

# XENCOR INC

## FORM 10-K (Annual Report)

Filed 03/01/17 for the Period Ending 12/31/16

Address	111 WEST LEMON AVE MONROVIA, CA 91016
Telephone	626-305-5900
CIK	0001326732
Symbol	XNCR
SIC Code	2834 - Pharmaceutical Preparations
Industry	Biotechnology & Medical Research
Sector	Healthcare
Fiscal Year	12/31

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-K

(Mark One)

[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2016

[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to

Commission file number: 001-36182

Xencor, Inc.

(Exact Name of Registrant as Specified in its Charter)

Delaware

(State or Other Jurisdiction of
Incorporation or Organization)

111 West Lemon Avenue, Monrovia, CA
(Address of Principal Executive Offices)

20-1622502

(I.R.S. Employer
Identification No.)

91016
(Zip Code)

(626) 305-5900

(Registrant's Telephone Number, Including Area Code)

Securities registered pursuant to Section 12(b) of the Act:

Table with 2 columns: Title of Each Class, Name of Each Exchange on Which Registered. Row 1: Common Stock, par value \$0.01 per share; The NASDAQ Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes [X] No [ ]

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes [ ] No [X]

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes [X] No [ ]

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes [X] No [ ]

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [ ]

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 definitions of "large accelerated filer", "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer [X] Accelerated filer [ ] Non-accelerated filer [ ] Smaller reporting company [ ]
(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Securities Exchange Act of 1934). Yes [ ] No [X]

The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold as of June 30, 2016 was \$769,079,561

The number of outstanding shares of the registrant's common stock, par value \$0.01 per share, as of February 17, 2017 was 46,573,700.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's proxy statement to be filed with the Securities and Exchange Commission pursuant to Regulation 14A in connection with the registrant's 2017 Annual Meeting of Stockholders, which will be filed subsequent to the date hereof, are incorporated by reference into Part III of this Form 10-K. Such proxy statement will be filed with the Securities and Exchange Commission not later than 120 days following the end of the registrant's fiscal year ended December 31, 2016.

**Xencor, Inc.**  
**FORM 10-K**  
**For the Fiscal Year Ended December 31, 2016**  
**Table of Contents**

	<b>Page</b>
<b><u>PART I</u></b>	
<a href="#">Item 1</a> <a href="#">Business</a>	3
<a href="#">Item 1A</a> <a href="#">Risk Factors</a>	24
<a href="#">Item 1B</a> <a href="#">Unresolved Staff Comments</a>	48
<a href="#">Item 2</a> <a href="#">Properties</a>	48
<a href="#">Item 3</a> <a href="#">Legal Proceedings</a>	49
<a href="#">Item 4</a> <a href="#">Mine Safety Disclosures</a>	49
<b><u>PART II</u></b>	
<a href="#">Item 5</a> <a href="#">Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</a>	49
<a href="#">Item 6</a> <a href="#">Selected Financial Data</a>	52
<a href="#">Item 7</a> <a href="#">Management’s Discussion and Analysis of Financial Condition and Results of Operations</a>	53
<a href="#">Item 7A</a> <a href="#">Quantitative and Qualitative Disclosures About Market Risk</a>	70
<a href="#">Item 8</a> <a href="#">Financial Statements and Supplementary Data</a>	70
<a href="#">Item 9</a> <a href="#">Changes in and Disagreements With Accountants on Accounting and Financial Disclosure</a>	107
<a href="#">Item 9A</a> <a href="#">Controls and Procedures</a>	107
<a href="#">Item 9B</a> <a href="#">Other Information</a>	108
<b><u>PART III</u></b>	
<a href="#">Item 10</a> <a href="#">Directors, Executive Officers and Corporate Governance</a>	108
<a href="#">Item 11</a> <a href="#">Executive Compensation</a>	108
<a href="#">Item 12</a> <a href="#">Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</a>	108
<a href="#">Item 13</a> <a href="#">Certain Relationships and Related Transactions, and Director Independence</a>	108
<a href="#">Item 14</a> <a href="#">Principal Accounting Fees and Services</a>	109
<b><u>PART IV</u></b>	
<a href="#">Item 15</a> <a href="#">Exhibits, Financial Statement Schedules</a>	110
<a href="#">Signatures</a>	111

The Xencor logo is a trademark of Xencor, Inc. XmAb, PDA and Protein Design Automation are also registered trademarks of Xencor. All other product and company names are trademarks of their respective companies.

## PART I

### Forward-Looking Statements

This Annual Report on Form 10-K or this Annual Report, may contain “forward-looking statements” within the meaning of the federal securities laws made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends affecting the financial condition of our business. Forward-looking statements should not be read as a guarantee of future performance or results, and will not necessarily be accurate indications of the times at, or by, which such performance or results will be achieved. Forward-looking statements are based on information available at the time those statements are made and/or management’s good faith belief as of that time with respect to future events, and are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in or suggested by the forward-looking statements. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth below under Part I, Item 1A, “Risk Factors” in this Annual Report. These statements, which represent our current expectations or beliefs concerning various future events, may contain words such as “may,” “will,” “expect,” “anticipate,” “intend,” “plan,” “believe,” “estimate” or other words indicating future results. Such statements may include, but are not limited to, statements concerning the following:

- the initiation, cost, timing, progress and results of our research and development activities, preclinical studies and future clinical trials;
- our ability to obtain and maintain regulatory approval of our future 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;
- our plans to research, develop and commercialize our future product candidates;
- our strategic alliance partners’ election to pursue development and commercialization;
- our ability to attract collaborators with development, regulatory and commercialization expertise;
- our ability to obtain and maintain intellectual property protection for our future product candidates;
- the size and growth potential of the markets for our future product candidates, and our ability to serve those markets;
- our ability to successfully commercialize our future product candidates;
- the rate and degree of market acceptance of our future 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 failure to successfully execute our growth strategy including any delays in our planned future growth;

- our failure to maintain effective internal controls; and
- the accuracy of our estimates regarding expenses, future revenues, capital requirements and need for additional financing.

Given these uncertainties, you should not place undue reliance on these forward-looking statements. These forward-looking statements represent our estimates and assumptions only as of the date of this Annual Report on Form 10-K and, except as required by law, we undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise after the date of this Annual Report on Form 10-K. We qualify all of our forward-looking statements by these cautionary statements.

