** You may not exercise your option before the Date of Grant or after the expiration of the option's term. The term of your option expires, subject to the provisions of Section 5(h) of the Plan, upon the earliest of the following:

a. immediately upon the termination of your Continuous Service for Cause;

b. three (3) months after the termination of your Continuous Service for any reason other than Cause, your Disability or your death (except as otherwise provided in Section 8(d) below); *provided, however*, that if during any part of such three (3) month period your option is not exercisable solely because of the condition set forth in the section above relating to "Securities Law Compliance," your option will not expire until the earlier of the Expiration Date or until it has been exercisable for an aggregate period of three (3) months after the termination of your Continuous Service; *provided further*, if during any part of such three (3) month period, the sale of any Common Stock received upon exercise of your option would violate the Company's insider trading policy, then your option will not expire until the earlier of the Expiration Date or until it has been exercisable for an aggregate period of three (3) months after the termination of your Continuous Service during which the sale of the Common Stock received upon exercise of your option would not be in violation of the Company's insider trading policy. Notwithstanding the foregoing, if (i) you are a Non-Exempt Employee, (ii) your Continuous Service terminates within six (6) months after the Date of Grant, and (iii) you have vested in a portion of your option at the time of your termination of Continuous Service, your option will not expire until the earlier of (x) the later of (A) the date that is seven (7) months after the Date of Grant, and (B) the date that is three (3) months after the termination of your Continuous Service, and (y) the Expiration Date;

c. twelve (12) months after the termination of your Continuous Service due to your Disability (except as otherwise provided in Section 8(d)) below;

d. eighteen (18) months after your death if you die either during your Continuous Service or within three (3) months after your Continuous Service terminates for any reason other than Cause;

e. the Expiration Date indicated in your Grant Notice; or

f. the day before the tenth (10th) anniversary of the Date of Grant.

If your option is an Incentive Stock Option, note that to obtain the federal income tax advantages associated with an Incentive Stock Option, the Code requires that at all times beginning on the Date of Grant and ending on the day three (3) months before the date of your option's exercise, you must be an employee of the Company or an Affiliate, except in the event of your death or Disability. The Company has provided for extended exercisability of your option under certain circumstances for your benefit but cannot guarantee that your option will necessarily be treated as an Incentive Stock Option if you continue to provide services to the Company or an Affiliate as a Consultant or Director after your employment terminates or if you otherwise exercise your option more than three (3) months after the date your employment with the Company or an Affiliate terminates.

## 9. EXERCISE.

a. You may exercise the vested portion of your option (and the unvested portion of your option if your Grant Notice so permits) during its term by (i) delivering a Notice of Exercise (in a form designated by the Company) or completing such other documents and/or procedures designated by the Company for exercise and (ii) paying the exercise price and any applicable withholding taxes to the Company's Secretary, stock plan administrator, or such other person as the Company may designate, together with such additional documents as the Company may then require.

b. By exercising your option you agree that, as a condition to any exercise of your option, the Company may require you to enter into an arrangement providing for the payment by you to the Company of any tax withholding obligation of the Company arising by reason of (i) the exercise of your option, (ii) the lapse of any substantial risk of forfeiture to which the shares of Common Stock are subject at the time of exercise, or (iii) the disposition of shares of Common Stock acquired upon such exercise.

c. If your option is an Incentive Stock Option, by exercising your option you agree that you will notify the Company in writing within fifteen (15) days after the date of any disposition of any of the shares of the Common Stock issued upon exercise of your option that occurs within two (2) years after the Date of Grant or within one (1) year after such shares of Common Stock are transferred upon exercise of your option.

d. By accepting your option you agree that you will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale, any shares of Common Stock or other securities of the Company held by you, for a period of one hundred eighty (180) days

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following the effective date of a registration statement of the Company filed under the Securities Act or such longer period as the underwriters or the Company will request to facilitate compliance with FINRA Rule 2711 or NYSE Member Rule 472 or any successor or similar rules or regulation (the “*Lock-Up Period*”); *provided, however*, that nothing contained in this section will prevent the exercise of a repurchase option, if any, in favor of the Company during the Lock-Up Period. You further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to your shares of Common Stock until the end of such period. You also agree that any transferee of any shares of Common Stock (or other securities) of the Company held by you will be bound by this Section 9(d). The underwriters of the Company’s stock are intended third party beneficiaries of this Section 9(d) and will have the right, power and authority to enforce the provisions hereof as though they were a party hereto.

**10. TRANSFERABILITY.** Except as otherwise provided in this Section 10, your option is not transferable, except by will or by the laws of descent and distribution, and is exercisable during your life only by you.

a. **Certain Trusts.** Upon receiving written permission from the Board or its duly authorized designee, you may transfer your option to a trust if you are considered to be the sole beneficial owner (determined under Section 671 of the Code and applicable state law) while the option is held in the trust. You and the trustee must enter into transfer and other agreements required by the Company.

b. **Domestic Relations Orders.** Upon receiving written permission from the Board or its duly authorized designee, and provided that you and the designated transferee enter into transfer and other agreements required by the Company, you may transfer your option pursuant to the terms of a domestic relations order, official marital settlement agreement or other divorce or separation instrument as permitted by Treasury Regulation 1.421-1(b)(2) that contains the information required by the Company to effectuate the transfer. You are encouraged to discuss the proposed terms of any division of this option with the Company prior to finalizing the domestic relations order or marital settlement agreement to help ensure the required information is contained within the domestic relations order or marital settlement agreement. If this option is an Incentive Stock Option, this option may be deemed to be a Nonstatutory Stock Option as a result of such transfer.

c. **Beneficiary Designation.** Upon receiving written permission from the Board or its duly authorized designee, you may, by delivering written notice to the Company, in a form approved by the Company and any broker designated by the Company to handle option exercises, designate a third party who, on your death, will thereafter be entitled to exercise this option and receive the Common Stock or other consideration resulting from such exercise. In the absence of such a designation, your executor or administrator of your estate will be entitled to exercise this option and receive, on behalf of your estate, the Common Stock or other consideration resulting from such exercise.

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**11. OPTION NOT A SERVICE CONTRACT.** Your option is not an employment or service contract, and nothing in your option will be deemed to create in any way whatsoever any obligation on your part to continue in the employ of the Company or an Affiliate, or of the Company or an Affiliate to continue your employment. In addition, nothing in your option will obligate the Company or an Affiliate, their respective stockholders, boards of directors, officers or employees to continue any relationship that you might have as a Director or Consultant for the Company or an Affiliate.

**12. WITHHOLDING OBLIGATIONS.**

a. At the time you exercise your option, in whole or in part, and at any time thereafter as requested by the Company, you hereby authorize withholding from payroll and any other amounts payable to you, and otherwise agree to make adequate provision for (including by means of a “same day sale” pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board to the extent permitted by the Company), any sums required to satisfy the federal, state, local and foreign tax withholding obligations of the Company or an Affiliate, if any, which arise in connection with the exercise of your option.

b. If this option is a Nonstatutory Stock Option, then upon your request and subject to approval by the Company, and compliance with any applicable legal conditions or restrictions, the Company may withhold from fully vested shares of Common Stock otherwise issuable to you upon the exercise of your option a number of whole shares of Common Stock having a Fair Market Value, determined by the Company as of the date of exercise, not in excess of the minimum amount of tax required to be withheld by law (or such lower amount as may be necessary to avoid classification of your option as a liability for financial accounting purposes). If the date of determination of any tax withholding obligation is deferred to a date later than the date of exercise of your option, share withholding pursuant to the preceding sentence shall not be permitted unless you make a proper and timely election under Section 83(b) of the Code, covering the aggregate number of shares of Common Stock acquired upon such exercise with respect to which such determination is otherwise deferred, to accelerate the determination of such tax withholding obligation to the date of exercise of your option. Notwithstanding the filing of such election, shares of Common Stock shall be withheld solely from fully vested shares of Common Stock determined as of the date of exercise of your option that are otherwise issuable to you upon such exercise. Any adverse consequences to you arising in connection with such share withholding procedure shall be your sole responsibility.

c. You may not exercise your option unless the tax withholding obligations of the Company and/or any Affiliate are satisfied. Accordingly, you may not be able to exercise your option when desired even though your option is vested, and the Company will have no obligation to issue a certificate for such shares of Common Stock or release such shares of Common Stock from any escrow provided for herein, if applicable, unless such obligations are satisfied.

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**13. TAX CONSEQUENCES.** You hereby agree that the Company does not have a duty to design or administer the Plan or its other compensation programs in a manner that minimizes your tax liabilities. You will not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from your option or your other compensation. In particular, you acknowledge that this option is exempt from Section 409A of the Code only if the exercise price per share specified in the Grant Notice is at least equal to the “fair market value” per share of the Common Stock on the Date of Grant and there is no other impermissible deferral of compensation associated with the option.

**14. NOTICES.** Any notices provided for in your option or the Plan will be given in writing (including electronically) and will be deemed effectively given upon receipt or, in the case of notices delivered by mail by the Company to you, five (5) days after deposit in the United States mail, postage prepaid, addressed to you at the last address you provided to the Company. The Company may, in its sole discretion, decide to deliver any documents related to participation in the Plan and this option by electronic means or to request your consent to participate in the Plan by electronic means. By accepting this option, you consent to receive such documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

**15. GOVERNING PLAN DOCUMENT.** Your option is subject to all the provisions of the Plan, the provisions of which are hereby made a part of your option, and is further subject to all interpretations, amendments, rules and regulations, which may from time to time be promulgated and adopted pursuant to the Plan. If there is any conflict between the provisions of your option and those of the Plan, the provisions of the Plan will control. In addition, your option (and any compensation paid or shares issued under your option) is subject to recoupment in accordance with The Dodd—Frank Wall Street Reform and Consumer Protection Act and any implementing regulations thereunder, any clawback policy adopted by the Company and any compensation recovery policy otherwise required by applicable law.

**16. OTHER DOCUMENTS.** You hereby acknowledge receipt of and the right to receive a document providing the information required by Rule 428(b)(1) promulgated under the Securities Act, which includes the Plan prospectus. In addition, you acknowledge receipt of the Company’s policy permitting certain individuals to sell shares only during certain “window” periods and the Company’s insider trading policy, in effect from time to time.

**17. EFFECT ON OTHER EMPLOYEE BENEFIT PLANS.** The value of this option will not be included as compensation, earnings, salaries, or other similar terms used when calculating your benefits under any employee benefit plan sponsored by the Company or any Affiliate, except as such plan otherwise expressly provides. The Company expressly reserves its rights to amend, modify, or terminate any of the Company’s or any Affiliate’s employee benefit plans.

**18. VOTING RIGHTS.** You will not have voting or any other rights as a stockholder of the Company with respect to the shares to be issued pursuant to this option until such shares are issued to you. Upon such issuance, you will obtain full voting and other rights as a stockholder of the Company. Nothing contained in this option, and no action taken pursuant to its provisions, will create or be construed to create a trust of any kind or a fiduciary relationship between you and the Company or any other person.

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**19. SEVERABILITY.** If all or any part of this Option Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity will not invalidate any portion of this Option Agreement or the Plan not declared to be unlawful or invalid. Any Section of this Option Agreement (or part of such a Section) so declared to be unlawful or invalid shall, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

**20. MISCELLANEOUS.**

**a.** The rights and obligations of the Company under your option will be transferable to any one or more persons or entities, and all covenants and agreements hereunder will inure to the benefit of, and be enforceable by the Company’s successors and assigns.

**b.** You agree upon request to execute any further documents or instruments necessary or desirable in the sole determination of the Company to carry out the purposes or intent of your option.

**c.** You acknowledge and agree that you have reviewed your option in its entirety, have had an opportunity to obtain the advice of counsel prior to executing and accepting your option, and fully understand all provisions of your option.

**d.** This Option Agreement will be subject to all applicable laws, rules, and regulations, and to such approvals by any governmental agencies or national securities exchanges as may be required.

**e.** All obligations of the Company under the Plan and this Option Agreement will be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, or otherwise, of all or substantially all of the business and/or assets of the Company.

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This Option Agreement will be deemed to be signed by you upon the signing by you of the Stock Option Grant Notice to which it is attached.

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**NOTICE OF EXERCISE**

**Xencor, Inc.**  
111 West Lemon Avenue  
Monrovia, CA 91016

Date of Exercise:

This constitutes notice to Xencor, Inc. (the “*Company*”) under my stock option that I elect to purchase the below number of shares of Common Stock of the Company (the “*Shares*”) for the price set forth below.

Type of option (check one):	Incentive o	Nonstatutory o
Stock option dated:		
Number of Shares as to which option is exercised:		
Certificates to be issued in name of:		
Total exercise price:	\$	\$
Cash payment delivered herewith:	\$	\$
[Value of Shares delivered herewith(1):	\$	\$ ]
[Value of Shares pursuant to net exercise(2):	\$	\$ ]
[Regulation T Program (cashless exercise(3)):	\$	\$ ]

- (1) Shares must meet the public trading requirements set forth in the option. Shares must be valued in accordance with the terms of the option being exercised, and must be owned free and clear of any liens, claims, encumbrances or security interests. Certificates must be endorsed or accompanied by an executed assignment separate from certificate.
- (2) The option must be a Nonstatutory Stock Option, and Xencor, Inc. must have established net exercise procedures at the time of exercise, in order to utilize this payment method.
- (3) Shares must meet the public trading requirements set forth in the option.

By this exercise, I agree (i) to provide such additional documents as you may require pursuant to the terms of the Xencor, Inc. 2013 Equity Incentive Plan, (ii) to provide for the payment by me to you (in the manner designated by you) of your withholding obligation, if any, relating to the exercise of this option, and (iii) if this exercise relates to an incentive stock option, to notify you in writing within fifteen (15) days after the date of any disposition of any of the Shares issued upon exercise of this option that occurs within two (2) years after the date of grant of this option or within one (1) year after such Shares are issued upon exercise of this option.

I further agree that, if required by the Company (or a representative of the underwriters) in connection with the first underwritten registration of the offering of any securities of the Company under the Securities Act, I will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale with respect to any shares of Common Stock or other securities of the Company for a period of one hundred eighty (180) days following the effective date of a registration statement of the Company filed under the Securities Act (or such longer period as the underwriters or the Company shall request to facilitate compliance with FINRA Rule 2711 or NYSE Member Rule 472 or any successor or similar rule or regulation) (the "**Lock-Up Period**"). I further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to securities subject to the foregoing restrictions until the end of such period.

Very truly yours,

**XENCOR, INC.  
STOCK OPTION GRANT NOTICE  
(2013 EQUITY INCENTIVE PLAN)**

Xencor, Inc. (the "**Company**"), pursuant to its 2013 Equity Incentive Plan (the "**Plan**"), hereby grants to Optionholder an option to purchase the number of shares of the Company's Common Stock set forth below. This option is subject to all of the terms and conditions as set forth in this notice, in the Option Agreement, the Plan and the Notice of Exercise, all of which are attached hereto and incorporated herein in their entirety. Capitalized terms not explicitly defined herein but defined in the Plan or the Option Agreement will have the same definitions as in the Plan or the Option Agreement. If there is any conflict between the terms in this notice and the Plan, the terms of the Plan will control.

Optionholder:  
Date of Grant:  
Vesting Commencement Date:  
Number of Shares Subject to Option:  
Exercise Price (Per Share):  
Total Exercise Price:  
Expiration Date:

**Type of Grant:**            o Incentive Stock Option(1)    o Nonstatutory Stock Option

**Exercise Schedule:**    x Same as Vesting Schedule    o Early Exercise Permitted

**Vesting Schedule:**    [One-fourth (1/4<sup>th</sup>) of the shares vest one year after the Vesting Commencement Date; the balance of the shares vest in a series of thirty-six (36) successive equal monthly installments measured from the first anniversary of the Vesting Commencement Date, subject

to Optionholder's Continuous Service as of each such date.]

**Payment:** By one or a combination of the following items (described in the Option Agreement):

- x By cash, check, bank draft or money order payable to the Company
- x Pursuant to a Regulation T Program if the shares are publicly traded
- x By delivery of already-owned shares if the shares are publicly traded
- x If and only to the extent this option is a Nonstatutory Stock Option, and subject to the Company's consent at the time of exercise, by a "net exercise" arrangement

(1) If this is an Incentive Stock Option, it (plus other outstanding Incentive Stock Options) cannot be first *exercisable* for more than \$100,000 in value (measured by exercise price) in any calendar year. Any excess over \$100,000 is a Nonstatutory Stock Option.

**Additional Terms/Acknowledgements:** Optionholder acknowledges receipt of, and understands and agrees to, this Stock Option Grant Notice, the Option Agreement and the Plan. Optionholder acknowledges and agrees that this Stock Option Grant Notice and the Option Agreement may not be modified, amended or revised except as provided in the Plan. Optionholder further acknowledges that as of the Date of Grant, this Stock Option Grant Notice, the Option Agreement, and the Plan set forth the entire understanding between Optionholder and the Company regarding this option award and supersede all prior oral and written agreements, promises and/or representations on that subject with the exception of (i) options previously granted and delivered to Optionholder, (ii) any compensation recovery policy that is adopted by the Company or is otherwise required by applicable law and (iii) any written employment or severance arrangement that would provide for vesting acceleration of this option upon the terms and conditions set forth therein. By accepting this option, Optionholder consents to receive such documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

**XENCOR, INC.**

**OPTIONHOLDER:**

By: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**ATTACHMENTS:** Option Agreement, 2013 Equity Incentive Plan and Notice of Exercise

**ATTACHMENT I**

**OPTION AGREEMENT**

**ATTACHMENT II**

**2013 EQUITY INCENTIVE PLAN**

**ATTACHMENT III**

**NOTICE OF EXERCISE**

## XENCOR, INC.

**2013 EMPLOYEE STOCK PURCHASE PLAN**  
**ADOPTED BY THE BOARD OF DIRECTORS: NOVEMBER 1, 2013**  
**APPROVED BY THE STOCKHOLDERS: , 2013**

**1. GENERAL; PURPOSE.**

(a) The Plan provides a means by which Eligible Employees of the Company and certain designated Related Corporations may be given an opportunity to purchase shares of Common Stock. The Plan permits the Company to grant a series of Purchase Rights to Eligible Employees under an Employee Stock Purchase Plan.

(b) The Company, by means of the Plan, seeks to retain the services of such Employees, to secure and retain the services of new Employees and to provide incentives for such persons to exert maximum efforts for the success of the Company and its Related Corporations.

**2. ADMINISTRATION.**

(a) The Board will administer the Plan unless and until the Board delegates administration of the Plan to a Committee or Committees, as provided in Section 2(c).

(b) The Board will have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine how and when Purchase Rights will be granted and the provisions of each Offering (which need not be identical).

(ii) To designate from time to time which Related Corporations of the Company will be eligible to participate in the Plan.

(iii) To construe and interpret the Plan and Purchase Rights, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan, in a manner and to the extent it deems necessary or expedient to make the Plan fully effective.

(iv) To settle all controversies regarding the Plan and Purchase Rights granted under the Plan.

(v) To suspend or terminate the Plan at any time as provided in Section 12.

(vi) To amend the Plan at any time as provided in Section 12.

(vii) Generally, to exercise such powers and to perform such acts as it deems necessary or expedient to promote the best interests of the Company and its Related Corporations and to carry out the intent that the Plan be treated as an Employee Stock Purchase Plan.

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(viii) To adopt such procedures and sub-plans as are necessary or appropriate to permit participation in the Plan by Employees who are foreign nationals or employed outside the United States.

(c) The Board may delegate some or all of the administration of the Plan to a Committee or Committees. If administration is delegated to a Committee, the Committee will have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the Committee, including the power to delegate to a subcommittee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board will thereafter be to the Committee or subcommittee), subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. The Board may retain the authority to concurrently administer the Plan with the Committee and may, at any time, revert in the Board some or all of the powers previously delegated. Whether or not the Board has delegated administration of the Plan to a Committee, the Board will have the final power to determine all questions of policy and expediency that may arise in the administration of the Plan.

(d) All determinations, interpretations and constructions made by the Board in good faith will not be subject to review by any person and will be final, binding and conclusive on all persons.

**3. SHARES OF COMMON STOCK SUBJECT TO THE PLAN.**

(a) Subject to the provisions of Section 11(a) relating to Capitalization Adjustments, the maximum number of shares of Common Stock that may be issued under the Plan will not exceed 267,741 shares of Common Stock, plus the number of shares of Common Stock that are automatically added on January 1st of each year for a period of up to ten years, commencing on the first January 1 following the IPO Date and ending on (and including) January 1, 2023, in an amount equal to the lesser of (i) 1% of the total number of shares of Capital Stock outstanding on December 31st of the preceding calendar year, and (ii) 621,814 shares of Common Stock. Notwithstanding the foregoing, the Board may act prior to the first day of any calendar year to provide that there will be no January 1<sup>st</sup> increase in the share reserve for such calendar year or that the increase in the share reserve for such calendar year will be a lesser number of shares of Common Stock than would otherwise occur pursuant to the preceding sentence.

(b) If any Purchase Right granted under the Plan terminates without having been exercised in full, the shares of Common Stock not purchased under such Purchase Right will again become available for issuance under the Plan.

(c) The stock purchasable under the Plan will be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the open market.

**4. GRANT OF PURCHASE RIGHTS; OFFERING.**

(a) The Board may from time to time grant or provide for the grant of Purchase Rights to Eligible Employees under an Offering (consisting of one or more Purchase Periods) on an Offering Date or Offering Dates selected by the Board. Each Offering will be in such form and will contain such terms and conditions as the Board will deem appropriate, and will comply

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with the requirement of Section 423(b)(5) of the Code that all Employees granted Purchase Rights will have the same rights and privileges. The terms and conditions of an Offering shall be incorporated by reference into the Plan and treated as part of the Plan. The provisions of separate Offerings need not be identical, but each Offering will include (through incorporation of the provisions of this Plan by reference in the document comprising the Offering or otherwise) the period during which the Offering will be effective, which period will not exceed 27 months beginning with the Offering Date, and the substance of the provisions contained in Sections 5 through 8, inclusive.

(b) If a Participant has more than one Purchase Right outstanding under the Plan, unless he or she otherwise indicates in forms delivered to the Company: (i) each form will apply to all of his or her Purchase Rights under the Plan, and (ii) a Purchase Right with a lower exercise price (or an earlier-granted Purchase Right, if different Purchase Rights have identical exercise prices) will be exercised to the fullest possible extent before a Purchase Right with a higher exercise price (or a later-granted Purchase Right if different Purchase Rights have identical exercise prices) will be exercised.

(c) The Board will have the discretion to structure an Offering so that if the Fair Market Value of a share of Common Stock on the first Trading Day of a new Purchase Period within that Offering is less than or equal to the Fair Market Value of a share of Common Stock on the Offering Date for that Offering, then (i) that Offering will terminate immediately as of that first Trading Day, and (ii) the Participants in such terminated Offering will be automatically enrolled in a new Offering beginning on the first Trading Day of such new Purchase Period.

## 5. ELIGIBILITY.

(a) Purchase Rights may be granted only to Employees of the Company or, as the Board may designate in accordance with Section 2(b), to Employees of a Related Corporation. Except as provided in Section 5(b), an Employee will not be eligible to be granted Purchase Rights unless, on the Offering Date, the Employee has been in the employ of the Company or the Related Corporation, as the case may be, for such continuous period preceding such Offering Date as the Board may require, but in no event will the required period of continuous employment be equal to or greater than two years. In addition, the Board may provide that no Employee will be eligible to be granted Purchase Rights under the Plan unless, on the Offering Date, such Employee's customary employment with the Company or the Related Corporation is more than 20 hours per week and more than five months per calendar year or such other criteria as the Board may determine consistent with Section 423 of the Code.

(b) The Board may provide that each person who, during the course of an Offering, first becomes an Eligible Employee will, on a date or dates specified in the Offering which coincides with the day on which such person becomes an Eligible Employee or which occurs thereafter, receive a Purchase Right under that Offering, which Purchase Right will thereafter be deemed to be a part of that Offering. Such Purchase Right will have the same characteristics as any Purchase Rights originally granted under that Offering, as described herein, except that:

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(i) the date on which such Purchase Right is granted will be the "Offering Date" of such Purchase Right for all purposes, including determination of the exercise price of such Purchase Right;

(ii) the period of the Offering with respect to such Purchase Right will begin on its Offering Date and end coincident with the end of such Offering; and

(iii) the Board may provide that if such person first becomes an Eligible Employee within a specified period of time before the end of the Offering, he or she will not receive any Purchase Right under that Offering.

(c) No Employee will be eligible for the grant of any Purchase Rights if, immediately after any such Purchase Rights are granted, such Employee owns stock possessing five percent or more of the total combined voting power or value of all classes of stock of the Company or of any Related Corporation. For purposes of this Section 5(c), the rules of Section 424(d) of the Code will apply in determining the stock ownership of any Employee, and stock which such Employee may purchase under all outstanding Purchase Rights and options will be treated as stock owned by such Employee.

(d) As specified by Section 423(b)(8) of the Code, an Eligible Employee may be granted Purchase Rights only if such Purchase Rights, together with any other rights granted under all Employee Stock Purchase Plans of the Company and any Related Corporations, do not permit such Eligible Employee's rights to purchase stock of the Company or any Related Corporation to accrue at a rate which exceeds \$25,000 of Fair Market Value of such stock (determined at the time such rights are granted, and which, with respect to the Plan, will be determined as of their respective Offering Dates) for each calendar year in which such rights are outstanding at any time.

(e) Officers of the Company and any designated Related Corporation, if they are otherwise Eligible Employees, will be eligible to participate in Offerings under the Plan. Notwithstanding the foregoing, the Board may provide in an Offering that Employees who are highly compensated Employees within the meaning of Section 423(b)(4)(D) of the Code will not be eligible to participate.

## 6. PURCHASE RIGHTS; PURCHASE PRICE.

(a) On each Offering Date, each Eligible Employee, pursuant to an Offering made under the Plan, will be granted a Purchase Right to purchase up to that number of shares of Common Stock purchasable either with a percentage or with a maximum dollar amount, as designated by the Board, but in either case not exceeding 15% of such Employee's earnings (as defined by the Board in each Offering) during the period that begins on the Offering Date (or such later date as the Board determines for a particular Offering) and ends on the date stated in the Offering, which date will be no later than the end of the Offering.

(b) The Board will establish one or more Purchase Dates during an Offering on which Purchase Rights granted for that Offering will be exercised and shares of Common Stock will be purchased in accordance with such Offering.

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(c) In connection with each Offering made under the Plan, the Board may specify (i) a maximum number of shares of Common Stock that may be purchased by any Participant on any Purchase Date during such Offering, (ii) a maximum aggregate number of shares of Common Stock that may be purchased by all Participants pursuant to such Offering and/or (iii) a maximum aggregate number of shares of Common Stock that may be purchased by all Participants on any Purchase Date under the Offering. If the aggregate purchase of shares of Common Stock issuable upon exercise of Purchase Rights granted under the Offering would exceed any such maximum aggregate number, then, in the absence of any Board action otherwise, a pro rata (based on each Participant's accumulated Contributions) allocation of the shares of Common Stock available will be made in as nearly a uniform manner as will be practicable and equitable.

(d) The purchase price of shares of Common Stock acquired pursuant to Purchase Rights will be not less than the lesser of:

- (i) an amount equal to 85% of the Fair Market Value of the shares of Common Stock on the Offering Date; or
- (ii) an amount equal to 85% of the Fair Market Value of the shares of Common Stock on the applicable Purchase Date.

## 7. PARTICIPATION; WITHDRAWAL; TERMINATION.

(a) An Eligible Employee may elect to authorize payroll deductions as the means of making Contributions by completing and delivering to the Company, within the time specified in the Offering, an enrollment form provided by the Company. The enrollment form will specify the amount of Contributions not to exceed the maximum amount specified by the Board. Each Participant's Contributions will be credited to a bookkeeping account for such Participant under the Plan and will be deposited with the general funds of the Company except where applicable law requires that Contributions be deposited with a third party. If permitted in the Offering, a Participant may begin such Contributions with the first payroll occurring on or after the Offering Date (or, in the case of a payroll date that occurs after the end of the prior Offering but before the Offering Date of the next new Offering, Contributions from such payroll will be included in the new Offering). If permitted in the Offering, a Participant may thereafter reduce (including to zero) or increase his or her Contributions. If specifically provided in the Offering, in addition to making Contributions by payroll deductions, a Participant may make Contributions through the payment by cash or check prior to a Purchase Date.

(b) During an Offering, a Participant may cease making Contributions and withdraw from the Offering by delivering to the Company a withdrawal form provided by the Company. The Company may impose a deadline before a Purchase Date for withdrawing. Upon such withdrawal, such Participant's Purchase Right in that Offering will immediately terminate and the Company will distribute to such Participant all of his or her accumulated but unused Contributions and such Participant's Purchase Right in that Offering shall thereupon terminate. A Participant's withdrawal from that Offering will have no effect upon his or her eligibility to participate in any other Offerings under the Plan, but such Participant will be required to deliver a new enrollment form to participate in subsequent Offerings.

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(c) Purchase Rights granted pursuant to any Offering under the Plan will terminate immediately if the Participant either (i) is no longer an Employee for any reason or for no reason (subject to any post-employment participation period required by law) or (ii) is otherwise no longer eligible to participate. The Company will distribute to such individual all of his or her accumulated but unused Contributions.

(d) During a Participant's lifetime, Purchase Rights will be exercisable only by such Participant. Purchase Rights are not transferable by a Participant, except by will, by the laws of descent and distribution, or, if permitted by the Company, by a beneficiary designation as described in Section 10.

(e) Unless otherwise specified in the Offering, the Company will have no obligation to pay interest on Contributions.

## 8. EXERCISE OF PURCHASE RIGHTS.

(a) On each Purchase Date, each Participant's accumulated Contributions will be applied to the purchase of shares of Common Stock, up to the maximum number of shares of Common Stock permitted by the Plan and the applicable Offering, at the purchase price specified in the Offering. No fractional shares will be issued unless specifically provided for in the Offering.

(b) If any amount of accumulated Contributions remains in a Participant's account after the purchase of shares of Common Stock and such remaining amount is less than the amount required to purchase one share of Common Stock on the final Purchase Date of an Offering, then such remaining amount will be held in such Participant's account for the purchase of shares of Common Stock under the next Offering under the Plan, unless such Participant withdraws from or is not eligible to participate in such Offering, in which case such amount will be distributed to such Participant after the final Purchase Date, without interest. If the amount of Contributions remaining in a Participant's account after the purchase of shares of Common Stock is at least equal to the amount required to purchase one whole share of Common Stock on the final Purchase Date of an Offering, then such remaining amount will not roll over to the next Offering and will instead be distributed in full to such Participant after the final Purchase Date of such Offering without interest.

(c) No Purchase Rights may be exercised to any extent unless the shares of Common Stock to be issued upon such exercise under the Plan are covered by an effective registration statement pursuant to the Securities Act and the Plan is in material compliance with all applicable federal, state, foreign and other securities and other laws applicable to the Plan. If on a Purchase Date the shares of Common Stock are not so registered or the Plan is not in such compliance, no Purchase Rights will be exercised on such Purchase Date, and the Purchase Date will be delayed until the shares of Common Stock are subject to such an effective registration statement and the Plan is in material compliance, except that the Purchase Date will in no event be more than 6 months from the Offering Date. If, on the Purchase Date, as delayed to the maximum extent permissible, the shares of Common Stock are not registered and the Plan is not in material compliance with all applicable laws, no Purchase Rights will be exercised and all accumulated but unused Contributions will be distributed to the Participants without interest.

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## 9. COVENANTS OF THE COMPANY.

The Company will seek to obtain from each federal, state, foreign or other regulatory commission or agency having jurisdiction over the Plan such authority as may be required to grant Purchase Rights and issue and sell shares of Common Stock thereunder. If, after commercially reasonable efforts, the

Company is unable to obtain the authority that counsel for the Company deems necessary for the grant of Purchase Rights or the lawful issuance and sale of Common Stock under the Plan, and at a commercially reasonable cost, the Company will be relieved from any liability for failure to grant Purchase Rights and/or to issue and sell Common Stock upon exercise of such Purchase Rights.

#### **10. DESIGNATION OF BENEFICIARY.**

(a) The Company may, but is not obligated to, permit a Participant to submit a form designating a beneficiary who will receive any shares of Common Stock and/or Contributions from the Participant's account under the Plan if the Participant dies before such shares and/or Contributions are delivered to the Participant. The Company may, but is not obligated to, permit the Participant to change such designation of beneficiary. Any such designation and/or change must be on a form approved by the Company.

(b) If a Participant dies, and in the absence of a valid beneficiary designation, the Company will deliver any shares of Common Stock and/or Contributions to the executor or administrator of the estate of the Participant. If no executor or administrator has been appointed (to the knowledge of the Company), the Company, in its sole discretion, may deliver such shares of Common Stock and/or Contributions to the Participant's spouse, dependents or relatives, or if no spouse, dependent or relative is known to the Company, then to such other person as the Company may designate.

#### **11. ADJUSTMENTS UPON CHANGES IN COMMON STOCK; CORPORATE TRANSACTIONS.**

(a) In the event of a Capitalization Adjustment, the Board will appropriately and proportionately adjust: (i) the class(es) and maximum number of securities subject to the Plan pursuant to Section 3(a), (ii) the class(es) and maximum number of securities by which the share reserve is to increase automatically each year pursuant to Section 3(a), (iii) the class(es) and number of securities subject to, and the purchase price applicable to outstanding Offerings and Purchase Rights, and (iv) the class(es) and number of securities that are the subject of the purchase limits under each ongoing Offering. The Board will make these adjustments, and its determination will be final, binding and conclusive.

(b) In the event of a Corporate Transaction, then: (i) any surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company) may assume or continue outstanding Purchase Rights or may substitute similar rights (including a right to acquire the same consideration paid to the stockholders in the Corporate Transaction) for outstanding Purchase Rights, or (ii) if any surviving or acquiring corporation (or its parent company) does not assume or continue such Purchase Rights or does not substitute similar rights for such Purchase Rights, then the Participants' accumulated Contributions will be used to purchase shares of Common Stock within ten business days prior to the Corporate Transaction

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under the outstanding Purchase Rights, and the Purchase Rights will terminate immediately after such purchase.

#### **12. AMENDMENT, TERMINATION OR SUSPENSION OF THE PLAN.**

(a) The Board may amend the Plan at any time in any respect the Board deems necessary or advisable. However, except as provided in Section 11(a) relating to Capitalization Adjustments, stockholder approval will be required for any amendment of the Plan for which stockholder approval is required by applicable law or listing requirements, including any amendment that either (i) materially increases the number of shares of Common Stock available for issuance under the Plan, (ii) materially expands the class of individuals eligible to become Participants and receive Purchase Rights, (iii) materially increases the benefits accruing to Participants under the Plan or materially reduces the price at which shares of Common Stock may be purchased under the Plan, (iv) materially extends the term of the Plan, or (v) expands the types of awards available for issuance under the Plan, but in each of (i) through (v) above only to the extent stockholder approval is required by applicable law or listing requirements.

(b) The Board may suspend or terminate the Plan at any time. No Purchase Rights may be granted under the Plan while the Plan is suspended or after it is terminated.

(c) Any benefits, privileges, entitlements and obligations under any outstanding Purchase Rights granted before an amendment, suspension or termination of the Plan will not be materially impaired by any such amendment, suspension or termination except (i) with the consent of the person to whom such Purchase Rights were granted, (ii) as necessary to comply with any laws, listing requirements, or governmental regulations (including, without limitation, the provisions of Section 423 of the Code and the regulations and other interpretive guidance issued thereunder relating to Employee Stock Purchase Plans) including without limitation any such regulations or other guidance that may be issued or amended after the date the Plan is adopted by the Board, or (iii) as necessary to obtain or maintain favorable tax, listing, or regulatory treatment. To be clear, the Board may amend outstanding Purchase Rights without a Participant's consent if such amendment is necessary to ensure that the Purchase Right and/or the Plan complies with the requirements of Section 423 of the Code.

#### **13. EFFECTIVE DATE OF PLAN.**

The Plan will become effective immediately prior to and contingent upon the IPO Date. No Purchase Rights will be exercised unless and until the Plan has been approved by the stockholders of the Company, which approval must be within 12 months before or after the date the Plan is adopted (or if required under Section 12(a) above, materially amended) by the Board.

#### **14. MISCELLANEOUS PROVISIONS.**

(a) Proceeds from the sale of shares of Common Stock pursuant to Purchase Rights will constitute general funds of the Company.

(b) A Participant will not be deemed to be the holder of, or to have any of the rights of a holder with respect to, shares of Common Stock subject to Purchase Rights unless and until

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the Participant's shares of Common Stock acquired upon exercise of Purchase Rights are recorded in the books of the Company (or its transfer agent).

(c) The Plan and Offering do not constitute an employment contract. Nothing in the Plan or in the Offering will in any way alter the at will nature of a Participant's employment or be deemed to create in any way whatsoever any obligation on the part of any Participant to continue in the employ of the

Company or a Related Corporation, or on the part of the Company or a Related Corporation to continue the employment of a Participant.