## **Item 1. Business .**

### **Our Business**

We are a clinical-stage biopharmaceutical company focused on discovering and developing engineered monoclonal antibody therapeutics to treat severe and life-threatening diseases with unmet medical needs. We have developed a proprietary XmAb® technology platform that we use 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 and controls antibody structure. 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, extending circulating half-life or stabilizing novel antibody structures, 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 protein engineering capabilities allow us to continually explore opportunities for additional functionality in the Fc region. The most recent expansion of our platform is the XmAb bispecific Fc domains, which enable the rapid design and simplified development of antibodies that bind two or more antigens simultaneously. Bispecifics are a rapidly emerging area of biotherapeutics development, particularly in immuno-oncology, and we are using our XmAb bispecific Fc domains as a robust scaffold to develop a pipeline of new bispecific oncology candidates that recruit immune cells against tumors.

We are developing a suite of clinical candidates using two of our Fc technology platforms. We have developed two wholly owned clinical, stage product candidates, using our Immune Inhibitor Fc platform; XmAb5871 is currently in two Phase 2 trials and is being developed for autoimmune disease and XmAb7195 is currently in a Phase 1 trial and is being developed for asthma and allergic diseases.

We are also developing a pipeline of bispecific antibody candidates using our heterodimer Fc bispecific technology:

- XmAb14045 is currently in a Phase 1 trial for the treatment of acute myeloid leukemia,
- XmAb13676 is currently in a Phase 1 trial for the treatment of B-cell malignancies,
- XmAb18087 is in preclinical development for the treatment of neuroendocrine tumors and
- XmAb20717 is in preclinical development for the treatment of various cancers and is our first dual checkpoint inhibitor.

These product candidates all use XmAb Fc domains to confer enhanced antibody functionality.

Our business strategy is based on the plug-and-play nature of the XmAb technology, allowing us to create new antibody drug candidates for our internal development or licensing, or to selectively license access to one or more of our XmAb technologies to pharmaceutical or biotechnology companies to use in developing their own proprietary antibodies with improved properties. Our Fc technologies have been used to develop multiple product candidates for us and our partners and we have different levels of involvement in creating and developing these candidates:

- Compounds we have created, we wholly-own and which we are currently developing,
- Compounds we have created and are co-developing with Novartis Institutes for BioMedical Research, Inc. (Novartis) pursuant to a license and collaboration agreement,
- Compounds that we have created, performed early-stage of development and licensed to our partners for further development and,
- Compounds that were created by our partners that incorporate one of our Fc technologies for which all development for these compounds is the responsibility of our partner. These transactions usually require limited resources or efforts from us.

There are currently eleven antibody product candidates in clinical trials that have been engineered with XmAb technology, including seven candidates being advanced by licensees and development partners.

Our protein engineering capabilities allow us to continue to expand the functionality of the XmAb technology platform to identify new protein enhancements and create new antibody drug candidates with improved properties. The most recent addition to our technology, heterodimer Fc domains, enables the creation of bispecific drug candidates, which are antibodies that are engineered to bind two targets simultaneously. The core of our bispecific programs is a novel Fc domain that is a robust and portable scaffold for two, or potentially more, different antigen binding domains. Our Fc domain technology is designed to maintain full-length antibody properties in a bispecific antibody, potentially enabling stable molecules with favorable *in vivo* half-life and allowing for the use of standard antibody production methods. These bispecific Fc domains are being used to rapidly generate a broad array of novel drug candidates for our own pipeline and for our partners.

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 Wholly-Owned Compounds**

Our XmAb technology has created a suite of wholly owned compounds that we are developing: two XmAb compounds that are currently in clinical trials and four additional compounds that are at earlier-stage of development by us as well.

#### **Compounds Wholly-Owned by Xencor**

<b>Program</b>	<b>Fc Domain</b>	<b>Primary Indication</b>	<b>Target</b>	<b>Stage of Development</b>
XmAb5871	Immune Inhibitor	IgG4-RD, SLE	CD-19	Phase 2
XmAb7195	Immune Inhibitor	Asthma/Allergy	IgE	Phase 1
XmAb18087	Bispecific	Neuroendocrine tumors	SSTR2 x CD3	Preclinical
XmAb20717	Bispecific	Oncology	PD-1 x CTLA-4	Preclinical
XmAb CTLA4-LAG3	Bispecific	Oncology	CTLA4 x LAG3	Preclinical
XmAb PD1-LAG3	Bispecific	Oncology	PD-1 x LAG3	Preclinical

*XmAb5871* uses our XmAb Immune Inhibitor Fc Domain and targets B cells, an important component of the immune system. We believe that 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.

In June 2015, we announced results from a Phase 1b/2a placebo-controlled trial of XmAb5871 in patients with rheumatoid arthritis (RA). The results indicated that XmAb5871 was generally well tolerated. Although the trial was not designed to observe a statistically significant difference in efficacy results between XmAb5871 and placebo treated patients, sufficient efficacy trends were seen to warrant continued clinical development of XmAb5871 in autoimmune indications. A numerically increased proportion of patients with improvements across several measurements of disease activity were observed in the XmAb5871 treated groups compared to placebo.

In the first quarter of 2016 we began enrolling two Phase 2 trials for XmAb5871, one in IgG4-Related Disease (IgG4-RD) and another trial in Systemic Lupus Erythematosus (SLE or Lupus). We also initiated a Phase 1 trial with a subcutaneous formulation of XmAb5871 in the third quarter of 2016.

***IgG4-RD:*** we are currently conducting a Phase 2 open-label pilot study of XmAb5871 for IgG4-RD. In early 2017 we enrolled the last of the 15 planned patients. The trial design is for patients to receive every other week IV administration of XmAb5871 for up to 24 weeks and the primary objective of the study is to evaluate the effect of XmAb5871 on disease activity using the recently reported IgG4-RD Responder Index in patients with active IgG4-RD. Secondary objectives are to determine the safety and tolerability profile and to characterize the pharmacokinetics (PK) and immunogenicity of every other week IV administration of XmAb5871.

In November 2016 we presented preliminary data from the trial for 12 patients that had been enrolled and received one or more doses through October 31, 2016, the date selected for cut-off of the interim data review. The preliminary data indicated that XmAb5871 was well tolerated by patients receiving drug in the study. As of the cut-off date, no serious adverse events were reported. Treatment related AE's have occurred in five patients (42%), all mild (Grade 1) or moderate (Grade 2). One patient discontinued the study as the result of an AE. The patient developed a Grade 2 (moderate) hypersensitivity reaction with rash and arthritis, commonly referred to as serum sickness, following the fifth infusion. The event quickly resolved without the need for medical management. This patient was subsequently found to have developed anti-drug antibodies.

Preliminary efficacy data from the trial was very encouraging. As of the cut-off date, 11 of 12 patients dosed with XmAb5871 had a least one responder index performed followed dosing. Nine of the 11 patients (82%) reviewed under the responder index had an initial response to XmAb5871 therapy of at least a three point reduction in IgG4-RD Responder Index within two weeks of the first dose. The study protocol provided that any reduction in the IgG4-RD Responder Index greater than or equal to two points was considered a positive response for that patient. Five of the nine patients attained disease remission, or an IgG4-RD Responder Index of zero. Two of the nine patients that entered the study on steroids have been able to taper and discontinue their steroid use during the study.

In addition to the patient with early study termination due to an AE, two other patients have discontinued treatment prior to receipt of all 12 planned infusions. One patient had a response to therapy (IgG4-RD RI reduction of six points), but lost response following the sixth infusion, and one patient had no response to therapy. Neither of these two patients have responded to subsequent rituximab treatment.

We expect to provide top line data from this trial in the second half of 2017.

We believe that the promising preliminary data from the Phase 2 trial warrants further clinical development of XmAb5871 in treating IgG4-RD and we are planning such development.

In 2016 we also completed enrollment of a bioequivalence trial for XmAb5871 using a subcutaneous formulation and we expect to provide data from this trial in 2017. Our plan is to conduct further clinical studies with XmAb5871 in a subcutaneous formulation.

***Systemic Lupus Erythematosus (SLE)*** : in March 2015 we also began enrolling a Phase 2 randomized, double blinded, placebo-controlled study of XmAb5871 in SLE. This trial is designed to assess the effect of XmAb5871

on SLE disease activity in a shorter timeframe and using fewer patients compared to standard SLE trials, and XmAb5871 is the first newly developed agent being assessed with this novel trial design. The trial design calls for treating patients with moderate to severe, non-organ threatening SLE with XmAb5871 (or placebo) after their lupus disease activity has improved with a short course of intra-muscular (IM) steroid therapy. Background, potentially confounding, immunosuppressant medications will be stopped. In this double-blinded placebo-controlled study, the ability of XmAb5871 to maintain the improvement in disease activity after IM steroid therapy and in the absence of immunosuppressant medication will be assessed. Historically, SLE trial designs generally add new medications to the many already taken by the patient, and hence display a discernible treatment effect only when restricted to the sickest patients. The trial will enroll approximately 90 subjects, 1:1 randomized to XmAb5871 or placebo, for up to 24 weeks.

**XmAb7195** uses our Immune Inhibitor Fc Domain and is being developed for the treatment of severe asthma and allergic diseases. XmAb 7195 is designed to reduce blood serum levels of IgE, which mediates allergic responses and allergic disease.

In May of 2016 we reported complete data results from the Phase 1a trial of XmAb7195. The Phase 1a study was a randomized, double-blind, placebo-controlled, ascending dose trial conducted in three parts: Part 1, a single IV administration of XmAb7195 or placebo to 40 healthy volunteers in five consecutive dose cohorts; Part 2, 16 otherwise healthy subjects with elevated serum IgE ( $> 300$  IU/mL) in two consecutive dose cohorts (Part 2); and Part 3, two sequential IV administrations (Day 1 priming dose of 0.3 mg/kg and Day 8 second ascending dose) of XmAb7195 or placebo to 16 healthy subjects in two consecutive dose cohorts. The primary and secondary objectives of the study were to determine the safety and tolerability profile of IV administration of XmAb7195 and to characterize the pharmacokinetics (PK) and immunogenicity of IV administration of XmAb7195, respectively. Exploratory objectives include the determination of the effect of XmAb7195 on serum free and total IgE and the effect on basophil surface IgE and basophil FcεRI expression levels.

The data showed rapid reduction in circulating free IgE levels to below the limit of detection ( $< 9.59$  ng/mL) for 93% of XmAb7195 treated healthy adult subjects in Part 1 that had detectable free IgE pre-dose, including those at the lowest dose evaluated of 0.3 mg/kg, with total IgE reduced in a parallel fashion. Five of six high IgE subjects dosed at 0.6 mg/kg XmAb7195 and nine of 12 subjects across all doses had sustained undetectable free IgE following infusion, with a median pre-dose free IgE of 710 ng/mL (424 - 1777 ng/mL). High IgE subjects treated with XmAb7195 single infusions across all dose levels had profound (mean pre-dose 583.5 IU/mL, mean nadir 7.77 IU/mL) reductions of total IgE, which were sustained for at least a week at  $\geq 1.0$  mg/kg doses.

XmAb7195 as an intravenous (IV) infusion was generally well tolerated in the safety population of 54 subjects. The two most common treatment emergent adverse events (TEAEs) were thrombocytopenia and urticaria. All but one TEAE was mild or moderate. One serious adverse event of severe bronchospasm was observed during infusion in an atopic subject with a history of perennial and seasonal allergies. The event responded quickly to discontinuation of the infusion and medical intervention.

The adverse event of thrombocytopenia, which was transient and asymptomatic, was reported in seven out of seven subjects treated with  $\geq 2$  mg/kg doses of XmAb7195, and in no subjects treated with  $< 2$  mg/kg. The nadir in platelet count occurred by 24 hours post-infusion and recovery began by 48 hours, with near full recovery by Day 8 in most subjects, at which time serum drug concentrations still exceeded levels that eliminate detectable IgE. Dose-dependent, non-clinically significant, reductions in platelet count were observed in most subjects that received  $\geq 0.75$  mg/kg XmAb7195. In Part 3 of the study, decreases in platelet count were seen after the second dose on Day 8 for the 1.0 mg/kg dose level, even for subjects with no detectable free IgE after the Day 1 0.3 mg/kg priming dose, but not seen after the second dose for the 0.3 mg/kg dose level.