- (d) The provisions of the Plan will be governed by the laws of the State of California without resort to that state's conflicts of laws rules.

## 15. DEFINITIONS.

As used in the Plan, the following definitions will apply to the capitalized terms indicated below:

- (a) "**Board**" means the Board of Directors of the Company.

- (b) "**Capital Stock**" means each and every class of common stock of the Company, regardless of the number of votes per share.

(c) "**Capitalization Adjustment**" means any change that is made in, or other events that occur with respect to, the Common Stock subject to the Plan or subject to any Purchase Right after the date the Plan is adopted by the Board without the receipt of consideration by the Company through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or other similar equity restructuring transaction, as that term is used in Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any successor thereto). Notwithstanding the foregoing, the conversion of any convertible securities of the Company will not be treated as a Capitalization Adjustment.

- (d) "**Code**" means the Internal Revenue Code of 1986, as amended, including any applicable regulations and guidance thereunder.

(e) "**Committee**" means a committee of one or more members of the Board to whom authority has been delegated by the Board in accordance with Section 2(c).

- (f) "**Common Stock**" means, as of the IPO Date, the common stock of the Company, having 1 vote per share.

- (g) "**Company**" means Xencor, Inc., a Delaware corporation.

(h) "**Contributions**" means the payroll deductions and other additional payments specifically provided for in the Offering that a Participant contributes to fund the exercise of a Purchase Right. A Participant may make additional payments into his or her account if

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specifically provided for in the Offering, and then only if the Participant has not already had the maximum permitted amount withheld during the Offering through payroll deductions.

(i) "**Corporate Transaction**" means the consummation, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) a sale or other disposition of all or substantially all, as determined by the Board in its sole discretion, of the consolidated assets of the Company and its Subsidiaries;

(ii) a sale or other disposition of at least 90% of the outstanding securities of the Company;

(iii) a merger, consolidation or similar transaction following which the Company is not the surviving corporation; or

(iv) a merger, consolidation or similar transaction following which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger, consolidation or similar transaction are converted or exchanged by virtue of the merger, consolidation or similar transaction into other property, whether in the form of securities, cash or otherwise.

- (j) "**Director**" means a member of the Board.

(k) "**Eligible Employee**" means an Employee who meets the requirements set forth in the document(s) governing the Offering for eligibility to participate in the Offering, provided that such Employee also meets the requirements for eligibility to participate set forth in the Plan.

(l) "**Employee**" means any person, including an Officer or Director, who is "employed" for purposes of Section 423(b)(4) of the Code by the Company or a Related Corporation. However, service solely as a Director, or payment of a fee for such services, will not cause a Director to be considered an "Employee" for purposes of the Plan.

(m) "**Employee Stock Purchase Plan**" means a plan that grants Purchase Rights intended to be options issued under an "employee stock purchase plan," as that term is defined in Section 423(b) of the Code.

- (n) "**Exchange Act**" means the Securities Exchange Act of 1934, as amended and the rules and regulations promulgated thereunder.

- (o) "**Fair Market Value**" means, as of any date, the value of the Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or traded on any established market, the Fair Market Value of a share of Common Stock will be the closing sales price for such stock as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) on the date of determination, as reported in such source as the Board deems reliable. Unless otherwise provided by the Board, if there is no closing sales price for the Common Stock on the date of determination, then the

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Fair Market Value will be the closing sales price on the last preceding date for which such quotation exists.

(ii) In the absence of such markets for the Common Stock, the Fair Market Value will be determined by the Board in good faith in compliance with applicable laws and in a manner that complies with Sections 409A of the Code.

(iii) Notwithstanding the foregoing, for any Offering that commences on the IPO Date, the Fair Market Value of the shares of Common Stock on the Offering Date will be the price per share at which shares are first sold to the public in the Company's initial public offering as specified in the final prospectus for that initial public offering.

(p) "**IPO Date**" means the date of the underwriting agreement between the Company and the underwriter(s) managing the initial public offering of the Common Stock, pursuant to which the Common Stock is priced for the initial public offering.

(q) "**Offering**" means the grant to Eligible Employees of Purchase Rights, with the exercise of those Purchase Rights automatically occurring at the end of one or more Purchase Periods. The terms and conditions of an Offering will generally be set forth in the "**Offering Document**" approved by the Board for that Offering.

(r) "**Offering Date**" means a date selected by the Board for an Offering to commence.

(s) "**Officer**" means a person who is an officer of the Company or a Related Corporation within the meaning of Section 16 of the Exchange Act.

(t) "**Participant**" means an Eligible Employee who holds an outstanding Purchase Right.

(u) "**Plan**" means this Xencor, Inc. 2013 Employee Stock Purchase Plan.

(v) "**Purchase Date**" means one or more dates during an Offering selected by the Board on which Purchase Rights will be exercised and on which purchases of shares of Common Stock will be carried out in accordance with such Offering.

(w) "**Purchase Period**" means a period of time specified within an Offering, generally beginning on the Offering Date or on the first Trading Day following a Purchase Date, and ending on a Purchase Date. An Offering may consist of one or more Purchase Periods.

(x) "**Purchase Right**" means an option to purchase shares of Common Stock granted pursuant to the Plan.

(y) "**Related Corporation**" means any "parent corporation" or "subsidiary corporation" of the Company whether now or subsequently established, as those terms are defined in Sections 424(e) and (f), respectively, of the Code.

(z) "**Securities Act**" means the Securities Act of 1933, as amended.

(aa) "**Trading Day**" means any day on which the exchange(s) or market(s) on which shares of Common Stock are listed, including but not limited to the NYSE, Nasdaq Global Select Market, the Nasdaq Global Market, the Nasdaq Capital Market or any successors thereto, is open for trading.

**XENCOR, INC.**  
**NON-EMPLOYEE DIRECTOR COMPENSATION POLICY**

Each member of the Board of Directors (the “*Board*”) who is not also serving as an employee of Xencor, Inc. (“*Xencor*”) or any of its subsidiaries (each such member, an “*Eligible Director*”) will receive the compensation described in this Non-Employee Director Compensation Policy for his or her Board service on and following the date of the underwriting agreement between Xencor and the underwriters managing the initial public offering of the common stock of Xencor (the “*Common Stock*”) pursuant to which the Common Stock is priced in such initial public offering (the “*Effective Date*”). This policy is effective as of the Effective Date and may be amended at any time in the sole discretion of the Board or the Compensation Committee of the Board.

**Annual Cash Compensation**

Each Eligible Director will be paid \$8,750 for each regular meeting of the Board at which such Eligible Director attends in person. In addition, the chairman of the Board will be paid an additional \$6,250 for each regular meeting of the Board at which such chairman attends in person. The Compensation Committee of the Board may, in its discretion, consider exceptions to the foregoing requirement that Eligible Directors attend regular meetings in person.

Eligible Directors who are members of the Audit Committee, Compensation Committee and Nominating & Corporate Governance Committee will additionally be paid the following annual cash compensation amounts, payable in equal quarterly installments, payable in arrears on the last day of each fiscal quarter in which the service occurred. If an Eligible Director joins a committee of the Board at a time other than effective as of the first day of a fiscal quarter, each annual retainer set forth below will be pro-rated based on days served in the applicable fiscal year, with the pro-rated amount paid for the first fiscal quarter in which the Eligible Director provides the service, and regular full quarterly payments thereafter. All annual and meeting cash fees are vested upon payment.

1. Annual Committee Chair Service Retainer:
  - a. Chairman of the Audit Committee: \$15,000
  - b. Chairman of the Compensation Committee: \$10,000
  - c. Chairman of the Nominating & Corporate Governance Committee: \$7,500
  
3. Annual Committee Member (other than Committee Chair) Service Retainer:
  - a. Member of the Audit Committee: \$7,500
  - b. Member of the Compensation Committee: \$5,000
  - c. Member of the Nominating & Corporate Governance Committee: \$3,500

**Equity Compensation**

The equity compensation set forth below will be granted under the Xencor, Inc. 2013 Equity Incentive Plan (the “*Plan*”) as may be amended from time to time. All stock options granted under this policy will be nonstatutory stock options, with an exercise price per share equal to

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100% of the Fair Market Value (as defined in the Plan) of the underlying Common Stock on the date of grant, and a term of ten years from the date of grant (subject to earlier termination in connection with a termination of service as provided in the Plan).

1. Initial Grant: On the date of the Eligible Director’s initial election to the Board, for each Eligible Director who is first elected to the Board following the Effective Date (or, if such date is not a market trading day, the first market trading day thereafter), the Eligible Director will be automatically, and without further action by the Board or Compensation Committee of the Board, granted a stock option for 15,000 shares. For the avoidance of doubt, Eligible Directors who are serving on the Board at the Effective Date will not be awarded an initial grant. One-third of the shares subject to each stock option will vest on the one year anniversary of the date of grant and the balance of the shares will vest in a series of 24 equal monthly installments thereafter, such that the option is fully vested on the third anniversary of the date of grant, subject to the Eligible Director’s Continuous Service (as defined in the Plan) through each such vesting date and will vest in full upon a Change in Control (as defined in the Plan).

2. Annual Grant: On the date of each of Xencor’s annual stockholder meeting held after the Effective Date, each Eligible Director who continues to serve as a non-employee member of the Board (or who is first elected to the Board at such annual stockholder meeting) will be automatically, and without further action by the Board or Compensation Committee of the Board, granted a stock option for 7,500 shares. The shares subject to the stock option will vest on the one year anniversary of the date of grant, subject to the Eligible Director’s Continuous Service (as defined in the Plan) through such vesting date and will vest in full upon a Change in Control (as defined in the Plan).

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\*\*\*Text Omitted and Filed Separately  
with the Securities and Exchange Commission.  
Confidential Treatment Requested  
Under 17 C.F.R. Sections 200.80(b)(4)  
and Rule 406 of the  
Securities Act of 1933,  
as amended.

## DEVELOPMENT AND MANUFACTURING SERVICES AGREEMENT

This Development and Manufacturing Services Agreement (“**Agreement**”) is made as of this 15<sup>th</sup> day of September, 2005 (“**Effective Date**”), by and between Xencor, Inc., a Delaware corporation, with a place of business at 111 West Lemon Avenue, Monrovia, CA 91016 (hereinafter “**Xencor**”) and Cardinal Health PTS, LLC, a Delaware limited liability company, by and through its Gala Biotech business unit with a place of business at 8137 Forsythia Street, Middleton, Wisconsin 53562 (hereinafter “**Cardinal Health**”).

### RECITALS

- A. Xencor is a pharmaceutical company that is developing the Product (as defined below) which is the subject of this Agreement; and
- B. Cardinal Health provides a complete range of analytical, development and clinical services to the pharmaceutical industry, including, without limitation, mammalian cell line engineering and development, protein manufacturing, and finished product manufacturing services; and
- C. Cardinal Health has developed a proprietary Gene Product Expression (“**GPEX™**”) technology for the expression of proteins through retrovector transduction of cell lines; and
- D. If the outcome of the cell line development Services under this Agreement is successful, the parties anticipate that they will enter into a license of the GPEX™ technology to Xencor on terms to be agreed upon by the parties; and
- E. Xencor and Cardinal Health desire to enter into this Agreement to provide the terms and conditions upon which Xencor may engage Cardinal Health to provide Product development and manufacturing services as described in individual SOWs (as defined below) specifying the details of the services and the related terms and conditions.

**THEREFORE**, in consideration of the mutual covenants, terms and conditions set forth below, the parties agree as follows:

### ARTICLE 1 DEFINITIONS

The following terms have the following meanings in this Agreement:

- 1.1 “**Affiliate(s)**” means any corporation, firm, partnership or other entity that controls, is controlled by or is under common control with a party. For purposes of this definition, “control” shall mean (i) the ownership of at least fifty percent (50%) of the voting share capital of such entity or any other comparable equity or ownership interest, or (ii) the power to appoint fifty percent (50%) or more of the directors, managers or general partners of such entity.

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- 1.2 “**API**” or “**Active Pharmaceutical Ingredient**” means any substance identified in an SOW as intended to be used in the manufacture of a drug (medicinal) product, and that, when used in the production of a drug, becomes an active ingredient of the drug product.
- 1.3 “**Applicable Laws**” means all laws, ordinances, rules and regulations within the Territory applicable to the Processing of the Product or any aspect thereof and the obligations of Cardinal Health or Xencor, as the context requires under this Agreement, including, without limitation, (A) all applicable federal, state and local laws and regulations of each Territory; (B) the U.S. Federal Food, Drug and Cosmetic Act, and (C) FDA guidance documents (to the extent applicable), current Good Manufacturing Practices (“**cGMPs**”) and current Good Laboratory Practices (“**cGLPs**”) promulgated by the Regulatory Authorities, as amended from time to time, as applicable to the Project.
- 1.4 “**Batch**” means Product resulting from (i) a single Cardinal Health Product production run or (ii) any other specific quantity of Product to be produced by Cardinal Health agreed upon in writing by the parties.
- 1.5 “[...\*\*\*...]” shall mean U.S. Patent No. [...\*\*\*...] ([...\*\*\*...]), issued to [...\*\*\*...], Inc., divisionals and continuations-in-part thereof, and any foreign equivalents of the foregoing.
- 1.6 “**Confidential Information**” has the meaning set forth in Section 6.2.
- 1.7 “**Critical cGMP Deficiency**” has the meaning set forth in Section 7.3(B).
- 1.8 “**Delivery**” has the meaning set forth in Section 3.5.
- 1.9 “**Dispute**” means any dispute, controversy or disagreement between the parties in connection with this Agreement.
- 1.10 “**Facility**” means the Cardinal Health facility defined in the applicable SOW.
- 1.11 “**Fill Finish**” means the compounding, filling, producing and primary packaging in accordance with the Manufacturing Specifications and the terms and conditions set forth in the Agreement and any applicable SOW.
- 1.12 “**GPEX Technology**” means Cardinal Health’s proprietary GPEX™ gene product expression technology.

1.13 “**Intellectual Property**” means all intellectual property (whether or not patented), including, without limitation, patents, patent applications, know-how, trade secrets, copyrights, trademarks, designs, concepts, registered and unregistered design rights, data, work product, results, reports, improvements, inventions, developments, technologies; technical information, compounds, composites of genes and gene constructs, cell lines, assays, antibodies and other proteins or biological materials, and other manuals, standard operating procedures, instructions or specifications.

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1.14 “**Invention**” has the meaning set forth in Section 7.2.

1.15 “**Manufacturing**” means all operations required pursuant to an SOW for the production of Product from a mammalian cell line, including receipt of materials, growth of the mammalian cell line to produce the Product, production of the Product, the subsequent purification, packaging, repackaging, labeling, relabeling, quality control, release, storage, and distribution of the Product and the related controls.

1.16 “**Packaging Cell Line**” means a cell line created primarily for the purpose of producing a [...\*\*\*...], typically a [...\*\*\*...], which also yields [...\*\*\*...].

1.17 “**Process**”, “**Processed**”, or “**Processing**” has the meaning set forth in the applicable SOW.

1.18 “**Product**” means the gene expression products specified in a SOW and any proteins produced as a result of the use of any Vector derived from genetic constructs for genes described in the SOW, and the same as further Processed.

1.19 “**Production Cell Line**” means a cell line created primarily for the purpose of producing Product.

1.20 “**Quality Agreement**” means a written agreement substantially in the form set forth on Appendix A that is a required and integral part of this Agreement, outlining the respective roles and responsibilities of Cardinal Health and its Affiliates and Xencor with respect to the quality assurance of the API Manufacturing activities outlined in this Agreement and the SOW(s).

1.21 “**Regulatory Authority**” means any governmental regulatory authority within the Territory involved in regulating any aspect of the development, manufacture, market approval, sale, distribution, packaging or use of the Product.

1.22 “**Services**” means all work performed by Cardinal Health for Xencor pursuant to this Agreement, as described more specifically in each SOW.

1.23 “**SOW**” means a separate quotation or Statement of Work agreed to by the parties in writing and specifically incorporating by reference this Agreement pursuant to the language set forth on Appendix B and that defines the scope of the services to be performed by Cardinal Health and the responsibilities of the parties with respect to such services. The SOW for the initial Project to be undertaken pursuant to this Agreement is attached hereto as **Appendix B-1**. The SOW(s) for any subsequent Project(s) hereunder shall be numbered sequentially as **Appendix B-2**, **Appendix B-3**, etc. and, upon execution by the parties, be deemed incorporated into this Agreement.

1.24 “**Specifications**” means all written specifications agreed to by the parties in the SOW, and applicable master batch records, protocols, or standard operating procedures.

1.25 “**Territory**” means The United States of America and the European Union.

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1.26 “**Vector**” shall mean a [...\*\*\*...].

1.27 “**Xencor-Supplied Materials**” means any cDNA, mammalian cell line, API or other materials provided by Xencor to Cardinal Health.

## ARTICLE 2 SCOPE

2.1 Definition of Scope. Cardinal Health will perform the Services in accordance with the specific terms set forth in each applicable SOW and the Quality Agreement. Each SOW shall clearly define the undertakings, tasks, objectives and expected deliverables (including Product(s)) for each project contemplated in such SOW (each, a “**Project**”) and the responsibilities of the parties with respect to such Project. A separate SOW shall be prepared for each Xencor project. Each SOW will include, as appropriate, the scope of work, pricing and payment schedule. Each SOW shall be subject to all of the terms and conditions of this Agreement, in addition to the specific details set forth in the SOW. To the extent any terms or conditions of a SOW conflict with any terms and conditions of this Agreement, the terms and conditions of this Agreement shall control, except to the extent that the applicable SOW expressly and specifically states an intent to supersede this Agreement on a specific matter. This Agreement shall also supersede the terms of any purchase order, acknowledgement, delivery document or any oral communication or writing between the parties. No SOW shall be effective or binding upon either party unless and until such SOW is executed by both parties.

2.2 Amendments to Scope/Change Orders. Either party may request a change in the details of a SOW, or the assumptions-upon which the SOW is based (including, but not limited to, suspension of a Project and/or changes in a projected starting date, pricing and/or time lines). All SOW changes require a written amendment to the SOW (each, a “**Change Order**”). Each Change Order shall detail the requested changes to the applicable task, responsibility, duty, pricing, time line or other matter. A Change Order will become effective only upon its execution by both parties. Cardinal Health will be given a reasonable period of time within which to implement the changes. Each party agrees to act in good faith and promptly when considering a Change Order requested by the other party. Without limiting the foregoing, each party agrees that it will not unreasonably withhold approval of a Change Order if the proposed changes result from, among

other appropriate reasons, forces outside the reasonable control of a party or changes in Applicable Law or the assumptions upon which the initial pricing, time lines or other terms of the SOW were based, Cardinal Health reserves the right to postpone effecting material changes in the Project's scope until such time as the parties agree to and execute the corresponding Change Order.

2.3 Xencor Obligations. Unless otherwise agreed by the parties in writing or in the SOW, Xencor will: (1) provide Cardinal Health with accurate and necessary scientific data reasonably available to Xencor regarding each Project and Xencor's requirements for each Project, including, without limitation, test methods and development, formulation, Fill Finish of the Product if applicable, (2) provide Cardinal Health with accurate and necessary information reasonably available to Xencor to develop the scope of work, and estimated or fixed costs for the Projects, (3) review and approve all Specifications, (4) if applicable, review and approve all in-process and

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finished Product test results to ensure conformity of such results with the Specifications, regardless of which party is responsible for finished Product release, and (5) if applicable, prepare all Product submissions to Regulatory Authorities.

2.4 Cardinal Health Obligations. Cardinal Health will: (1) perform the Services in accordance with all Applicable Laws, including, without limitation, the then-current state of the U.S. Food and Drug Administration's (FDA's) current Good Manufacturing Practice (cGMP) as outlined in 21 CFR Sections 210-211 and the International Committee for Harmonization (ICH) Guidance for Industry Q7A, "Good Manufacturing Practice for Active Pharmaceutical Ingredients" (for manufacture of Phase I clinical supplies Section XIX of the aforementioned document shall apply); (2) provide to Xencor upon request written reports documenting development of analytical methods, production processes, and storage conditions for Product (including the rationale for selection of methods, processes, unit operations, operating parameters, and conditions) as necessary to support regulatory filings for investigational use or marketing of Product; (3) use its best efforts to assist Xencor in obtaining and maintaining regulatory approvals for Products in the Territory, at the reasonable request and expense (to the extent of any out-of-pocket expenses) of Xencor; and (4) cooperate with any inspection by the FDA or other regulatory agency, including, but not limited to, any inspection prior to approval of Xencor's BLA for any Product. In addition, at Xencor's option, Xencor may contract with third parties to conduct cell banking, cell bank testing, viral clearance testing and/or testing of non-cGMP or cGMP material, in which event Cardinal Health shall promptly package and ship the applicable test materials to Xencor or its designee, for which Xencor shall pay Cardinal Health a fee not to exceed [...\*\*\*...] ([...\*\*\*...]%) of the cost of such third party services.

### ARTICLE 3 PRICING AND PAYMENT TERMS

#### 3.1 Price and Price Changes

A. Price. Xencor shall pay for the Services as provided in this Agreement and all SOWs.

B. Price Changes. Cardinal Health may propose to Xencor in writing revisions to the prices provided in a SOW if (1) the parties agree to revise a protocol, (2) any information relating to a Project which is provided by Xencor is inaccurate or incomplete, (3) Xencor revises Cardinal Health's responsibilities, the Specifications, applicable test methods, final review of test methods, procedures, assumptions, development processes, test methods or analytical requirements, (4) Xencor requests an alternate report format, (5) Xencor requests revisions to laboratory reports, (6) Xencor requests copies of laboratory records (excluding a single copy of batch records which will be provided for each batch manufactured hereunder) or (7) unforeseen circumstances affect the work required to complete the Project. All such proposed price changes must be submitted as a Change Order pursuant to Section 2.2. Notwithstanding anything to the contrary expressed or implied herein, no proposed price change shall be effective or binding upon either party, unless and until both parties have executed a Change Order with respect thereto.

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C. Retesting. All retesting performed that is not directly due to Cardinal Health's gross negligence, willful misconduct or breach of this Agreement, the Quality Agreement or a SOW will be billed to the Xencor. All required investigational studies or additional Xencor requests not outlined in the SOW will be invoiced for the cost of performance at the current standard hourly rate; plus any associated fees.

D. Deviation Investigations. Cardinal Health reserves the right to expend up to [...\*\*\*...] per Critical Deviation (as defined in the Quality Agreement) to complete all required investigational work (such as OOS investigations, trouble shooting chromatographic methods, etc.) without prior approval from the Xencor. If the additional work requires going beyond [...\*\*\*...], the Xencor will be contacted prior to continuation. The additional work will be performed based on verbal agreement from the Xencor and will be documented on a Cardinal Health Telephone Conversation Record (TCR). Cardinal Health shall [...\*\*\*...], in which case Xencor shall [...\*\*\*...] within thirty (30) days after receipt of an invoice and appropriate supporting documentation from Cardinal Health.

E. Cancellations and Postponements. If Xencor cancels or postpones any portion of a Project or if Cardinal Health terminates any portion of a Project pursuant to Section 3.3, Xencor shall pay Cardinal Health for all work completed through the date of such cancellation, postponement or termination in accordance with this Agreement and the applicable SOW, including reasonable and documented out-of-pocket expenses incurred by Cardinal Health, any non-cancelable commitments incurred by Cardinal Health in accordance with this Agreement and such SOW up to the date of such cancellation, or postponement or termination, and with respect to any unperformed cGMP batches anticipated by such SOW, Xencor will pay to Cardinal Health the following charges:

Notice of Cancellation, Postponement or Termination in Days from the Date Scheduled for Commencement of cGMP Production	Charge as a Percentage of Total Production Fee
[...***...] or less	[...***...]%
[...***...] days	[...***...]%
[...***...] days and over	[...***...]%



provided, however, that if Cardinal Health secures new business that utilizes the slot in the manufacturing schedule with respect to the cGMP manufacturing space that would have been occupied by Xencor, it will [...\*\*\*...].

Notwithstanding the foregoing, no such payments shall be due in the event that such cancellation; postponement or termination is due to Cardinal Health's breach of this Agreement, the Quality Agreement or the applicable SOW.

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3.2 Invoicing. Cardinal Health shall invoice Xencor as set forth in the applicable SOW.

3.3 Payment Terms. In the event payment is not received by Cardinal Health on or before the [...\*\*\*...] day after the date of any invoice, then Cardinal Health may, at its option elect to: (i) charge a late payment fee on such unpaid amount equal to [...\*\*\*...] ([...\*\*\*...]%) per month, or the highest amount allowed by applicable law, whichever is less, until paid in full; and/or (ii) suspend any further deliveries under the applicable SOW until such invoice is paid in full. If Xencor fails to pay any invoice (other than an invoice subject to a good-faith dispute) for more than [...\*\*\*...] following its due date, Cardinal Health shall also be entitled to terminate the applicable SOW and/or this Agreement on written notice to Xencor.

3.4 Taxes. All taxes, duties and other amounts assessed (excluding tax based on net income and franchise taxes) on the services, components, API or the Product prior to or upon sale to Xencor and on any Xencor owned tooling and equipment are the responsibility of Xencor, and Xencor shall reimburse Cardinal Health for any such taxes, duties or other expenses paid by Cardinal Health.

3.5 Shipments. All Batch shipments shall conform to the shipping and packaging instructions set forth in the Specifications or as otherwise provided in advance by Xencor to Cardinal Health in writing no later than [...\*\*\*...] prior to the contemplated delivery date of a shipment. All Batch shipments and deliveries (collectively, a "Delivery") shall be made FCA (Incoterms 2000) Cardinal Health's Facility. Cardinal Health shall be responsible for providing all quality and commercial shipping documentation set forth in the Specifications.

3.6 Certificate of Analysis. Each cGMP Delivery shall be accompanied by a written certification of Cardinal Health setting forth the measured and observable characteristics of the Delivery, as required by the Specifications, together with a certification of the Delivery's compliance with cGMPs, cGLPs and FDA guidance documents (to the extent applicable), and any description of any departures from any of the foregoing (the "Certificate"). Non-cGMP Deliveries shall be accompanied by a written product information sheet, the content of which shall be mutually agreed between the parties.

3.7 Inspection; Acceptance/Rejection. Xencor shall have [...\*\*\*...] from the date of receipt of each Delivery to evaluate the Product and accept or reject such Delivery. Xencor shall in good faith have the right to reject any Delivery if (i) a Batch does not meet the mutually agreed Specifications; or (ii) a cGMP Batch was not actually Processed in accordance with cGMPs or relevant FDA guidance documents. If Xencor does not notify Cardinal Health of its rejection of a Delivery within such [...\*\*\*...] period, the Delivery shall be deemed accepted. Notwithstanding the foregoing, if after Xencor's acceptance of a Delivery hereunder, [...\*\*\*...], Xencor shall so notify Cardinal Health within [...\*\*\*...] and [...\*\*\*...].

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#### ARTICLE 4 ADDITIONAL TERMS FOR MANUFACTURING, FILL/FINISH AND PACKAGING

4.1 Non-Conforming Product. If Cardinal Health agrees that a Batch rejected by Xencor pursuant to Section 3.7 is non-conforming and such non-conformity is determined to be the result of Cardinal Health's gross negligence, willful misconduct or breach of this Agreement, the Quality Agreement or the applicable SOW, Cardinal Health shall, within [...\*\*\*...] after receiving the non-conforming Batch, at its option and sole expense, either (i) re-perform the Services and replace the entire Delivery containing the non-conforming Batch with conforming Product in accordance with this Agreement, or (ii) refund to Xencor all payments made by Xencor for the Delivery containing the non-conforming Batch. If Cardinal Health in good faith does not agree with Xencor's determination that the rejected Batch is a non-conforming Batch, then after reasonable efforts to resolve the disagreement, not to exceed [...\*\*\*...] following such Batch's rejection by Xencor, either party may submit a sample of such Batch to [...\*\*\*...] or another mutually agreed upon independent third party laboratory to determine whether the Batch has been properly rejected under Section 3.7. The independent laboratory's determination shall be final and binding on both parties. If the independent laboratory determines that the Batch has been properly rejected under Section 3.7, but the parties do not agree on whether or not such failure is the result of Cardinal Health's gross negligence, willful misconduct or breach of this Agreement; the Quality Agreement or the applicable SOW, the parties shall submit such dispute to arbitration in accordance with the terms of Section 14.9. Unless otherwise agreed to by the parties in writing, the costs associated with testing and review by the independent laboratory shall be borne by (i) Cardinal Health, if the non-conforming Batch is the result of Cardinal Health's gross negligence, willful misconduct or breach of this Agreement, the Quality Agreement or the applicable SOW, or (ii) Xencor, if the non-conforming Batch is not the result of Cardinal Health's gross negligence, willful misconduct or breach of this Agreement, the Quality Agreement or the applicable SOW.

4.2 Remedies for Non-Conforming Product. THE OBLIGATION OF CARDINAL HEALTH TO PROVIDE A REFUND FOR OR REPLACE NON-CONFORMING PRODUCT IN ACCORDANCE WITH THIS ARTICLE 4 SHALL BE XENCOR'S SOLE AND EXCLUSIVE REMEDY UNDER THIS AGREEMENT FOR PRODUCT THAT DOES NOT CONFORM TO SPECIFICATIONS AND IS IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED.

4.3 Initial Batches. The parties acknowledge that (i) information regarding the Manufacturing Process and the characteristics of each Product resulting therefrom is practically nonexistent at this point in time, as development of the Manufacturing Process and associated analytical methods has not yet commenced; (ii) the Preliminary Target Product Specifications (as defined in the applicable SOW) are deemed achievable based on the parties' respective experience with similar products, but subject to revision by mutual agreement of the parties prior to commencement of pilot and full-scale Manufacturing runs based on data from bench-scale runs; and (iii) Cardinal Health shall have primary responsibility for development of the Manufacturing Process for each Product, with appropriate input from Xencor. In consideration of the foregoing, the parties agree that [...\*\*\*...] of all Initial Batches (defined as the pilot-scale non-GMP and full-scale

Target Product Specifications as outlined in (ii) above, unless the non-conformance was due to Cardinal Health's gross negligence, willful misconduct or breach of this Agreement, the Quality Agreement or the applicable SOW in the manufacture of the out of Specification Batch; in which case, Cardinal Health shall bear [...] (\*\*\*) [...] (%) of the cost of the out of Specification Batch. Cardinal Health and Xencor shall cooperate in good faith to identify and correct any technical or cGMP issues causing the out of Specification Batch.

4.4 Unlabeled Product. If Cardinal Health is to provide Xencor with Product which is not labeled, Xencor represents and warrants that it will comply with all applicable regulations, including, without limitation, 21 CFR§201.150.

4.5 Failure to Take Delivery. If Xencor fails to take delivery on any scheduled delivery date, Cardinal Health shall invoice Xencor for the stored Product and shall invoice Xencor on a monthly basis for reasonable administration and storage costs. For each such batch of undelivered Product, Xencor agrees that: (A) Xencor has made a fixed commitment to purchase such Product, (B) risk of ownership and storage for such Product passes to Xencor, (C) such Product shall be on a bill and hold basis for legitimate business purposes, (D) if no delivery date is determined at the time of billing, Cardinal Health shall have the right to ship the Product to Xencor within [...] (\*\*\*) [...] after billing, and (E) Xencor will be responsible for any decrease in market value of such Product that relates to factors and circumstances outside of Cardinal Health's control. Within [...] (\*\*\*) [...] following a written request from Cardinal Health, Xencor shall provide Cardinal Health with a letter confirming items (A) through (E) of this Article 4 for each Batch of undelivered Product.

## ARTICLE 5 REGULATORY

5.1 Audit. Once [...] (\*\*\*) [...] during the Term, and subject to Cardinal Health's obligations of confidentiality to third parties, Cardinal Health will permit Xencor to conduct an audit of those portions of the Facility where Services are being conducted upon reasonable advance notice during regular business hours and at no cost to Xencor. Upon request, Xencor may conduct additional audits, provided that Xencor shall reimburse Cardinal Health for time and expenses reasonably incurred by Cardinal Health in connection with such additional audit.

5.2 Observation. Xencor may have up to two (2) representatives at the Facility to observe the Services, provided that Xencor provide Cardinal Health at least [...] (\*\*\*) [...] days advance written notice of the attendance of such Xencor representatives. Such representatives shall comply with Cardinal Health's rules and regulations. Xencor shall indemnify and hold harmless Cardinal Health for any action or activity of such representatives while on Cardinal Health's premises.

5.3 Regulatory Inspections. Each party shall: (1) notify the other party promptly of any inspection or inquiry by any Regulatory Authority concerning any Project or Product of Xencor; and (2) forward to the other party copies of any correspondence from any Regulatory Authority relating to such a Project or Product, including, but not limited to, Form FD-483 notices, FDA refusal to file, rejection or warning letters. Where reasonably practicable, each party will be given the opportunity to have a representative present during an inspection by a Regulatory Authority.

Each party acknowledges that it may not direct the manner in which the other party fulfills its obligations to permit inspection by a Regulatory Authority.

5.4 Record Retention. Unless the parties otherwise agree in writing, Cardinal Health will retain batch, laboratory and other technical records for the minimum period required by Applicable Laws and, after such period, shall not destroy or dispose of such without [...] (\*\*\*) [...] prior written notice to Xencor. At Xencor's election at any time during such [...] (\*\*\*) [...] period, Xencor shall have the right to cause Cardinal Health to ship all such manufacturing related records to Xencor at Xencor's reasonable expense. Cardinal Health will not be required to ship any GPEX related documents beyond the GPEX project report. Cardinal Health will include all reasonably requested information in the GPEX project report and will include all information requested by a regulatory agency.

5.5 Quality Agreement. Any Quality Agreement executed by the parties related to the Services shall in no way determine liability or financial responsibility of the parties for the responsibilities set forth therein. In the event of a conflict between the terms of this Agreement and the Quality Agreement, this Agreement shall control.

5.6 Regulatory Compliance. Xencor shall be solely responsible for all permits and licenses required by any Regulatory Authority with respect to the Product, including any Product licenses, applications and amendments in connection therewith. Cardinal Health will be responsible to maintain all permits and licenses required by any Regulatory Authority with respect to the Services and the Facility. During the Term, each party will assist the other party with all regulatory matters relating to Services and Product, at the other party's request. Each party intends and commits to cooperate to satisfy all Applicable Laws relating to Services and Products.

5.7 Waiver of In Process Quality Control Holds. Project scheduling may include certain FDA "Points to Consider" ("PTC") assays and other in-process assays, as set forth in a SOW. PTC and in-process assays are typically required in "quality control (QC) holds" and may prevent a Project from progressing to subsequent scheduled events until the results of said PTC and in-process assays are completed, documented and audited by the appropriate QC group. In the event that Xencor wishes to expedite a Project by proceeding to subsequent Project events, without waiting for PTC and/or assay results ("QC Hold Waiver"), Xencor shall be fully responsible for the cost of all Services performed with respect to such Project after the QC Hold Waiver, regardless of whether the results of the PTC and/or other in-process tests indicate a problem with the Project or Product, unless such problem was caused by Cardinal Health's gross negligence, willful misconduct or breach of this Agreement, the Quality Agreement or the applicable SOW. Cardinal Health shall remain responsible for activities up to the QC Hold Waiver to the extent provided in this Agreement.

## ARTICLE 6 CONFIDENTIALITY AND NON-USE

6.1 Mutual Obligation. Each party receiving Confidential Information (each, a “**Recipient**”) from the other party (each, a “**Discloser**”), agrees that it will (i) only use Discloser’s Confidential Information as specified herein, and for no other purpose whether for Recipient’s own benefit or the

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benefit of any third party and (ii) not disclose Discloser’s Confidential Information to any third party without the prior written consent of the Discloser except to the limited extent required by Applicable Law or to enforce this Agreement; provided, however, that prior to making any such legally required disclosure, the Recipient shall give Discloser as much prior notice of the requirement for and contents of such disclosure as is practicable under the circumstances. Notwithstanding the foregoing, the Recipient may disclose the Discloser’s Confidential Information to those of Recipient’s employees or Affiliates that (A) need to know such Confidential Information for the purpose of performing this Agreement, and (B) are legally bound by obligations of confidentiality and non-use no less restrictive than the terms of this Article 6.

6.2 Definition. As used in this Agreement, the term “**Confidential Information**” includes all such information furnished by Cardinal Health or Xencor, or any of their respective representatives or Affiliates, to the other party or its representatives or Affiliates, whether furnished before, on or after the date of this Agreement and furnished in any form, including, but not limited to, written, verbal, visual, electronic or in any other media or manner. Confidential Information includes all proprietary technologies, know-how, trade secrets, discoveries, inventions and any other Intellectual Property (whether or not patented), analyses, compilations, business or technical information and other materials prepared by either party, or any of its representatives or Affiliates, containing or based in whole or in part on any such information furnished by the other party or its representatives or Affiliates. Confidential Information also includes the existence of this Agreement and its terms, except that each party may disclose this Agreement or its terms to any of its advisors, lawyers, accountants, investment bankers, or actual or potential investors, acquirors or merger parties, provided that such recipient is bound by contractual or other legal obligations of non-use and non-disclosure with respect to such Confidential information consistent with the terms of this Article 6.