Moderate urticaria was reported in a total of 10 of 54 XmAb7195 treated subjects with an apparent correlation of dose with frequency of occurrence. In all cases regardless of dose, the signs/symptoms of urticaria were mild, non-diffuse and easily treated with oral antihistamine, and the study drug infusions were continued to completion without worsening of symptoms.

In 2016 we initiated a Phase 1 trial for XmAb7195 with a subcutaneous formulation. The first part of the trial is an open-label, parallel group, multi-dose study to establish a safety dose for subcutaneous XmAb7195 in

healthy volunteers. The second part of the trial is a randomized, double-blind, placebo-controlled, multiple ascending dose study in healthy volunteers and atopic subjects with XmAb7195. We expect to announce top line data from this trial in 2017.

**XmAb18087** is our first bispecific oncology candidate that targets solid tumors. XmAb18087 binds to somastatin receptor 2 (SSTR2), a target on neuroendocrine tumors, and CD3, an activating receptor on T cells. We expect to file an IND for this compound in 2017.

**XmAb20717** is our first bispecific checkpoint inhibitor and targets PD1 and CTLA4 and we expect to enter clinical trials for this compound in 2018.

#### **Compounds that we are Co-developing with Novartis**

In June 2016 we entered into a Collaboration and License Agreement (the Novartis Agreement) with Novartis Institutes for BioMedical Research, Inc. (Novartis) to develop and commercialize bispecific and other Fc engineered antibody drug candidates using the Company's proprietary XmAb® technologies. Pursuant to the Agreement, we granted Novartis certain exclusive rights to research, develop and commercialize XmAb14045 and XmAb13676, the Company's two lead bispecific clinical candidates. Under the Novartis Agreement we granted Novartis a license to commercialize the sale of drug candidates from these two programs in all worldwide territories outside the United States. We received a non-refundable upfront payment of \$150 million in July 2016. Assuming successful development and commercialization of a product, we could receive up to \$325 million in milestones for each of XmAb14045 and XmAb13676. The total potential milestones for each product include \$90 million in development milestones, \$110 million in regulatory milestones and \$125 million in sales milestones. If commercialized, we are eligible to receive tiered low double-digit royalties on global net sales of approved products outside the United States.

The Company and Novartis will co-develop XmAb14045 and XmAb13676 worldwide and share development costs equally. The Company may elect to opt-out of the development of either program by providing notice to Novartis. If the Company elects to opt-out with respect to a program, Novartis will receive the Company's United States rights to the program and the Company will receive low double-digit royalties on United States net sales in addition to the royalties on net sales outside the US.

Pursuant to the Novartis Agreement, the Company will also apply its bispecific technology to up to four target pair antibodies selected by Novartis, if such target pairs are available for exclusive license to Novartis and are not subject to a Xencor internal program.

Under the Novartis Agreement, the Company is also granting Novartis a non-exclusive research license to use certain of the Company's Fc technologies, specifically Cytotoxic, Xtend and Immune Inhibitor Fc domains to research, develop, commercialize and manufacture antibodies against up to ten target selected by Novartis, if such targets are available for non-exclusive license and not subject to a Xencor internal program.

**XmAb14045** uses our XmAb bispecific Fc technology that allows us to create dual-antigen targeting molecules. In September 2016 we began enrolling patients in a Phase 1 clinical trial for XmAb14045 for the treatment of acute myeloid leukemia (AML). XmAb14045 targets CD123, an antigen on AML cells and leukemic stem cells, and CD3, an activating receptor on T cells. The trial is a Phase 1, open-label, multiple-dose, dose escalation study to assess safety, tolerability and preliminary anti-tumor activity in AML. Initial data from this trial is expected in 2017 pending alignment with Novartis on timing of disclosure.

**XmAb13676** is our second bispecific oncology candidate and we began enrolling in a Phase 1 trial in February 2017. It targets CD20, an antigen on B-cell tumors, and CD3 for the treatment of B-cell malignancies and is a tumor-targeted antibody that contains both a tumor antigen binding domain (CD20) and a cytotoxic T-cell binding domain (CD3). The trial is a Phase 1, open-label, multiple-dose, dose escalation study to assess safety, tolerability and preliminary anti-tumor activity in B-cell malignancies. Initial data from this trial is expected in 2018 pending alignment with Novartis on timing of disclosure.

### **Our Out-licensed Compounds**

In addition to our wholly-owned compounds in clinical development and those being co-developed with Novartis, we have used our XmAb technology to create antibody compounds which have been licensed to other pharmaceutical and biotechnology companies for further development. These licensed compounds do not require additional development effort by us as they advance into development by our partners. If successful, these candidates will generate additional milestone payments and royalties to support our internal development efforts. These include XmAb5574/MOR208 (now MOR208) licensed to MorphoSys AG (MorphoSys), and XmAb13551, a bispecific CD38 x CD3 preclinical candidate, which we developed and licensed to Amgen Inc. (Amgen).

### **Xencor Out-licensed Compounds**

<u>Program</u>	<u>Target</u>	<u>Fc Domain</u>	<u>Primary Stage of</u>		<u>Partner</u>
			<u>Indication</u>	<u>Development</u>	
XmAb5574/MOR208	CD19	Cytotoxic	CLL/NHL/ALL	Phase 2	Morphosys
XmAb13551	CD38 x CD3	Bispecific	Myeloma	Preclinical	Amgen

**MOR208** is an antibody drug candidate originally created by us and developed through a Phase 1 clinical trial. It incorporates our XmAb Cytotoxic Fc Domain. Pursuant to a Collaboration and License Agreement (MorphoSys Agreement) with MorphoSys AG (MorphoSys) in June 2010, this compound is being developed by MorphoSys for the treatment of blood-based cancers.

MorphoSys is currently conducting Phase 2 clinical trials of MOR208 in patients with non-Hodgkin lymphomas (NHL) and chronic lymphocytic leukemia (CLL). MorphoSys has indicated that it has received fast track designation from the U.S. Food and Drug Administration (FDA) for targeting diffuse large B-cell lymphoma (DLBCL) and has announced that they intend to initiate a Phase 3 trial for this indication in 2017.