6.3 Exclusions. Notwithstanding Section 6.2, Confidential Information does not include information that Recipient can demonstrate by competent evidence (A) is or becomes generally available to the public or within the industry to which such information relates other than as a result of a breach of this Agreement, or (B) is already known by the Recipient at the time of disclosure as evidenced by the Recipient’s written records, or (C) becomes available to the Recipient on a non-confidential basis from a source that is entitled to disclose it on a non-confidential basis, or (D) was or is independently developed by or for the Recipient without use of or reference to the Confidential Information, as evidenced by the Recipient’s written records.

6.4 No Implied License. Recipient will obtain no right of any kind or license under any patent application or patent by reason of this Agreement. All Confidential Information will remain the sole property of Discloser.

6.5 Return of Confidential Information. Upon termination of this Agreement, Recipient shall, upon Discloser’s request, promptly return within [...\*\*\*...] all such information, including any copies thereof, and cease its use or, at the request of the disclosing party, shall promptly destroy the same and certify such destruction to the disclosing party; except for a single copy thereof, which may be retained for the sole purpose of determining the scope of the obligations incurred under this Agreement.

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6.6 Survival. The obligations of this Article 6 will terminate [...\*\*\*...] from the expiration or termination of this Agreement for any reason.

## ARTICLE 7 INTELLECTUAL PROPERTY

7.1 Ownership of Existing Technologies.

A. All rights to and interests in Xencor’s Intellectual Property, including, without limitation, all Intellectual Property covering or claiming the Products or any use thereof, and Xencor’s Confidential Information shall remain vested solely in Xencor (or its licensors). No right or interest therein is transferred or granted to Cardinal Health under this Agreement.

B. All rights to and interests in Cardinal Health’s Intellectual Property and Cardinal Health’s Confidential Information, including, without limitation, Cardinal Health’s GPEX Technology, shall remain vested solely in Cardinal Health. No right or interest therein is transferred or granted to Xencor under this Agreement, except as is specifically set forth in Section 7.3.

7.2 Improvements, Inventions & Developments. All Intellectual Property arising during the performance of any Project (an “**Invention**”) shall be the property of the party whose employees conceive of or make the Invention; *except that* (a) all improvements in the process of gene expression in cells, vectors for gene expression, Packaging Cell Lines created for gene expression or to the GPEX Technology, Cardinal Health Intellectual Property or Cardinal Health Confidential Information made by either party or jointly by the parties shall be the property of Cardinal Health, and (b) all improvements to, new uses of, or any substance produced or isolated with or by use of, the Product, Xencor Intellectual Property or Xencor Confidential Information or cDNAs, genes, or cell lines provided by Xencor made by either party or jointly by the parties shall be the property of Xencor. If either party develops an Invention that is the property of the other party, such party (the “**Inventing Party**”) shall promptly disclose such Invention to the other party (the “**Owning Party**”) in writing and hereby assigns to the Owning Party all right, title and interest in and to such Invention, or if assignment is not permitted by law, waives such rights or grants to the Owning Party an exclusive, fully paid, perpetual, irrevocable, worldwide license under such rights for any and all purposes, and will execute any documents to this effect, if requested to do so by the Owning Party. In addition, at the Owning Party’s request and expense (to the extent of any out-of-pocket expenses), the Inventing Party agrees to cooperate with the Owning Party or its designee(s), both during and after the term of this Agreement, in the procurement and maintenance of the Owning Party’s rights in such Invention and to assist the Owning Party in every proper way to obtain, and from time to time enforce, Intellectual Property rights relating to such Invention in any and all countries. To that end, the Inventing Party will execute, verify, and deliver such documents and perform such other acts (including appearances as a witness) as the Owning Party may reasonably request for use in applying for, obtaining, perfecting, evidencing, sustaining, and enforcing such



provided, however, that if Xencor licenses a cell line pursuant to this Section 7.3(B) after the achievement of one or more milestones by a Product produced using such cell line, then the payment(s) associated with such previously-achieved milestone(s) under this subparagraph (iii) shall not be due for such cell line. Following conduct of an audit pursuant to Section 5.1 hereof of the Facility by qualified representatives of Xencor, Xencor shall promptly provide a written summary of any audit observations to Cardinal Health. Cardinal Health shall have [...\*\*\*...] from the time of receipt of such summary to resolve to Xencor's reasonable satisfaction any Critical cGMP Deficiencies (as defined below) specifically identified in such summary. If Cardinal Health fails to resolve any such Critical cGMP Deficiency to Xencor's

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reasonable satisfaction within such [...\*\*\*...] period, then Xencor may elect to transfer such cGMP activities to a third party CMO, and each of the payment amounts set forth in subparagraphs (i), (ii), and (iii) of this Section 7.3(B) shall be reduced by [...\*\*\*...] ([...\*\*\*...]%); provided, however, that such payments shall not be reduced in the event that Xencor elects to so transfer such cGMP activities during any period of time following the [...\*\*\*...] period for so long as Cardinal Health is continuing to diligently and timely pursue the resolution of the relevant Critical cGMP)Deficiency or has resolved such deficiency. If Cardinal Health and Xencor disagree as to whether any audit finding is a Critical cGMP Deficiency, then the parties shall appoint a qualified third party cGMP expert within [...\*\*\*...] after a written request by either party to the other party. The parties shall provide the expert with all relevant information on the disputed audit finding within [...\*\*\*...] following the appointment of such cGMP expert. The cGMP expert shall prepare and deliver to the parties a written, reasoned opinion conferring its decision within [...\*\*\*...] after receiving the information on the disputed audit finding from the parties. The opinion of such cGMP expert shall be final and binding on the parties. The fees and expenses of any cGMP expert appointed under this Section 7.3(B) shall be paid by the non-prevailing party.

For the purposes of this Agreement, the term "Critical cGMP Deficiency" shall mean a practice (or absence of a practice) that is a critical part of the Processing of Product that, if not corrected, would cause a Product Processed in such manner to not materially comply with applicable cGMPs (notwithstanding any reasonable rework, retesting or other remediation permitted by Applicable Laws) and that would justify the recall of such Product under Applicable Laws, or in the case of Product used or proposed to be used under an Investigational New Drug Exemption (or its equivalent), that would justify placement of ongoing or proposed studies in human subjects on clinical hold.

## ARTICLE 8 REPRESENTATIONS AND WARRANTIES

8.1 Cardinal Health. Cardinal Health represents, warrants and covenants to Xencor that, unless otherwise agreed to by the parties in the SOW, for the duration of the Term: (i) Cardinal Health will perform each Project in accordance with all Applicable Laws, (ii) the Services hereunder shall be performed with requisite care, skill and diligence, in accordance with industry standards by individuals who are appropriately trained, experienced and qualified, (iii) when manufacturing Product under this Agreement, Cardinal Health will use reasonable commercial efforts to manufacture Product that complies with any Specifications agreed to by the parties, and (iv) none of the Cardinal Health personnel assigned to the Product have been subject to debarment under the Generic Drug Enforcement Act or any other penalty or sanction by FDA.

8.2 Xencor. Xencor represents, warrants and covenants to Cardinal Health for the duration of the Term that:

A. It has all necessary authority and all right, title and interest in and to any Intellectual Property related to each Product, or that is otherwise provided by Xencor, under this Agreement;

B. It has provided all safe handling instructions; health and environmental information and material safety data sheets applicable to the Product or to and any Xencor-Supplied Materials,

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except as disclosed to Cardinal Health in writing by Xencor in sufficient time for review and training by Cardinal Health prior to delivery;

C. All Product delivered to Xencor by Cardinal Health will be held, used and/or disposed of by Xencor in accordance with all Applicable Laws; and

D. Xencor will comply with all Applicable Laws applicable to Xencor's performance under this Agreement and its use of any materials or Products provided by Cardinal Health under this Agreement or any SOW.

8.3 Mutual. Each party hereby represents and warrants to the other party that:

A. Existence and Power. Such party (1) is duly organized, validly existing and in good standing under the laws of the state in which it is organized, (2) has the power and authority and the legal right to own and operate its property and assets, and to carry on its business as it is now being conducted, and (3) is in compliance with all requirements of Applicable Laws, except to the extent that any noncompliance would not materially adversely affect such party's ability to perform its obligations under the Agreement;

B. Authorization and Enforcement of Obligations. Such party (1) has the power and authority and the legal right to enter into this Agreement and to perform its obligations hereunder and (2) has taken all necessary action on its part to authorize the execution and delivery of this Agreement and the performance of its obligations hereunder;

C. Execution and Delivery. This Agreement has been duly executed and delivered on behalf of such party, and constitutes a legal, valid, binding obligation, enforceable against such party in accordance with its terms;

D. No Consents. All necessary consents, approvals and authorizations of all Regulatory Authorities and other persons required to be obtained by such party in connection with the Agreement have been obtained; and

E. No Conflict. The execution and delivery of this Agreement and the performance of such party's obligations hereunder (1) do not conflict with or violate any requirement of Applicable Laws; and (2) do not materially conflict with, or constitute a material default or require any consent under, any contractual obligation of such party.

8.4 Limitations. THE REPRESENTATIONS AND WARRANTIES SET FORTH IN THIS ARTICLE 8 AND IN SECTIONS 4.1 AND 4.2 ARE THE SOLE AND EXCLUSIVE REPRESENTATIONS AND WARRANTIES MADE BY EITHER PARTY TO THE OTHER PARTY AND NEITHER PARTY MAKES ANY OTHER REPRESENTATIONS, WARRANTIES OR GUARANTEES OF ANY KIND WHATSOEVER, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, NON-INFRINGEMENT OR FITNESS FOR A PARTICULAR PURPOSE FOR THE AVOIDANCE OF DOUBT, EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, CARDINAL HEALTH MAKES NO REPRESENTATIONS OR WARRANTIES RESPECTING PRODUCT OR CELL LINE

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CHARACTERIZATION, PERFORMANCE, PURITY, COMPARABILITY, BIO-SIMILARITY, POTENCY AND/OR EXPRESSION LEVELS.

## ARTICLE 9 INDEMNIFICATION

9.1 Indemnification by Cardinal Health. Cardinal Health shall indemnify, defend and hold harmless Xencor, its Affiliates, and their respective directors, officers, employees and agents ("**Xencor Indemnitees**") from and against any and all suits, claims, losses, demands, liabilities, damages, costs and expenses (including reasonable attorneys' fees) in connection with any suit, demand or action by any third party ("**Losses**") arising out of or resulting from (A) any breach by Cardinal Health of its representations, warranties or obligations set forth in this Agreement, the Quality Agreement or any SOW; (B) any negligence or willful misconduct by Cardinal Health, except to the extent that any of the foregoing arises out of or results from any Xencor Indemnitee's negligence, willful misconduct or breach of this Agreement; or (C) a claim that Cardinal Health's use or practice of the GPEX™ Technology, Cardinal Health Confidential Information or Cardinal Health Intellectual Property hereunder infringe the Intellectual Property rights of a third party.

9.2 Indemnification by Xencor. Xencor shall indemnify, defend and hold harmless Cardinal Health, its Affiliates, and their respective directors, officers, employees and agents ("**Cardinal Health Indemnitees**") from and against all Losses arising out of or resulting from (A) any breach by Xencor of its representations, warranties or obligations set forth in this Agreement, the Quality Agreement or any SOW; (B) any manufacture (excluding the Services) by Xencor or any sublicensee, sale, promotion, distribution, use of or exposure to the Product or any Xencor-Supplied Materials, including, without limitation, product liability or strict liability; (C) Xencor's exercise of control over the Project to the extent that Xencor's instructions or, directions violate Applicable Law; (D) the conduct of any clinical trials relating to any material or Product which is the subject of this Agreement or any SOW; (E) a claim that Cardinal Health's use or practice of any Intellectual Property provided by Xencor hereunder, including, without limitation, any cell line, raw material or process provided by Xencor, infringes the Intellectual Property rights of a third party; *provided, however*, that such use or practice are in accordance with the terms of this Agreement, the Quality Agreement and the applicable SOW and with Xencor's specific written instructions; or (F) any negligence or willful misconduct by Xencor, except to the extent that any of the foregoing arises out of or results from any Cardinal Health Indemnitee's negligence, willful misconduct or breach of this Agreement.

9.3 Exception to Indemnity Obligations. Notwithstanding the foregoing or any other provision of this Agreement, neither party shall have any obligation to indemnify the other party with respect to any claim of infringement under the Cabilly Patent relating to the manufacture, use or sale of any Products or to the performance of either party's obligations under this Agreement.

9.4 Indemnification Procedures. All indemnification obligations in this Agreement are conditioned upon the party seeking indemnification: (A) promptly notifying the indemnifying party of any claim or liability of which the party seeking indemnification becomes aware (including a copy of any related complaint, summons, notice or other instrument); *provided, however*, that failure to provide such notice within a reasonable period of time shall not relieve the indemnifying

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party of any of its obligations hereunder, except to the extent the indemnifying party is prejudiced by such failure; (B) cooperating with the indemnifying party in the defense of any such claim or liability (at the indemnifying party's expense); and (C) not compromising or settling any claim or liability without prior written consent of the indemnifying party.

## ARTICLE 10 LIMITATIONS OF LIABILITY

10.1 [...\*\*\*...] LIABILITY UNDER THIS AGREEMENT FOR ANY AND ALL CLAIMS, LOSSES OR DAMAGES, INCLUDING FOR LOST, DAMAGED OR DESTROYED API OR XENCOR-SUPPLIED MATERIALS WHETHER OR NOT SUCH API OR XENCOR-SUPPLIED MATERIALS ARE INCORPORATED INTO FINISHED PRODUCT SHALL NOT EXCEED XENCOR'S ACTUAL COST FOR SUCH LOST, DAMAGED OR DESTROYED XENCOR SUPPLIED MATERIALS.

10.2 CARDINAL HEALTH'S TOTAL LIABILITY, WHETHER IN CONTRACT OR TORT, INCLUDING, WITHOUT LIMITATION, CARDINAL HEALTH'S INDEMNITY OR OTHER FINANCIAL OBLIGATIONS UNDER ARTICLE 9, SHALL:

(A) [...\*\*\*...]

(B) [...\*\*\*...]

10.3 NEITHER PARTY SHALL BE LIABLE TO THE OTHER PARTY FOR INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF PERFORMANCE UNDER THIS AGREEMENT, INCLUDING, WITHOUT LIMITATION, LOSS OF REVENUES, PROFITS OR DATA,

**ARTICLE 11  
INSURANCE**

11.1 Cardinal Health

A. During the Term of this Agreement, Cardinal Health shall obtain and maintain the following insurance with limits not less than those specified below:

- i. Commercial General Liability insurance with a limit of [...\*\*\*...] Dollars (\$[...\*\*\*...]) per occurrence.
- ii. Products and Completed Operations Liability insurance with a limit of [...\*\*\*...] Dollars (\$[...\*\*\*...]) per occurrence.

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- iii. Worker's Compensation and Employers Liability Insurance with statutory limits for Workers' Compensation and Employers' Liability limits of [...\*\*\*...] Dollars (\$[...\*\*\*...]) per accident.
- iv. Professional Services Liability insurance with a limit of [...\*\*\*...] Dollars (\$[...\*\*\*...]) per claim.

B. Cardinal Health may self-insure any or a portion of the required insurance. In the event that any of the required policies of insurance are written on a claims made basis, then such policies shall be maintained during the entire term of this Agreement and for a period of not less than [...\*\*\*...] years following the termination or expiration of this Agreement.

C. Cardinal Health shall waive subrogation rights against Xencor for workers' compensation benefits and shall obtain a waiver from any insurance carriers with which Cardinal Health carries workers' compensation insurance releasing their subrogation rights against Xencor.

D. Xencor shall be named as an additional insured under the Commercial General Liability and Products and Completed Operations Liability insurance policies with respect to Xencor's liability for damages arising from the Services provided under this Agreement. Such additional insured status shall end upon the termination or expiration of this Agreement unless the policies are written on a claims made basis, in which case such additional insured status will continue for the period of time Cardinal Health is required to maintain such insurance under the terms of this Agreement.

E. Cardinal Health shall furnish certificates of insurance to Xencor evidencing the required insurance and additional insured status as soon as practicable after the Effective Date and within [...\*\*\*...] after renewal of such policies. Such certificates shall state that Cardinal Health's insurers will endeavor to provide [...\*\*\*...] written notice of any cancellation prior to the policy(ies) expiration date(s). Each insurance policy that is required under this Section 11.1 shall be obtained from an insurance carrier with an A.M. Best rating of at least A-VII.

11.2 Xencor

A. During the Term of this Agreement, Xencor shall obtain and maintain the following insurance with limits not less than those specified below:

- i. Commercial General Liability insurance with a limit of [...\*\*\*...] Dollars (\$[...\*\*\*...]) per occurrence.
- ii. Products and Completed Operations Liability insurance with a limit of [...\*\*\*...] Dollars (\$[...\*\*\*...]) per occurrence (to be maintained only immediately prior to and during use of Product in humans).
- iii. Worker's Compensation and Employers Liability Insurance with statutory limits for Workers' Compensation and Employers' Liability limits of [...\*\*\*...] Dollars (\$[...\*\*\*...]) per accident.
- iv. All Risk Property Insurance, including transit coverage, in an amount equal to full replacement value covering Xencor's property while it is at Cardinal Health's facility or in transit to or from Cardinal Health's facility.

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B. In the event that any of the required policies of insurance are written on a claims made basis, then such policies shall be maintained during the entire period of this Agreement and for a period of not less than [...\*\*\*...] following the termination or expiration of this Agreement.

C. Xencor shall waive subrogation rights against Cardinal Health for Workers' compensation benefits and shall obtain a waiver from any insurance carriers with which Xencor carries workers' compensation insurance releasing their subrogation rights against Cardinal Health.

D. Cardinal Health, Inc. and its subsidiaries and affiliates shall be named as additional insureds under the Commercial General Liability and Products and Completed Operations Liability insurance policies. Xencor's Commercial General Liability and Products and Completed Operation Liability policies shall provide that Xencor's insurance is primary (with respect both to any insurance issued to Cardinal Health and to any self-insurance amount retained by Cardinal Health) with regard to Cardinal Health's liability for damages arising out of those Products for which they have been added as additional insureds. Such additional insured status shall end upon the termination or expiration of this Agreement unless the policies are written on a claims made basis, in which case such additional insured status will continue for the period of time Xencor is required to maintain such insurance under the terms of this Agreement.