Under the terms of the MorphoSys Agreement, we received a \$13 million upfront payment and \$3 million for development milestone payments in 2013. If certain developmental, regulatory and sales milestones are achieved, we are also eligible to receive up to an additional \$299 million in milestone payments which are comprised as follows: \$62.0 million in clinical development milestones, \$187 million in regulatory approval milestones and \$50 million of aggregate milestone payments for 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.

The term of this agreement will continue until all of MorphoSys' royalty payment obligations have expired unless terminated earlier.

**XmAb13551 (CD38 x CD3)** is a preclinical drug candidate originally created by us and licensed to Amgen in September 2015. It is being developed for the treatment of multiple myeloma. XmAb13551 incorporates our bispecific XmAb Fc domain and binds both the tumor antigen CD38 and a cytotoxic T-cell domain, CD3. Amgen has assumed all responsibility for further development.

Amgen licensed the worldwide development rights to XmAb13551 as part of a Research and License Agreement executed in September 2015 (the Amgen Agreement). We received a \$45 million upfront payment and will be eligible to receive up to \$355 million in milestone payments for XmAb13551 and tiered high single to low double-digit royalties on global net sales of approved products. Pursuant to the Amgen Agreement, Xencor will also apply its bispecific technology to five specific Amgen provided antibodies (Amgen Discovery Programs).

### **Our Out-Licensed Technology**

We selectively license our XmAb technology to other companies for use in their own internal development candidates and to potentially make next-generation improvements to their marketed products. These licenses generally

require little research effort and no development effort by us and provide us with cash to fund our own research and development programs. These agreements typically provide the licensee with specific rights to use one or more of our Fc technologies to be applied to their proprietary antibodies or targets. The licensee is generally responsible for all development, of any resulting product candidate. As part of these agreements, we are generally entitled to receive upfront fees, annual licensing fees, potential milestone payments and royalties on the sales of any resulting products. In connection with our collaboration with Novo Nordisk, we also received research and development funding.

There are currently eight programs in development with our partners. The most advanced programs are with Alexion which started a Phase 3 clinical trial in 2016 and CSL-Janssen, which entered into a Phase 2 clinical trial in 2015.

**Xencor Technology Licenses**

<b>Licensee</b>	<b>Year</b>	<b>Xencor Technology</b>	<b>Indication</b>	<b>Milestones</b>	<b>Royalties</b>	<b>Current Development Stage</b>
Alexion	2013	Xtend	Undisclosed	Yes	Yes	Phase 3
CSL-Janssen	2009	Cytotoxic	Oncology	Yes	Yes	Phase 2
Boehringer Ingelheim	2007	Cytotoxic	Oncology	Yes	Yes	(2 candidates)
Janssen	2009	Xtend	Autoimmune disease	Yes	Yes	Preclinical
NIH (not licensed)		Xtend	HIV	N/A	N/A	Phase 1
Merck	2013	Fc optimization	Autoimmune disease	Yes	Yes	Phase 1
Amgen	2015	Bi-specific	Oncology/Autoimmune	Yes	Yes	5 Preclinical candidates
Novartis	2016	Various, including Bi-specifics	Undisclosed	Yes	Yes	Preclinical

***Novartis***

Pursuant to the Novartis Agreement, the Company will apply its bispecific technology to up to four target pair antibodies selected, if available for exclusive license to Novartis and not subject to a Xencor internal program. The Company will apply its bispecific technology to generate bispecific antibody candidates from starting target pair antibodies provided by Novartis for each of the four Global Discovery Programs and return the bispecific product candidate to Novartis for further testing, development and commercialization. Novartis has the right to substitute up to four of the original selected target pair antibodies during the research term provided that Novartis has not filed and received acceptance for an IND with the Xencor provided bispecific candidate. The research term is five years from the date of the Novartis Agreement.

Novartis will assume full responsibility for development and commercialization of each product candidate under each of the Global Discovery Programs. Assuming successful development and commercialization of each Global Discovery Program compound, the Company could receive up to \$250.0 million in milestones for each Global Discovery Program which includes \$50.0 million in development milestones, \$100.0 million in regulatory milestones and \$100.0 million in sales milestones. If commercialized, the Company is eligible to receive mid-single digit royalties on global net sales of approved products.

Under the Novartis Agreement, the Company has the right to participate in the development and commercialization of one of the Global Discovery Programs prior to filing an IND for the Program. If the Company elects to participate in development, it will assume responsibility for 25% of the worldwide development costs for the program and 50% of commercialization costs and will receive 50% of the US profits on net sales of the product.

No bispecific antibody candidates for Global Discovery Programs were completed in 2016.

Under the Novartis Agreement, the Company is also granting Novartis a non-exclusive research license to use certain of the Company's Fc technologies, specifically Cytotoxic, Xtend and Immune Inhibitor Fc domains to research, develop, commercialize and manufacture antibodies against up to ten targets selected by Novartis, if available for non-

exclusive license and not subject to a Xencor internal program. Novartis will assume all research, development and commercialization costs for products that are developed from application of the Fc technologies. Assuming successful development and commercialization of a compound that incorporates an Fc technology, the Company could receive up to \$76 million in milestones for each target which includes \$16.0 million in development milestones, \$30.0 million in regulatory milestones and \$30.0 million in sales milestones. If commercialized, the Company is eligible to receive low single-digit royalties on global net sales of approved products.

### ***Amgen***

In September 2015, we entered into the Amgen Agreement, providing an exclusive license to our internally developed XmAb 13551 and pursuant to the Amgen Agreement, Xencor will also apply its bispecific technology to five specific Amgen provided antibodies (Amgen Discovery Programs). Amgen will assume all preclinical and clinical development for each of the Amgen Discovery Program compounds that Xencor delivers to them. We will be eligible to receive up to \$260.5 million in milestone payments for each Amgen Discovery Program and tiered mid to high single-digit royalties on global net sales of approved products. Subject to Xencor review and approval, Amgen has the right to substitute up to three of the original identified antibodies.