E. Xencor shall furnish certificates of insurance to Cardinal Health evidencing the required insurance and additional insured status as soon as practicable after the Effective Date and within [...] after renewal of such policies. Such certificates shall state that Xencor's insurers will endeavor to provide [...] written notice of any cancellation prior to the policy(ies) expiration date(s). Each insurance policy which is required under this Section 11.2 shall be obtained from an insurance carrier with an A.M. Best rating of at least A-VII.

## ARTICLE 12 TERM AND TERMINATION

12.1 Term. The term of this Agreement shall commence as of the Effective Date and shall continue until either party terminates this Agreement as set forth in Section 12.2 or Section 12.3 ("**Term**").

12.2 Termination. Xencor may terminate this Agreement or activities under any SOW associated with this Agreement without cause at any time during the Term of the Agreement on ninety (90) days prior written notice to Cardinal Health, subject to payment of any cancellation or other fees set forth in Article 3. Cardinal Health may terminate this Agreement without cause at any time during the Term of the Agreement on twenty-four (24) months prior written notice to Xencor; *provided, however*, that as of the effective date of any such termination Cardinal Health shall have completed all Deliveries required under all SOWs then in effect. Nothing contained in this Agreement shall be construed as requiring either party to enter into additional SOW's or to perform additional services other than such as are mutually agreed to by the parties in their sole discretions. [...\*\*\*...]

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12.3 Immediate Termination. Either party shall have the right to immediately terminate this Agreement effective on written notice to the other party if (A) the other party files a petition in bankruptcy, or enters into an agreement with its creditors; or applies for or consents to the appointment of a receiver or trustee, or makes an assignment for the benefit of creditors, or suffers or permits the entry of any order adjudicating it to be bankrupt or insolvent and such order is not discharged within thirty (30) days; or (B) if the other party materially breaches any of the provisions of this Agreement, and such breach is not cured within thirty (30) days after the giving of written notice of such breach to the breaching party.

12.4 Effect of Termination. Expiration or termination of this Agreement shall be without prejudice to any rights or obligations that accrued to the benefit of either party prior to such expiration or termination. In the event that this Agreement or any SOW is terminated, Xencor shall pay Cardinal Health for all Services performed in accordance with the applicable SOW up to the date of termination plus any additional amounts due pursuant to Section 3.1E, and will reimburse Cardinal Health for all costs and expenses incurred, and all non-cancelable commitments made, in the performance of Services pursuant to a SOW.

12.5 Second Source. Subject to the requirements of Section 7.3, in the event that Xencor wishes to manufacture, or have manufactured any Products after this Agreement expires or is terminated for any reason (other than due to Xencor's material breach), Cardinal Health shall, at Xencor's cost and expense, cooperate and participate with Xencor or its designee in enabling Xencor or its designee to perform such manufacturing. Such cooperation by Cardinal Health shall include providing to Xencor or its designee a copy of all manufacturing data and information generated during the performance of the Services as reasonably necessary or appropriate to make and have made Products; *provided, however*, that any such data, know how, technology or information that is Cardinal Health Intellectual Property or Cardinal Health Confidential Information shall continue to remain and be treated as such, but it may be disclosed to any bona fide designee of Xencor pursuant to a written agreement containing confidentiality, non-use and intellectual property provisions substantially similar to the ones set forth herein.

## ARTICLE 13 NOTICE

All notices and other communications hereunder shall be in writing and shall be deemed given: (A) when delivered personally; (B) when delivered by facsimile transmission (receipt verified); (C) when received or refused, if mailed by registered or certified mail (return receipt requested), postage prepaid; or (D) when delivered if sent by express courier service, to the parties at the following addresses (or at such other address for a party as shall be specified by like notice; provided, that notices of a change of address shall be effective only upon receipt thereof):

To Xencor: Xencor, Inc.  
111 W. Lemon Ave.  
Monrovia, CA 91016  
Attention: Senior Vice President, Business Development  
Facsimile: (626) 256-3562

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With a copy to: Xencor, Inc:  
111 W. Lemon Ave.  
Monrovia, CA 91016  
Attention: Vice President, Intellectual Property  
Facsimile: (626) 256-3760

To Cardinal Health: Cardinal Health PTS, LLC  
8137 Forsythia Street  
Middleton, Wisconsin 53562  
Attention: President  
Facsimile: (608) 824-9930

With a copy to: Cardinal Health, Inc.  
7000 Cardinal Place  
Dublin, Ohio 43017  
Attention: Associate General Counsel,



**ARTICLE 14**  
**MISCELLANEOUS**

14.1 Entire Agreement; Amendments. This Agreement, Exhibit A hereto, all SOWs, the Quality Agreement, and any amendments to any of the foregoing, constitute the entire understanding between the parties and supersede any contracts, agreements or understanding (oral or written) of the parties with respect to the subject matter hereof including, without limitation, the Letter of Intent, dated November 30, 2004, which Letter of intent (including the Project Plan and Quotation attached thereto) is hereby terminated in its entirety. No term of this Agreement may be amended, except upon written agreement of both parties, unless otherwise provided in this Agreement.

14.2 Captions. The captions in this Agreement are for convenience only and are not to be interpreted or construed as a substantive part of this Agreement.

14.3 Further Assurances. The parties agree to execute, acknowledge and deliver such further instruments and to take all such other incidental acts as may be reasonably necessary or appropriate to carry out the purpose and intent of this Agreement.

14.4 No Waiver. Failure by either party to insist upon strict compliance with any term of this Agreement in any one or more instances will not be deemed to be a waiver of its rights to insist upon such strict compliance with respect to any subsequent failure.

14.5 Severability. If any term of this Agreement is declared invalid or unenforceable by a court or other body of competent jurisdiction, the remaining terms of this Agreement will continue in full force and effect.

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14.6 Independent Contractors. The relationship of the parties is that of independent contractors, and neither party will incur any debts or make any commitments for the other party, except to the extent expressly provided in this Agreement. Nothing in this Agreement is intended to create or will be construed as creating between the parties the relationship of joint ventures, co-partners, employer/employee or principal and agent.

14.7 Successors and Assigns. This Agreement will be binding upon and inure to the benefit of the parties, their successors and permitted assigns. Neither party may assign this Agreement, in whole or in part, without the prior written consent of the other party, except that either party may, without the other party's consent, assign this Agreement to an Affiliate or to a successor to substantially all of the business or assets of the assigning company to which this Agreement relates (or the assigning company's business unit responsible for performance under this Agreement), whether by acquisition, merger, sale of stock, sale of assets, change of control or otherwise.

14.8 Governing Law. This Agreement shall be governed by and construed under the laws of the State of Ohio, excluding its conflicts of law provisions. The United Nations Convention on Contracts for the International Sale of Goods shall not apply to this Agreement.

14.9 Alternative Dispute Resolution. If any Dispute arises between the parties, such Dispute shall be presented to the respective presidents or senior executives of Cardinal Health and Xencor for their consideration and resolution for a period of up to thirty (30) days. If such parties cannot reach a resolution of the Dispute within such period, then at either party's request (the "**Requesting Party**"), such Dispute shall be resolved by binding alternative dispute resolution in accordance with the then existing commercial arbitration rules of CPR Institute for Dispute Resolution, 366 Madison Avenue, New York, NY 10017, and judgment on the arbitration award may be entered in any court having jurisdiction thereof; *provided, however*, that no Dispute concerning the validity or infringement of any Intellectual Property of either party shall be subject to the provisions of this Section 14.9. Any such arbitration shall be conducted before a panel of three neutral and experienced arbitrators, one chosen by Cardinal Health, one chosen by Xencor and the third chosen by the foregoing two arbitrators. The parties shall be entitled to conduct reasonable discovery, within limitations to be established by the arbitrators. Arbitration shall be conducted in the jurisdiction of the non-Requesting Party. The arbitrators shall have no authority to award punitive or any other type of damages not measured by a party's compensatory damages. Except to the extent necessary to confirm an award or as may be required by law, neither a party nor any arbitrator may disclose the existence, content; or results of an arbitration without the prior written consent of both parties. In no event shall an arbitration be initiated after the date when commencement of a legal or equitable proceeding based on the dispute, controversy or claim would be barred by the applicable Ohio statute of limitations. Each party shall bear its own attorneys' fees, costs and disbursements arising out of the arbitration, and shall pay an equal share of the fees and costs of the arbitrators; *provided, however*, that the arbitrators shall be authorized to determine whether a party is the prevailing party, and if so, to award to that prevailing party reimbursement for its reasonable attorneys' fees, costs and disbursements (including, for example, expert witness fees and expenses, photocopy charges, travel expenses, etc.) and/or the, fees and costs of the arbitrators. Each party shall fully perform and satisfy the arbitration award within fifteen (15) days of the service of the award. By agreeing to this binding arbitration provision, the parties understand that they are waiving certain rights and protections which may otherwise be available if a dispute

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between the parties were determined by litigation in court, including, without limitation, the right to seek or obtain certain types of damages precluded by this provision, the right to a jury trial, certain rights of appeal and a right to invoke formal rules of procedure and evidence. Notwithstanding the foregoing provisions of this Section 14.9, each party acknowledges and agrees that, due to the unique and valuable nature of the other party's Intellectual Property and Confidential Information, there can be no adequate remedy at law for any breach by such party of the provisions of this Agreement, that any such breach may result in irreparable harm to the other party for which monetary damages would be inadequate to compensate such party and that the other party shall have the right, in addition to any other rights available under applicable law, to obtain from any court of competent jurisdiction injunctive relief to restrain any breach or threatened breach of, or otherwise to specifically enforce, any covenant or obligation of such party under such provisions without the necessity of posting any bond or security.

14.10 Counterparts. This Agreement may be executed in one or more counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument. Any photocopy, facsimile or electronic reproduction of the executed Agreement shall constitute an original.

14.11 Publicity. Neither party will make any press release or other public disclosure regarding this Agreement or the transactions contemplated hereby without the other party's express prior written Consent, except as required under applicable law or by any governmental agency, in which case the party required to make

the press release or public disclosure shall use commercially reasonable efforts to obtain the approval of the other party as to the form, nature and extent of the press release or public disclosure prior to issuing the press release or making the public disclosure.

14.12 **Survival.** The rights and obligations of the parties shall continue under Articles 1 (Definitions), 6 (Confidentiality), 7 (Intellectual Property), 9 (Indemnification), 10 (Limitations of Liability), 11 (Insurance), to the extent expressly stated therein, 13 (Notice), 14 (Miscellaneous) and Sections 12.4 (Effect of Termination) and 12.5 (Second Source), notwithstanding expiration or termination of this Agreement.

14.13 **Force Majeure.** Except as to payments required under this Agreement, neither party shall be liable in damages for; nor shall this Agreement be terminable or cancelable by reason of any delay or default in such party's performance hereunder if such default or delay is caused by events beyond such party's reasonable control, including, but not limited to, acts of God, regulation or law or other action or failure to act of any government or agency thereof, war or insurrection, civil commotion, destruction of production facilities or materials by earthquake, fire, flood or storm, labor disturbances, epidemic, or failure of suppliers, public utilities or common carriers; *provided, however*, that the party seeking relief hereunder shall immediately notify the other party of such cause(s) beyond such party's reasonable control. The party that may invoke this Section 14.13 shall use all reasonable endeavors to reinstate its ongoing obligations to the other party. If the cause(s) shall continue unabated for one hundred eighty (180) days, then both parties shall meet to discuss and negotiate in good faith what modifications to this Agreement should result from this force majeure.

**IN WITNESS WHEREOF**, the parties have caused their duly authorized representative to execute this Agreement effective as of the date first written above.

**CARDINAL HEALTH PTS, LLC**

**XENCOR, INC.**

By: /s/ Paul M. Weiss  
Name: Paul M. Weiss, PhD  
Its: President, Gala Biotech business unit

By: /s/ Bassil Dahiyat  
Name: Bassil Dahiyat, PhD  
Its: President & CEO

\*\*\*Text Omitted and Filed Separately  
with the Securities and Exchange Commission.  
Confidential Treatment Requested  
Under 17 C.F.R. Sections 200.80(b)(4)  
and Rule 406 of the Securities Act of 1933, as amended.

## CROSS-LICENSE AGREEMENT

This **CROSS-LICENSE AGREEMENT** (this “**Agreement**”) is made as of December 19, 2012 (the “**Effective Date**”) by and between **MEDIMMUNE, LLC** a limited liability company organized under the laws of Delaware, U.S.A., having a principal place of business at One MedImmune Way, Gaithersburg, MD 20878 (“**MedImmune**”), and **XENCOR, INC.**, a corporation organized under the laws of the state of Delaware, U.S.A, having a principal place of business at 111 West Lemon Avenue, Monrovia, California 91016, U.S.A. (“**Xencor**”).

### BACKGROUND

**A.** Xencor and MedImmune have each developed and/or acquired certain technology and patent positions relating to certain engineered protein Fcs containing specific mutations relative to wild type.

**B.** Each Party wishes to receive a royalty-free license from the other Party, and to grant a royalty-free license to the other Party, within the respective scopes of patents and license rights provided for in detail below.

**NOW, THEREFORE**, the Parties, intending to be legally bound, hereby agree as follows:

### ARTICLE 1

#### DEFINITIONS

The following initially capitalized terms have the following meanings as used in this Agreement:

**1.1** “**Affiliate**” means any corporation, company, firm, partnership or other entity that directly or indirectly controls, is controlled by or is under common control with either Party to this Agreement. For purposes of this definition, “control” means the ownership, directly or indirectly, of fifty percent (50%) or more of the issued share capital or shares of stock entitled to vote for the election of directors, or the legal power to direct or cause the direction of the general management and policies of the entity.

**1.2** “**Antibody License Notice**” shall have the meaning given to it in Section 2.1(c)(iii).

**1.3** “**Available Target**” means any target that is not an Unavailable Target.

**1.4** “**Business Day**” means any day that is not a Saturday or Sunday or a federal holiday in the United States.

**1.5** “**CDR**” means a complementarity-determining region of a protein.

**1.6** “**Confidential Information**” has the meaning given in Section 3.1.

**1.7** “**Determination**” shall have the meaning given to it in Section 2.1(c)(vi).

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**1.8** “**Distributor**” means any entity that a Party or its Affiliate grants the right to sell a Licensed Product that benefits from a license under this Agreement, other than a Sublicensee.

**1.9** “**Expert**” shall mean a person who is independent of MedImmune, Xencor and their respective Affiliates and independent of all other parties with an interest in the outcome of the Determination, who has suitable knowledge and experience in biotechnology licensing contracts to perform the activities set forth in Section 2.1(c)(vi). If the process of Section 2.1(c)(vi) is invoked, then the Expert shall be proposed by MedImmune, and subject to Xencor’s consent, which consent shall not be unreasonably withheld or delayed.

**1.10** “**FDA**” means the U.S. Food and Drug Administration or its successor.

**1.11** “**Fc**” shall mean the Fc fragment of an antibody (meaning, e.g., IgG<sub>1</sub> from residue 230 (or the analogous residue in any other IgG heavy chain) to the carboxy terminus thereof, where the sequence numbering is defined using the EU numbering system (Edelman, GE, et al., Proceedings of the National Academy of Sciences USA, vol. 63, p. 78, 1969) as applied in the Kabat antibody sequence database, and any fragment or portion thereof), including both naturally occurring such fragments, naturally occurring variants of such fragments, and non-naturally occurring variants of such fragments.

**1.12** “**Licensed Patent**” means a MedImmune Patent or a Xencor Patent.

**1.13** “**Licensed Product**” means a Licensed-to-MedImmune Product or a Licensed-to-Xencor Product.

**1.14** “**Licensed-to-MedImmune Product**” means (a) any Licensed-to- MedImmune Protein, and (b) all products containing a Licensed-to-MedImmune Protein. MedImmune shall have the right to pursue, as Licensed-to-MedImmune Products, pharmaceutical combination products that combine a Licensed-to- MedImmune Protein with another protein or active pharmaceutical ingredient, however, if the other protein or active pharmaceutical ingredient is separately proprietary to Xencor or its Affiliate, Xencor grants no license under this Agreement for such other protein or active pharmaceutical ingredient.

**1.15** “**Licensed-to-MedImmune Protein**” means an amino acid sequence that has been designated as a Licensed-to-MedImmune Protein in accordance with Section 2.1(c) (i.e., by acceptance or required acceptance under Section 2.1(c)(iv)). Such amino acid sequence may be covalently or otherwise linked to another chemical entity (for example (but without limitation), in the case of an antibody-drug conjugate), if, as, and to the extent disclosed in the MedImmune notice electing a commercial license thereto under Section 2.1(c)(ii). For the avoidance of doubt, [...\*\*\*...] to be a Licensed-to-MedImmune Protein.

**1.16** “**Licensed-to-Xencor Product**” means (a) any Licensed-to-Xencor Protein, and (b) all products containing any Licensed-to-Xencor Protein. Xencor shall have the right to pursue, as Licensed-to-Xencor Products, pharmaceutical combination products that combine a Licensed-to-Xencor Protein with another protein or active pharmaceutical ingredient, however, if the other protein or active pharmaceutical ingredient is separately proprietary to MedImmune or its Affiliate, MedImmune grants no license under this Agreement for such other protein or active pharmaceutical ingredient.

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**1.17** “**Licensed-to-Xencor Protein**” means any amino acid sequence within the scope of, claimed in, or covered by the MedImmune Patents containing [...\*\*\*...]. Such amino acid sequence may be covalently or otherwise linked to another chemical entity (for example (but without limitation), in the case of an antibody-drug conjugate). It is understood and agreed, in accordance with the definition of MedImmune Patents, that if a claim of a Patent that is a MedImmune Patent would [...\*\*\*...], then Xencor will not have a license under this Agreement for such claim.

**1.18** “**MedImmune Patents**” means (a) U.S. Patent Serial Number [...\*\*\*...]; (b) all patent applications (including provisional and utility applications) to which it claims priority or claiming priority to or common priority with or based on any of the foregoing, including all divisionals, continuations, continuations-in-party, patents of addition and substitutions of any of the foregoing; (c) all patents issued or issuing on any of the foregoing, and all reissues, reexaminations, renewals and extensions of any of the foregoing; (d) all counterparts to the foregoing in other countries; and (e) all Supplementary Protection Certifications, restoration of patent term and other similar rights of MedImmune or its Affiliates based on any of the foregoing; and (f) all Patents owned or controlled by MedImmune or its Affiliates at any time during the Term of this Agreement that claim [...\*\*\*...]. If a claim of a Patent that is a MedImmune Patent would still read on an [...\*\*\*...], then notwithstanding the foregoing definition of MedImmune Patents, Xencor will not have a license under this Agreement for such claim and such claim shall be excluded from the definition of MedImmune Patents.

**1.19** “**Nominated Target**” shall have the meaning given to it in Section 2.1(c)(i).

**1.20** “**Party**” means MedImmune or Xencor.

**1.21** “**Patent**” means any patent application or patent anywhere in the world, including all of the following kinds: provisional, utility, divisional, continuation, continuation-in-part, and substitution applications; and utility, re-issue, re-examination, renewal and extended patents, and patents of addition, and any Supplementary Protection Certificates, restoration of patent terms and other similar rights.

**1.22** “**Research Term**” means the time period from the Effective Date until the earlier of (a) expiry of the Term, or (b) the date upon which MedImmune’s license as to a [...\*\*\*...] Licensed-to-MedImmune Protein becomes effective under Section 2.1(b).

**1.23** “**Reservation Period**” shall have the meaning given to it in Section 2.1

**1.24** “**Reserved Target**” shall have the meaning given to it in Section 2.1

**1.25** “**Sublicensee**” means a Third Party to which a Party or its Affiliate grants a sublicense under such Party’s license under this Agreement, or a sub-sublicensee thereof.

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**1.26** “**Target Option Notice**” shall have the meaning given to it in Section 2.1(c)(i).

**1.27** “**Term**” shall have the meaning given to it in Section 7.1.

**1.28** “**Territory**” means worldwide.

**1.29** “**Third Party**” means any entity other than MedImmune, Xencor, or an Affiliate of either of them.

**1.30** [...\*\*\*...]

**1.31** “**Unavailable Target**” means any target which Xencor, is: (a) engaged in research, whether conducted internally or through a collaboration, with respect to such target and/or (b) contractually obligated on an exclusive basis with a Third Party in respect of such target that would preclude granting MedImmune a reservation for such target. The targets listed in Exhibit A are Unavailable Targets as of the Effective Date.

**1.32** “[...\*\*\*...]” means MedImmune’s counterparty to the [...\*\*\*...] License.

**1.33** “[...\*\*\*...] License” means [...\*\*\*...].

**1.34** “[...\*\*\*...]” means [...\*\*\*...].

**1.35** “Xencor Patents” means (a) the patent applications and patents listed in Exhibit B that relate to the [...\*\*\*...]; (b) all patent applications (including provisional and utility applications) to which any of the foregoing claims priority or claiming priority to or common priority with or based on any of the foregoing, including all divisionals, continuations, continuations-in-party, patents of addition and substitutions of any of the foregoing; (c) all patents issued or issuing on any of the foregoing, and all reissues, reexaminations, renewals and extensions of any of the foregoing; (d) all counterparts to the foregoing in other countries; (e) all Supplementary Protection Certifications, restoration of patent term and other similar rights of Xencor or its Affiliates based on any of the foregoing and (f) all Patents owned or controlled by Xencor or its Affiliates at any time during the Term of this Agreement that claim [...\*\*\*...]

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**1.36** [...\*\*\*...], then notwithstanding the foregoing definition of Xencor Patents, MedImmune will not have a license under this Agreement for such claim and such claim shall be excluded from the definition of Xencor Patents.

## ARTICLE 2

### RIGHTS GRANTED

#### 2.1 Licenses to MedImmune.

**(a) Research License.** Xencor hereby grants to MedImmune a worldwide, non-exclusive, royalty-free license under the Xencor Patents during the Research Term in the Territory, [...\*\*\*...] into longer amino acid sequences in order to research and discover proteins, only at stages of research and discovery that are earlier-stage than IND-enabling toxicology studies, for the purpose of assessing MedImmune’s interest in obtaining commercial licenses with respect thereto under Section 2.1(b). MedImmune may work on any number of proteins under this research license. Notwithstanding the foregoing, MedImmune’s research license under this Section shall exclude the right to research and discover proteins that bind (i) any target listed in Exhibit A, and/or (ii) from and after the date of Xencor’s written notice with respect thereto, any other target for which Xencor notifies MedImmune in writing that it is an Unavailable Target; Xencor may provide such written notice from time to time as to any target(s) that are not Reserved Targets at the time of Xencor’s notice, and otherwise at that time meet the definition of Unavailable Target.

**(b) Commercial Licenses.** Effective upon the designation of each of the [...\*\*\*...] Licensed-to-MedImmune Proteins as such under Section 2.1(c), Xencor hereby grants to MedImmune a worldwide, exclusive, royalty-free, fully-paid, perpetual, irrevocable license under the Xencor Patents in all fields in the Territory, to research, have researched, develop, have developed, make, have made, use, have used, sell, have sold, offer to sell, import and/or export such Licensed-to-MedImmune Protein and the Licensed-to-MedImmune Products that contain it. Such license grant may become effective as to a [...\*\*\*...] Licensed-to-MedImmune Proteins only.

**(c) Process: Target Inquiries and Sequence Notifications.**

**(i)** At any time during the Research Term, MedImmune may in a written request to Xencor (each a “Target Option Notice”) request that Xencor grant MedImmune a twenty four (24) month reservation (“Reservation Period”) in relation to an identified target (“Nominated Target”). Xencor shall determine whether, as of the date of the Target Option Notice, such Nominated Target is an Available Target or Unavailable Target and shall, within twenty (20) Business Days of receipt of the Target Option Notice, notify MedImmune accordingly. Up to and including [...\*\*\*...] Nominated Targets may be reserved at any time by MedImmune (each a “Reserved Target”).

**(ii)** In the event that Xencor notifies MedImmune that a Nominated Target is an Available Target, Xencor agrees that it shall be under a duty to grant MedImmune the license specified in Section 2.1(b) if MedImmune makes a request pursuant

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to Section 2.1(c)(iii) for such a license during the Reservation Period and provided that the Xencor is not precluded from granting such a license pursuant to Section 2.1(c)(iv).

**(iii)** In respect of any Reserved Target, at any time prior to the expiration of the Reservation Period for such Reserved Target, MedImmune may notify Xencor in writing of an amino acid sequence containing a [...\*\*\*...] that MedImmune wishes to designate as a Licensed-to-MedImmune Protein (“Antibody License Notice”). Such Antibody License Notice shall state the full amino acid sequence (which may include chemical modifications) in its entirety, the stage of the most advanced research and/or development work that has been conducted on such sequence, and the applicable Reserved Target. MedImmune shall only have the right to provide an Antibody License Notice with respect to a Reserved Target during its Reservation Period; any purported Antibody License Notice that is for a protein that binds a target other than a Reserved Target during its applicable Reservation Period shall not be effective under this Section as an Antibody License Notice.

**(iv)** Within thirty (30) Business Days after receipt of any Antibody License Notice, Xencor shall make a determination and respond in writing to MedImmune accordingly, whether it accepts the designation of the applicable amino acid sequence as a Licensed-to-MedImmune Protein. Xencor shall be required to accept such designation unless: (A) granting the license of Section 2.1(b) to MedImmune with respect to such amino acid sequence would conflict with a Third- Party agreement of Xencor or its Affiliates that was executed prior to the date of the relevant Antibody License Notice; (B) the amino acid sequence contains any Fc mutation that is proprietary to Xencor, that makes the Fc of MedImmune’s nominated amino acid sequence fall outside of the [...\*\*\*...] definition; (C) such amino acid sequence corresponds to or contains the amino acid sequence of a CDR described, claimed or covered in the Xencor Patents or any other Patent owned or controlled by Xencor and its Affiliates; and/or (D) there are already [...\*\*\*...] Licensed-to-MedImmune Proteins that have already been accepted as such under this Section 2.1(c)(iv).

**(v)** If the designation is accepted under Section 2.1(c)(iv), then the amino acid sequence in the notice shall be a Licensed-to-MedImmune Protein. The maximum number of Licensed-to-MedImmune Proteins under this Agreement shall be [...\*\*\*...]. Such up-to [...\*\*\*...] Licensed-to-

MedImmune Proteins may be directed against the same target as each other, or against different targets.

(vi) Within twenty (20) Business Days after notice is given by Xencor to MedImmune of a determination that a Nominated Target is an Unavailable Target pursuant to Section 2.1(a) or Section 2.1(c)(i) or that a Licensed-to-MedImmune Protein has not been accepted pursuant to Section 2.1(iv) (individually a "Determination") MedImmune may notify Xencor that it wishes to appoint an Expert to make such enquiries of Xencor as may be reasonably necessary for the Expert to be able to confirm that the Determination has been correctly made by Xencor. Xencor shall provide such information to the Expert as the Expert may reasonably determine is required in order to make such confirmation. For the avoidance of doubt, the Expert shall not be entitled (unless Xencor consents) to enter Xencor premises in order to carry out its enquiries, shall only provide the confirmation to MedImmune on a "Yes/No" basis whether the Determination has been correctly made by Xencor, and shall not give or be obliged to give MedImmune any other information obtained from Xencor in respect of the Determination. The Expert shall, prior to making any enquiries of Xencor enter into a confidential disclosure agreement with Xencor. The Expert shall complete its investigations and provide the confirmation to MedImmune (with a copy to

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Xencor) within thirty (30) Business Days after appointment by MedImmune and payment of the Expert's fee shall be conditioned on such delivery being timely made. If the Expert provides notice that he or she cannot complete the analysis because Xencor has failed without good reason to provide any information reasonably requested as provided above, then Xencor shall have no more than ten (10) Business Days, to provide the information and the Expert shall then have no more than ten (10) Business Days after the information is provided to the Expert to evaluate the information and make a determination. If the Expert appointed by MedImmune hereunder decides that Xencor correctly applied the Determination, MedImmune shall be responsible for the Expert's fees and Xencor shall thereafter have no obligations to MedImmune in respect of such Nominated Target or Licensed-to-MedImmune Protein, as applicable. If the Expert decides that Xencor did not correctly carry out the Determination then such Nominated Target shall cease to be an Unavailable Target pursuant to Section 2.1(a), become a Reserved Target pursuant to Section 2.1(c)(i) or the license in Section 2.1(b) shall be granted with respect to such Licensed-to-MedImmune Protein, as applicable, and Xencor shall be responsible for the Expert's fees.

## 2.2 Sublicensing by MedImmune.

(a) **Of Research License.** The research license of Section 2.1(a) shall be sublicensable by MedImmune to its Affiliates, but excluding joint ventures and contractual joint ventures. Such research license shall not otherwise be sublicensable.

(b) **Of Commercial License.** MedImmune shall have the right to sublicense its licenses in Section 2.1(b) through one (1) or more tiers of sublicensees, without the need to obtain consent from Xencor. Each sublicense shall be subject to and consistent with the terms and conditions of this Agreement.

2.3 **License to Xencor.** MedImmune hereby grants to Xencor a worldwide, non-exclusive, royalty-free license under MedImmune's (and its Affiliates') interest in the MedImmune Patents in all fields in the Territory to research, have researched, develop, have developed, make, have made, use, have used, sell, have sold, offer to sell, import and/or export Licensed-to-Xencor Proteins and Licensed-to-Xencor Products and a worldwide, non-exclusive, royalty-free sublicense under the [...\*\*\*...] License to the MedImmune Patents in all fields in the Territory, to research, have researched, develop, have developed, make, have made, use, have used, sell, have sold, offer to sell, import and/or export Licensed-to-Xencor Proteins and Licensed-to-Xencor Products subject to the limitations set forth in the [...\*\*\*...] License. To avoid doubt, the license from MedImmune of its (and its Affiliates') interest in MedImmune Patents includes their co-ownership interest in those MedImmune Patents that are co-owned with [...\*\*\*...].

2.4 The sublicense granted with respect to MedImmune Patents is, to the extent of [...\*\*\*...]s co-ownership interest in such Patents, a sublicense under the license granted to MedImmune under the [...\*\*\*...] License and the rights and licenses sublicensed under the [...\*\*\*...] License are subject to and limited by the terms and conditions of this Agreement and are subject to and limited by the terms, conditions and restrictions of the [...\*\*\*...] License; and Xencor acknowledges and agrees that the scope of such granted sublicense is no greater than the license granted to MedImmune under the [...\*\*\*...] License.

2.5 Xencor hereby agrees to be bound by all of the terms and conditions of the [...\*\*\*...] License and further agrees to do all such acts and all such things as may be necessary or

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desirable to enable MedImmune to comply with the [...\*\*\*...] License in relation to Xencor's receipt or the exercise of its sublicense thereunder, including, without limitation:

(a) keeping complete and accurate records pursuant to Section 5.3 of the [...\*\*\*...] License; and

(b) providing reports pursuant to Section 5.4 of the [...\*\*\*...] License.

2.6 **Sublicensing by Xencor.** Xencor shall have the right to sublicense its license in Section 2.3 through one (1) or more tiers of sublicensees, without the need to obtain consent from MedImmune. Each sublicense shall be subject to and consistent with the terms and conditions of this Agreement and — to the extent granting a sub-sublicense of MedImmune's license from [...\*\*\*...] in the [...\*\*\*...] License — the terms of the [...\*\*\*...] License. (If the [...\*\*\*...] License is alleged at any time not to allow sub- sublicense, then if requested in writing by Xencor, MedImmune shall grant a direct sublicense of the [...\*\*\*...] interest in the co-owned MedImmune Patents, to Xencor's sublicensee under this Agreement (i.e., Xencor's sublicensee under the remainder of the interests in the MedImmune Patents); such direct sublicense shall be for no additional consideration beyond the consideration owed by Xencor in accordance with this Agreement and for purposes of Xencor's payment and other obligations under this Agreement any such direct sublicense shall be deemed to be part of and be within the sublicense to Xencor.)

2.7 **No Change in Ownership.** Nothing in this Agreement changes the ownership of any Patents.

**2.8 No Prosecution Rights.** Neither Party shall have any right to prosecute the Licensed Patents owned or controlled by the other Party (or its Affiliate), nor to require such other Party (or its Affiliate) to do so.

**2.9 No Enforcement Rights.** Neither Party shall have any right to enforce the Licensed Patents owned or controlled by the other Party (or its Affiliate), nor to require such other Party (or its Affiliate) to do so.

**2.10 No Implied Licenses.** Each Party acknowledges that the rights and licenses granted under this Article and elsewhere in this Agreement are limited to those expressly and explicitly granted in this Agreement, and are subject to the limitations as to scope set forth in this Agreement (including limitations as to what intellectual property is licensed, and for which activities, amino acid sequences, and products the license is granted). Accordingly, except for the rights expressly granted under this Agreement, no right, title, or interest of any nature whatsoever is granted whether by implication, estoppel, reliance, or otherwise, by Xencor to MedImmune, or by MedImmune to Xencor. Without limitation, this means that under this Agreement neither Party licenses to the other Party any target Patents, any Patents to the extent reading on specific CDR sequence(s), or any protein sequence other than a Licensed- to-MedImmune Protein or a Licensed-to-Xencor Protein (respectively).

**2.11 Release; Covenants.** Each Party hereby releases the other Party from any and all infringement claims of the releasing Party and its Affiliates and for any and all infringement liability to the releasing Party and its Affiliates, in each case that relates to activities by the released Party or its Affiliates prior to the Effective Date, which activities would be licensed under this Agreement had they occurred after the Effective Date instead of before it. Such release includes all such infringement claims and infringement liabilities,

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of every nature, kind, description and character, whether asserted or unasserted, whether known or unknown, suspected or unsuspected, foreseen or unforeseen, real or imaginary, actual or potential, in law or in equity; accordingly, each Party hereby waives any and all rights in relation to such waiver under California Civil Code Section 1542 (and any corresponding laws in other jurisdictions), which reads: "A general release does not extend to claims which the creditor does not know or suspect to exist in his or her favor at the time of executing the release, which if known by him or her must have materially affected his or her settlement with the debtor." Each Party hereby covenants not to sue the other Party for infringement or alleged infringement of the MedImmune Patents or the Xencor Patents prior to the Effective Date within the scope of a license to such other Party under this Agreement. It is understood and agreed that this Agreement shall not constitute evidence or admission of validity, scope, coverage, or any other matter relating to the MedImmune Patents and/or the Xencor Patents; each Party hereby covenants that it and its Affiliates shall not use or offer this Agreement as evidence of, or allege that it constitutes an admission of, validity, scope, coverage, or any other matter relating to the MedImmune Patents and/or the Xencor Patents in relation directly or indirectly to any infringement suit or other proceeding relating to any such Patent.

### ARTICLE 3

#### CONFIDENTIALITY; PUBLICITY

**3.1 General.** Any and all information disclosed or submitted in writing (including all information contained in any Target Option Notice or Antibody License Notice, and all development and financial reports provided by Xencor or its sublicensee to enable MedImmune's compliance with the [...\*\*\*...] License) or in other tangible form marked confidential — or if disclosed orally, that is indicated to be confidential at the time of disclosure and confirmed in writing as such within twenty (20) Business Days after initial disclosure — to one Party by the other Party under this Agreement is the "**Confidential Information**" of the disclosing Party. Each Party shall receive and maintain the other Party's Confidential Information in strict confidence. Neither Party shall disclose any Confidential Information of the other Party to any Third Party except that MedImmune may disclose Confidential Information of Xencor in order to comply with MedImmune's obligations under the [...\*\*\*...] License. Neither Party shall use the Confidential Information of the other Party for any purpose other than as required to perform or exercise its rights hereunder. Each Party may disclose the other Party's Confidential Information to the receiving Party's employees and contractors or the employees and contractors of the receiving Party's Affiliate requiring access thereto for the purposes of this Agreement, *provided, however*, that prior to making any such disclosures, each such person shall be bound by written agreement to maintain Confidential Information in confidence and not to use such information for any purpose other than in accordance with the terms and conditions of this Agreement. Each Party agrees to take all steps necessary to ensure that the other Party's Confidential Information shall be maintained in confidence including such steps as it takes to prevent the disclosure of its own proprietary and confidential information of like character. Each Party shall take all steps necessary to ensure that its Affiliates and all relevant personnel shall comply with the terms and conditions of this Agreement. The foregoing obligations of confidentiality and non- use shall survive, and remain in effect for a period of ten (10) years from, the termination or expiration of this Agreement in accordance with Article 7.

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**3.2 Exclusions from Nondisclosure Obligation.** The nondisclosure and nonuse obligations in Section 3.1 shall not apply to any Confidential Information to the extent that the receiving Party can establish by competent written proof that it:

- (a) at the time of disclosure is publicly known;
- (b) after disclosure, becomes publicly known by publication or otherwise, except by breach of this Agreement by such Party;
- (c) was in such Party's possession in documentary form at the time of disclosure hereunder;
- (d) is received by such Party from a Third Party who has the lawful right to disclose the Confidential Information and who shall not have obtained the Confidential Information either directly or indirectly from the disclosing Party; or
- (e) is independently developed by such Party (i.e., without reference to Confidential Information of the disclosing Party).