During 2016 we delivered bispecific antibodies for each of five Amgen Discovery Programs pursuant to the Amgen Agreement and Amgen exercised its option to substitute one of the original identified antibodies. Amgen is responsible for all further development of the Discovery Programs.

### ***Alexion***

In January 2013, we entered into an Option and License agreement (Alexion Agreement) with Alexion Pharmaceuticals, Inc. (Alexion), to make and use our Xtend technology against six different target programs during a five-year research term. 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 exclusive commercial licenses to any of the six programs.

In March 2015 we received a \$500,000 milestone payment related to the achievement of a clinical development milestone with an undisclosed molecule to be used against an undisclosed target. In November 2015, Alexion exercised an option for a commercial license on an undisclosed molecule and we received a \$4 million option fee. In the fourth quarter of 2015, Alexion achieved a further development milestone for an undisclosed compound and we received a \$3 million milestone payment.

In the fourth quarter of 2016, Alexion achieved a milestone for dosing a patient in a Phase 3 clinical trial for an undisclosed compound and we received a \$5 million milestone payment.

Absent early termination, the term of the Alexion Agreement will continue until the expiration of Alexion's royalty payment obligations. Either party may terminate the Alexion Agreement for a material breach 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.

### ***CSL-Janssen***

In February 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 our Fc Cytotoxic technology and options to non-exclusive commercial licenses. CSL elected to exercise one commercial license for a compound, CSL362

In 2013 CSL sublicensed CSL362 (now called JNJ-5602 2473) to Janssen Biotech Inc. (Janssen Biotech). In August 2015, CSL, through its sub licensee, Janssen Biotech, initiated a Phase 2 clinical trial for CSL362.

### ***Novo Nordisk***

In December 2014, we entered into a Collaboration and License agreement (Novo Agreement) with Novo Nordisk A/S (Novo). Under the terms of the Novo Agreement we granted Novo a research license to use certain of our technologies including our bispecific, Immune Inhibitor, Xtend and other technologies during a two-year research term. We provided research support for four full time employees (FTE's) in collaboration with Novo to apply our technologies to Novo provided targets to identify compounds with improved properties. We received an upfront payment of \$2.5 million and received FTE funding of \$1.6 million per year. The research license expired in December 2016.

### ***Boehringer Ingelheim***

In February 2007, we entered into a research and option agreement (BI Agreement) with Boehringer Ingelheim International GmbH (BI). Under the terms of the BI Agreement we provided a research license to our Cytotoxic XmAb technology and options to non-commercial licenses. BI elected to take options to two licenses and there are currently two compounds in Phase 1 clinical trials.

### ***Merck***

In July 2013, we entered into a License agreement (Merck Agreement) with Merck Sharp & Dohme Corp (Merck). Under the terms of the Merck 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 received an upfront payment of \$1 million and are receiving annual maintenance fees of \$100,000. In 2014 Merck initiated a Phase 1 trial.

### ***NIH***

In January 2016, we announced that the National Institutes of Health (NIH) has initiated a Phase 1 clinical trial of VRC01LS, a therapeutic antibody for the treatment of HIV that uses our Xtend antibody half-life extension technology. VRC01LS is a humanized monoclonal antibody targeted to the CD4 binding site of HIV-1. VRC01LS is a modification of the VRC01 monoclonal antibody, which demonstrated a suppression of HIV viral load in a Phase 1 trial conducted by NIH. VRC01LS includes our Xtend technology in order to enhance antibody half-life and stability. NIH has not entered into an agreement with us for this technology.

### **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 for the treatment of autoimmune diseases, including IgG4-RD and SLE, and are developing XmAb7195 for the treatment of asthma and allergic diseases. We are completing a Phase 2 trial for XmAb5871 treating IgG4-RD in 2017 and plan on advancing development of this compound in 2018.
- ***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 for preclinical and clinical development by us or, if appropriate, license certain candidates to leading pharmaceutical and biotechnology companies.
- ***Create a pipeline of bispecific candidates for us to advance into clinical development.*** Our XmAb bispecific technology allows us an opportunity to rapidly develop multiple antibody drug candidates with dual targeting mechanisms. We have initiated a Phase 1 trial for our first two bispecific oncology candidates, XmAb14045, and XmAb13676. We have four additional candidates at the preclinical stage of development including

XmAb18087, which we plan on filing an IND for in 2017 and initiating clinical trials in 2018 and, XmAb20717, our first bispecific checkpoint inhibitor which will enter the clinic in 2018.

- **Continue to monetize and expand the use of our XmAb technology platform.** We continuously seek opportunities to maximize the value of our XmAb technologies and will selectively license access to certain of the technologies to leading pharmaceutical and biotechnology companies for use in their proprietary programs. In 2016, we received \$150 million upfront in connection with the Novartis Agreement and are eligible to receive up to \$2.4 billion in potential milestones.
- **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. Our bispecific technology, which uses our heterodimeric Fc domain enabling molecules with dual target binding, is an example of the expanding functionality of our XmAb technology platform. We are expanding the functionality of the bispecific platform with the development of a series of dual checkpoint inhibitor clinical candidates beginning with XmAb20717.
- **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.

### **Our XmAb Technology Platform**

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 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.

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:

- **Bispecific Domain** – heterodimeric Fc domains enabling molecules with multiple target binding
- **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 FcγRIIIa 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 or manipulating Fc structural organization. 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. In contrast to other engineering approaches for next-generation antibodies, 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 allow 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.

### ***XmAb Bispecific Domain technology***

Bispecific antibodies are designed with two different variable domains to elicit biological effects that require simultaneous binding to two targets. Previously, industry efforts at bispecific antibody design have generally been frustrated by poor molecular stability, difficulties in production and short *in vivo* half-life. Our XmAb® Bispecific Fc Domain technology is designed to maintain full-length antibody properties in a bispecific antibody, potentially enabling stable molecules with favorable *in vivo* half-life and allowing for the use of standard antibody production methods. These bispecific Fc domains are used to generate a broad array of novel drug candidates.

We have created Fc variants that form heterodimeric Fc domains that enable the creation of bispecific antibodies which bind to a different antigen with each of their Fv domains. Our initial bispecific candidate discovery work was to build a pipeline of bispecific antibodies that bind both CD3 and a tumor antigen in order to recruit cytotoxic T cells to the tumor cell. The next focus of our bispecific platform is to develop a series of bispecific checkpoint inhibitors. Because of the Fc domain, these bispecific antibodies retain the long half-life and ease of production typical of standard antibodies.

The plug-and-play nature of the bispecific platform has allowed us to develop a pipeline of bispecific candidates for ourselves and our partners. In 2015 we entered into the Amgen Agreement in which we licensed a pre-clinical bispecific compound, XmAb13551, and applied our bispecific technology to five identified Amgen antibodies, and we received \$45 million upfront and are eligible to receive a total of \$1.7 billion in milestone payments. In 2016 we entered into the Novartis Agreement in which we licensed certain rights to our two lead bispecific compounds, XmAb14045 and XmAb13676, and are applying our bispecific technology to four Novartis antibodies and we will also license certain other Fc technologies to Novartis. We received a non-refundable upfront payment from Novartis of \$150 million and are eligible to receive up to \$2.4 billion in milestone payments.

We have initiated Phase 1 clinical trials for our first two bispecific candidates, XmAb14045 and XmAb13676, and have four additional bispecific candidates in preclinical development.

### ***XmAb 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. We have also applied this high affinity Immune Inhibitor Fc Domain to our immune inhibitor development candidate, XmAb7195.

### ***XmAb Cytotoxic Fc Domain technology***

Our XmAb 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 XmAb Cytotoxic Fc Domain also increases affinity for FcγRIIIa 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.

Several partners and licensees are using our Cytotoxic Fc Domain in their oncology antibodies, including four programs currently in clinical trials; two programs currently in Phase 2 and two programs currently in Phase 1.

### ***XmAb Xtend Fc Domain technology***

Our XmAb 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 XmAb 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 including:

- 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.

There are currently two compounds that incorporate our XmAb Xtend technology in clinical trials including Alexion which achieved a Phase 3 clinical development milestone in 2016 with an undisclosed molecule to be used against an undisclosed target.

### ***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.

### **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 XmAb Immune Inhibitor Fc Domain candidates designed to remove target antigens from circulation and multiple oncology candidates using our CD3 bispecific platform. We are also developing a series of bispecific checkpoint inhibitor candidates. We will continue to progress these candidates as additional options for clinical development by us or as out-licensing opportunities. We also from time to time in-license antibody technologies and compounds from other companies which we believe may allow us to create potential product candidates by incorporating our XmAb technology. These in-licenses may require us to pay up-front fees, development and commercial milestone payments and if commercial products are approved, royalties.

### **Market Opportunity**

**XmAb5871** : We are currently pursuing XmAb5871 development for IgG4-RD, a newly designated disorder and SLE. IgG4-RD is a fibro-inflammatory autoimmune disorder that we estimate impacts approximately 40,000 patients in the United States. IgG4-RD affects multiple organ systems and we believe is characterized by the distinct microscopic appearance of diseased organs, including the presence of IgG4-positive plasmablast cells that is required for diagnosis. There are currently no approved therapies for IgG4-RD and glucocorticoids (hormone steroids) are the current standard of care treatment.

The unmet need in SLE remains high for the estimated 240,000 Americans with a lupus diagnosis. Lupus is a serious and potentially fatal disease that mainly affects women. It is an autoimmune disease that affects many parts of the body, including the joints, skin, kidneys, heart, lungs, blood vessels and brain. Patients are often subject to prolonged use of systemic corticosteroids and potent immunosuppressive agents with significant short and long term side effects. Current biologic treatments are limited by their modest efficacy or safety risks. Because B cells play a significant role in SLE pathogenesis, we believe that XmAb5871 is a potential treatment. In addition to data from the Phase 1b/2a trial in RA, we have published ex vivo results showing XmAb5871 inhibition of SLE patient B cell activation and humoral immunity supporting the investigation of XmAb5871 as a potential SLE therapy.

**XmAb7195** : The potential indication for which we are currently pursuing XmAb7195 development is allergic asthma. 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.

**XmAb14045, XmAb1367, XmAb18087 and XmAb20717** : Our initial bispecific candidates are targeted toward oncology to treat cancer. Cancer is a broad group of diseases in which cells divide and grow in an uncontrolled fashion, forming malignancies that can invade other parts of the body. Cancer is the second leading cause of death in the United States. The American Cancer Society estimates that in 2016 there will be approximately 1.7 million new cases of cancer and approximately 595,000 deaths from cancer. The National Institutes of Health estimates that based on growth and aging of the U.S. population, medical expenditures for cancer in the year 2020 are projected to reach at least \$158 billion (in 2010 dollars). B-cell cancers include lymphomas such as NHL and leukemias such as CLL and ALL. Collectively, lymphomas and leukemias represent about three and five percent, respectively, of all cancers diagnosed in the United States. The National Cancer Institute estimates that over 20,000 new cases of AML and over 26,000 new cases of multiple myeloma were reported in the United States in 2015.

### **Intellectual Property**

The foundation for our 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.

Our patent estate, on a worldwide basis, includes over 200 issued patents and pending patent applications 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. We also have a large number of issued patents and pending patent applications with claims directed specifically to our XmAb technology and candidates. Our XmAb Fc domain, patents and patent applications, with claims directed to their incorporation into antibodies, Fc domain engineering and compositions of matter are expected to expire in the United States between 2023 and 2031. Our two Immune Inhibitor Fc domain 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 these lead product candidates are expected to expire in the United States between 2027 and 2030, two of which relate to XmAb5871 and two of which relate to XmAb7195. The composition of matter patents relating to our XmAb bispecific technology and patent candidates expire beginning in 2033 and 2034.

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 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. We have adopted a manufacturing strategy of contracting with third parties in accordance with current good manufacturing practices (cGMPs) for the manufacture of drug substance and product, including XmAb5871, XmAb7195 and our bispecific development candidates, XmAb14045, XmAb13676, XmAb18087 and XmAb20717. 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 cell line that expresses the antibody, followed by multiple purification and filtration steps typical of those used for monoclonal antibodies. We do not have any long term manufacturing agreements in place and will ultimately depend on contract manufacturers for the manufacture of our products for commercial sale, as well as for process development. We are currently in clinical trials with subcutaneous formulations for XmAb5871 and XmAb7195 which have been manufactured with third party contract manufacturers.