**3.3 Required Disclosures.** If either Party is required, pursuant to a governmental law, regulation or order, to disclose any Confidential Information of the other Party, the receiving Party (i) shall give whenever possible at least five (5) Business Days advance written notice to the disclosing Party, or a smaller amount if five (5) Business Days is not possible, (ii) shall make a reasonable effort to assist the other Party to obtain a protective order requiring that the Confidential Information so disclosed be used only for the purposes for which the law or regulation required and (iii) shall use and disclose the Confidential Information solely to the extent required by the law or regulation.

**3.4 Terms of Agreement.** The terms of this Agreement are the Confidential Information of both Parties. However, each Party shall be entitled to disclose the terms of this Agreement under legally binding obligations of confidence and limited use to: legal, financial and investment banking advisors; and potential and actual investors, acquirors and licensees, Sublicensees, or Distributors doing diligence and counsel for the foregoing. In addition, if legally required, a copy of this Agreement may be filed by either Party with the United States Securities and Exchange Commission (or relevant ex-U.S. counterpart).

**3.5 Return of Confidential Information.** Promptly after the termination or expiration of this Agreement for any reason, each Party shall return to the other Party all tangible manifestations of such other Party's Confidential Information at that time in the possession of the receiving Party, except that one copy of the other Party's Confidential Information may be retained by counsel for compliance purposes.

**3.6 Publicity.** Neither Party shall originate any news release or other public announcements, written or oral, whether to the public or press, stockholders or otherwise, relating to this Agreement, including its existence, the subject matter to which it relates, performance under it or any of its terms, any amendment hereto or performances hereunder, without the prior written consent of the other Party, except for legally required disclosures after compliance with Section 3.3.

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## ARTICLE 4

### REPRESENTATIONS AND WARRANTIES

**4.1 Authority.** Each of Xencor and MedImmune hereby represents and warrants to the other of them that the representing and warranting Party is duly organized in its jurisdiction of incorporation; that the representing and warranting Party has the full power and authority to enter into this Agreement; that this Agreement is binding upon the representing and warranting Party; that this Agreement has been duly authorized by all requisite corporate action within the representing and warranting Party; and that the entering into and performance of this Agreement by such Party does not and will not conflict with any agreement to which such Party is bound.

**4.2 By Xencor.** Xencor hereby represents and warrants to MedImmune that Xencor solely owns the Xencor Patents.

**4.3 By MedImmune.** MedImmune hereby represents and warrants to Xencor that MedImmune has the right to grant the license and sublicense set forth in Section 2.3 as applicable to each MedImmune Patent, and no MedImmune Patents are solely owned by [...\*\*\*...] (i.e., MedImmune or its Affiliate is at least a co-owner of all MedImmune Patents). The [...\*\*\*...] License is in full force and effect, MedImmune has not breached it, and MedImmune has received no notice of breach under the [...\*\*\*...] License.

**4.4 DISCLAIMER OF WARRANTIES.** OTHER THAN THE EXPRESS WARRANTIES OF SECTIONS 4.1, 4.2, AND 4.3, EACH PARTY DISCLAIMS ALL WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR THAT ANY PRODUCTS DEVELOPED OR LICENSED UNDER THIS AGREEMENT ARE FREE FROM THE RIGHTFUL CLAIM OF ANY THIRD PARTY, BY WAY OF INFRINGEMENT OR THE LIKE, OR THAT ANY XENCOR PATENTS WILL ISSUE OR BE VALID OR ENFORCEABLE.

## ARTICLE 5

### INDEMNIFICATION

**5.1 By Xencor.** Xencor hereby agrees to indemnify, defend and hold harmless (collectively, "Indemnify") MedImmune, its Affiliates, Sublicensees, and Distributors, and the directors, officers, agents and employees of each of the foregoing (collectively, "MedImmune Indemnitees") from and against any and all liability, loss, damage or expense (including without limitation reasonable attorneys fees) (collectively, "Losses") they may suffer as the result of Third-Party claims, demands and actions (collectively, "Third-Party Claims") arising out of or relating to (a) any breach of a representation or warranty made by Xencor under Article 4, (b) research, testing, development, manufacture, use, sale, distribution, offer for sale, import, export and/or other commercialization of Licensed-to-Xencor Proteins and/or Licensed-to-Xencor Products by or on behalf of Xencor or its Affiliates, Sublicensees or Distributors, except in each case to the extent of any Losses (i) attributable to the negligence or intentional misconduct of any MedImmune Indemnitee, or (ii) for which MedImmune is required to Indemnify Xencor pursuant to Section 5.2.

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**5.2 By MedImmune.** MedImmune hereby agrees to Indemnify Xencor, its Affiliates, Sublicensees, and Distributors, and the directors, officers, agents and employees (collectively, "Xencor Indemnitees") from and against any and all Losses they may suffer as the result of Third-Party Claims arising out of or relating to (a) any breach of a representation or warranty made by MedImmune under Article 4, (b) MedImmune's or its Affiliate's exercise of the research license in Section 2.1(a), and (c) research, testing, development, manufacture, use, sale, distribution, offer for sale, import, export and/or other commercialization of Licensed-to-MedImmune Proteins and/or Licensed-to-MedImmune Products by or on behalf of MedImmune or its Affiliates, Sublicensees or Distributors except in each case to the extent of any Losses (i) attributable to the negligence or intentional misconduct of any Xencor Indemnitee, or (ii) for which Xencor is required to Indemnify MedImmune pursuant to Section 5.1.

**5.3 Procedures.** Each of the foregoing agreements to Indemnify is conditioned on the relevant Xencor Indemnitees or MedImmune Indemnitees (i) providing prompt written notice of any Third-Party Claim giving rise to an indemnification obligation hereunder, (ii) permitting the indemnifying Party to assume full responsibility to investigate, prepare for and defend against any such Third-Party Claim, (iii) providing reasonable assistance in the defense of such claim at the indemnifying Party's reasonable expense, and (iv) not compromising or settling such Third-Party Claim without the indemnifying Party's advance



written consent. If the Parties cannot agree as to the application of the foregoing Sections 5.1 and 5.2, each may conduct separate defenses of the Third-Party Claim, and each Party reserves the right to claim indemnity from the other in accordance with this Article 5 upon the resolution of the underlying Third-Party Claim.

**5.4 Limitation of Liability.** EXCEPT TO THE EXTENT SUCH PARTY MAY BE REQUIRED TO INDEMNIFY THE OTHER PARTY UNDER THIS ARTICLE 5 (INDEMNIFICATION) OR AS REGARDS A BREACH OF A PARTY'S RESPONSIBILITIES PURSUANT TO ARTICLE 3 (CONFIDENTIALITY), NEITHER PARTY NOR ITS RESPECTIVE AFFILIATES SHALL BE LIABLE FOR ANY SPECIAL, INDIRECT, EXEMPLARY, CONSEQUENTIAL OR PUNITIVE DAMAGES HEREUNDER, WHETHER IN CONTRACT, WARRANTY, TORT, STRICT LIABILITY OR OTHERWISE.

## ARTICLE 6

### PAYMENTS

**6.1 Payments to MedImmune.** Xencor shall make payments to MedImmune pursuant to Section 5 of the [...] License and calculated according to the terms of the [...] License as applied to all activities, achievements and sales pursuant to Xencor's sublicense hereunder of [...] License's interest in those MedImmune Patents co-owned by MedImmune. Notwithstanding the foregoing, Xencor shall make payments pursuant to Section 5.1(c) of the [...] License within twenty (20) days of each milestone and payments pursuant to Section 5.1 (d) of the [...] License shall be due and payable by 1 February of each year so as to allow MedImmune to comply with the terms of the [...] License in relation to Xencor's sublicense.

To avoid doubt, Xencor shall be responsible only for the costs under the [...] License of the exercise of Xencor's sublicense, and shall not be responsible for costs under the [...] License of any other practice of the license of such agreement, including practice by MedImmune, its Affiliates, and any other of their sublicensees outside the scope of this

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Agreement (i.e., sublicensees other than Xencor and its sub-sublicensees). Furthermore, Xencor shall have no responsibility to make payment for patent prosecution or other costs under Section 5.5 of the [...] License. In addition, it is acknowledged by MedImmune that MedImmune shall have sole responsibility for any and all payments under Section 5.1(a) and 5.1(b) of the [...] License, whether paid in the past or required to be paid in the future; these Sections are redacted from the version of the [...] License that has been shared with Xencor and is appended to this Agreement.

**6.2 Method of payment.** All payments due to MedImmune under the terms of this Agreement shall be made to the bank account of MedImmune as notified by MedImmune to Xencor from time to time.

**6.3 [...] License Maintenance/Compliance.** MedImmune shall, until the expiration of the last Patent covered by the [...] License, comply fully with, maintain in full force and effect, and not without Xencor's written consent, such consent not to be unreasonably withheld or delayed, amend in any way that would be to the detriment of Xencor, the [...] License. Without limiting the generality of the foregoing, MedImmune shall promptly pay over to [...] those monies paid by Xencor to MedImmune under Article 6 of this Agreement, and shall promptly make reports to [...] under Section 5.4 of the [...] License, including the information provided by Xencor to MedImmune for the reports of such Section as required above. If MedImmune receives any notice of breach under the [...] License, it shall promptly notify Xencor in writing and keep Xencor apprised of the situation. Xencor shall have no responsibility for MedImmune's compliance with the [...] License outside of compliance relating to Xencor's sublicense; compliance outside the scope of Xencor's sublicense is MedImmune's sole responsibility.

## ARTICLE 7

### MISCELLANEOUS

**7.1 Term.** The term of this Agreement shall commence on the Effective Date and shall expire upon the expiration of the last to expire or cease to be pending of the claims (current and future) of the Licensed Patents (current and future).

**7.2 Non-Terminable Licenses.** Subject to Section 6.5 of the [...] License in respect of the sublicense of [...] License's interest granted by MedImmune to Xencor under this Agreement as it applies to Xencor's sublicense, the licenses granted to each Party under this Agreement shall not be terminable. Neither Party shall have any right to terminate this Agreement prior to its natural expiration under Section 7.1, under this Agreement, at law, or in equity. It is understood and agreed that even if the sublicense of [...] License's interest in the MedImmune Patents terminates, Xencor's license under MedImmune's ownership interest in the co-owned MedImmune Patents shall remain in full force and effect.

**7.3 Survival in All Cases.** Expiration or termination of this Agreement shall be without prejudice to or limitation on any other remedies available nor any accrued obligations of either Party. Sections 2.7 (No Change in Ownership), 2.8 (No Prosecution Rights), 2.9 (No Enforcement Rights), 2.10 (No Implied Licenses), 2.11 (Release; Covenants), and 4.4 (Disclaimer of Warranties) and Articles 1 (Definitions), 3 (Confidentiality; Publicity), 5 (Indemnification), 6 (Payments) (to the extent applicable to payment obligations having accrued while the sublicense of [...] License's rights was in effect), and 7 (Miscellaneous) shall survive any expiration or termination of this Agreement.

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**7.4 Independent Contractors.** The Parties shall perform their obligations under this Agreement as independent contractors. Nothing contained in this Agreement shall be construed to be inconsistent with such relationship or status. This Agreement and the Parties' relationship in connection with it shall not constitute, create or in any way be interpreted as a joint venture, fiduciary relationship, partnership or agency of any kind.

**7.5 Dispute Resolution.** If a dispute arises relating to the interpretation, performance or breach of this Agreement, the Parties will make senior executives of the Parties (for Xencor its CEO (or his designee having sufficient authority at the level of VP or above), and for MedImmune, a management representative having sufficient authority, at the level of VP or above) available for good faith discussion over a period of not less than thirty (30) Business Days. During such time period, each shall make a good faith attempt to resolve the matter without further legal recourse. If the dispute remains unresolved at the end of such thirty (30) Business Days, then either Party may seek a judicial resolution of the matter.

**7.6 Governing Law and Venue.** This Agreement shall be governed by and interpreted in accordance with the laws of Delaware without regard to its conflict of laws principles. Each Party hereby consents to the exclusive personal jurisdiction and exclusive venue of all federal courts located in Delaware, and waives all defenses it may have to such jurisdiction and venue, including the defenses that the court cannot assert personal jurisdiction over the defendant, and *forum non conveniens*.

**7.7 Entire Agreement.** This Agreement (including its Exhibits) sets forth all the covenants, promises, agreements, warranties, representations, conditions and understandings between the Parties with respect to the subject matter hereof and supersedes and terminates all prior agreements and understandings between the Parties with respect to such subject matter. No subsequent alteration, amendment, change or addition to this Agreement shall be binding upon the Parties unless reduced to writing and signed by the respective authorized officers of the Parties.

**7.8 Assignment.** Either Party may assign this Agreement in its entirety without the consent of the other Party: (a) to its Affiliate, or (b) to a Third Party that is the successor to all or substantially all of the Party's assets to which this Agreement relates, whether by merger, asset sale, or otherwise. This Agreement shall not otherwise be assignable, in whole or in part. Subject to the foregoing, this Agreement shall be binding upon and shall inure to the benefit of the Parties and their respective successors and permitted assigns. Any assignment of this Agreement not made in accordance with this Agreement is prohibited hereunder and shall be null and void.

**7.9 Legal Requirements.** If either Party is required to report to FDA or any of its counterparts safety information from the testing by or for entities with whom it has a contractual relationship, regarding an Fc contained in a protein developed by or for the other Party which Fc is also incorporated in a protein developed by or for the first Party, then the Parties shall reasonably cooperate to share, in confidence (but allowing for disclosures to FDA and its counterparts) the information legally required to be disclosed.

**7.10 Severability.** If one or more of the provisions in this Agreement are deemed unenforceable by law, then such provision shall be deemed stricken from this Agreement and the remaining provisions shall continue in full force and effect. However, if a Party's license is stricken from this Agreement, then the licenses to both Parties shall terminate.

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**7.11 Notices.** Any notice required or permitted to be given under this Agreement shall be in writing, shall specifically refer to this Agreement and shall be deemed to have been sufficiently given for all purposes if mailed by first class certified or registered mail, postage prepaid, delivered by express delivery service or personally delivered. Unless otherwise specified in writing, the mailing addresses of the Parties shall be as described below.

If to Xencor:

Xencor, Inc.  
111 West Lemon Avenue  
Monrovia, CA 91016  
USA  
Attn: President & CEO  
Fax: 626-256-3562

with required copies to:

The same address as above,  
Attn: CBO

Spiegelman Life Sciences, PC  
1459 Eighteenth St — PMB 309  
San Francisco, CA 94107  
Attn: Laura O. Spiegelman  
Facsimile: +1 415 520 2220

In the case of MedImmune:

MedImmune, LLC  
One MedImmune Way  
Gaithersburg  
MD, 20878  
Attention: General Counsel

**7.12 Construction.** This Agreement has been prepared jointly and shall not be strictly construed against either Party. Ambiguities, if any, in this Agreement shall not be construed against any Party, irrespective of which Party may be deemed to have authored the ambiguous provision.

**7.13 Drafting Convention.** In this Agreement, the words "includes," "including" and other conjugations of the verb "to include" shall be deemed followed by the phrase "without limitation" (and drawing no implication from the inconsistent actual inclusion or non-inclusion of such phrase in the text).

**7.14 Headings.** The headings for each article and section in this Agreement have been inserted for convenience of reference only and are not intended to limit or expand on, nor to be used to interpret, the meaning of the language contained in the particular article or section.

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**7.15 No Waiver.** Any delay in enforcing a Party's rights under this Agreement or any waiver as to a particular default or other matter shall not constitute a waiver of such Party's rights to the subsequent enforcement of its rights under this Agreement, excepting only as to an express written and signed waiver as to a particular matter for a particular period of time executed by an authorized officer of the waiving Party.

**7.16 Performance by Affiliates.** A Party may perform some or all of its obligations under this Agreement through Affiliate(s) or may exercise some or all of its rights under this Agreement through Affiliates. However, each Party shall remain responsible and be guarantor of the performance by its Affiliates and shall take reasonable steps to cause its Affiliates to comply with the provisions of this Agreement in connection with such performance. In particular and without limitation, all Affiliates of a Party that receive Confidential Information of the other Party pursuant to this Agreement shall be governed and bound by all obligations set forth in Article 3. A Party and its Affiliates shall be jointly and severally liable for their performance under this Agreement.

**7.17 Bankruptcy.** All rights and licenses granted under or pursuant to this Agreement by either Party to the other are and shall be deemed to be, for purposes of Section 365(n) of the U.S. Bankruptcy Code, licenses of rights to "intellectual property" as defined under Section 101(52) of the US. Bankruptcy Code. Each Party agrees that the other Party, as a licensee of such rights under this Agreement, shall retain and may fully exercise all of its rights and elections under the U.S. Bankruptcy Code. The Parties agree, without limiting the foregoing, that unless and until the debtor rejects this Agreement pursuant to applicable law, the debtor shall perform all of its obligations under this Agreement.

**7.18 Counterparts.** This Agreement may be executed in one or more identical counterparts, each of which shall be deemed to be an original, and which collectively shall be deemed to be one and the same instrument. In addition, signatures may be exchanged by facsimile or PDF.

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IN WITNESS WHEREOF, the Parties have by duly authorized persons executed this Agreement as of the date first written above.

XENCOR, INC.

MEDIMMUNE, LLC

By: /s/ Bassil Dahiyat

By: /s/ Bahija Fallal

Name: Bassil Dahiyat

Name: Bahija Fallal

Title: President and CEO

Title: Ex V.P.

Date: 19 December 2012

Date: 19 December 2012

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**EXHIBIT A**

Unavailable Targets as of the Effective Date

[...\*\*\*...]

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**EXHIBIT B**

Xencor [...\*\*\*...] Patent Applications and Patents

[...\*\*\*...]

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**EXHIBIT 3**

[...\*\*\*...]

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Consent of Independent Registered Public Accounting Firm

Xencor, Inc.  
Monrovia, California

We hereby consent to the use in the Prospectus constituting a part of this Registration Statement of our report dated September 11, 2013, except for note 10, which is as of November 3, 2013, relating to the financial statements of Xencor, Inc., which is contained in that Prospectus. Our report contains an explanatory paragraph regarding the Company's ability to continue as a going concern.

We also consent to the reference to us under the caption "Experts" in the Prospectus.

/s/ BDO USA, LLP

BDO USA, LLP  
Los Angeles, California

November 3, 2013

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