### ***Development and Manufacturing and Cell Line Sale Agreements with Catalent***

In September 2005, we entered into a development and manufacturing services agreement (the Catalent Manufacturing Agreement) with Catalent Pharma Solutions LLC (Catalent). Under the terms of the agreement, Catalent will, from time to time, provide development and manufacturing services for us. They are currently manufacturing drug substance for our XmAb5871 and XmAb7195 development programs.

We have also entered into separate cell line sale agreements (Cell Line Agreements) for the XmAb5871 and XmAb7195 cell lines. Catalent manufactured the cell lines for the XmAb5871 and XmAb7195 programs using their proprietary GPEx® technology. Under the Catalent Manufacturing Agreement, we have an unrestricted license to the

GPEX cell lines provided that Catalent is manufacturing drug substance material from the cell line. The Cell Line Agreements allow us to transfer the manufacturing processes for either XmAb5871 or XmAb7195 to a third party manufacturer.

Upon transfer of the XmAb5817 or XmAb7195 cell line to a third party manufacturer, we will be required to make payments to Catalent based upon the achievement of certain development and regulatory milestones and will also pay royalties based on a percentage of net sales for products that are derived from or utilize the GPEX Cell Line. The royalty percentages under each Cell Line Agreement are less than 1.0%.

We have the unilateral right to terminate the Catalent Manufacturing Agreement upon 30 days written notice to Catalent. 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 cell line will automatically terminate, and title will revert to Catalent.

#### ***Cell Line Agreements with Selexis***

In December 2015, we entered into a Master Service Agreement (the Selexis Agreement) with Selexis SA (Selexis) for the manufacture of Selexis cell lines. Under the terms of the Selexis Agreement, Selexis will manufacture cell lines for Xencor provided antibody candidates and upon completion of the cell lines Xencor has the option to take an unrestricted commercial license to the cell line. The terms of each commercial license require Xencor to make upfront payments and payments upon achievement of certain development and regulatory milestones and we will also pay royalties based on a percentage of net sales for products that are derived from or utilize the Selexis cell line. The royalty percentage is less than 1%.

Selexis is currently manufacturing cell lines for our bispecific drug candidates and we currently have commercial licenses to the Selexis cell line for our XmAb14045 and XmAb13676 clinical candidates.

#### ***License Agreement with BIO-TECHNE***

In February 2015, we entered into a license agreement with BIO-TECHNE Corporation for a non-exclusive license to certain antibody technology including monoclonal antibodies which recognize human somatostatin receptor 2. The variable domain of this antibody is incorporated in our XmAb18087 drug candidate.

Under the terms of the Agreement, Xencor made an upfront payment and is obligated to make payments upon the achievement of certain development and regulatory milestones and will also pay royalties based on a percentage of net sales from products that are derived from the XmAb18087 program. The royalty percentage is less than 1%.

#### ***License Agreement with Receptor Logic***

In December 2015, we entered into a worldwide exclusive license agreement with Receptor Logic, Inc. to research, develop, and commercialize products derived from antibodies that bind NY-eso-1 peptide in complex with MHC Class 1 HLA-A2.

Under the terms of the Agreement, Xencor made an upfront payment and is obligated to make payments upon the achievement of certain scientific, development and regulatory milestones and will also pay low single-digit royalties based on a percentage of net sales from products that are derived from the program.

#### ***Boehringer Ingelheim International GmbH***

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.

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.

### ***KBI Biopharma, Inc.***

In July 2014, we entered into a master services agreement (KBI Agreement) with KBI Biopharma, Inc. (KBI). We have engaged KBI under the KBI Agreement for process development, clinical scale-up, analytical method development, formulation development and other services related to drug substance and drug product for our bispecific development candidates, XmAb14045, XmAb13676, XmAb18087 and XmAb20717 in accordance with cGMP regulations. For each bispecific program we have entered into a separate agreement with the terms and conditions of services and payment. The KBI Agreement is for a three year term but is automatically extended on an annual basis until the services are completed. The KBI Agreement may be terminated by either party for a breach that is not remedied within thirty days after notice or sixty days after notice of the existence of an incurable scientific or technical issue that renders KBI unable to render services under the KBI Agreement, by after sixty day notice, or in the event of a bankruptcy of a party. For termination other than a material breach by KBI, we must pay for all services conducted prior to the termination and to wind down the activities.

### **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 autoimmune diseases, many of which are being developed or marketed by large multinational pharmaceutical companies. 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. In addition, other pharmaceutical companies have monoclonal antibodies or other biologics in clinical development for the treatment of autoimmune diseases. There are currently no approved therapies for IgG4-

related disease, a newly recognized disorder, and glucocorticoids are the current standard of care, although we believe that Rituxan is prescribed, off label.

Many companies have approved therapies or are developing drugs for the treatment of asthma including multinational pharmaceutical companies. Monoclonal antibody drug development has primarily focused on allergic asthma. Xolair is currently the only monoclonal antibody targeting IgE that we are aware of that is approved for the treatment of severe asthma. In addition, we are aware that Novartis and Genentech each have an antibody targeting IgE in clinical development for asthma. We are also aware of two antibodies for severe asthma that are marketed Nucala by GSK and Cinqair by Teva. 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 the drug candidates we and our licenses are developing 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 candidates.

## **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), 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 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 and acceptance by 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 and acceptance by 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;
- potential 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. 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. The FDA or responsible Institutional Review Board may place a trial on hold at any time related to perceived risks to patient safety.

- *Phase 1.* The product candidate is initially introduced into a limited population of healthy human subjects or, in some cases, patients with the disease for which the drug candidate is intended, 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 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.

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.

*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.

If the FDA determines that the BLA is substantially complete it will accept the BLA for filing. This process generally takes eight months to a year but in some cases may take much longer.

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 and it may inspect the manufacturing facilities to assure cGMP compliance and clinical sites used during the clinical trials to assure cGMP compliance. 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 prior to approval. A REMS can substantially increase the costs of obtaining approval. In addition, under the Pediatric Research Equity Act, or PREA, a BLA or supplement to a BLA must contain data that are adequate to assess the safety and effectiveness of the product for the claimed indications in all relevant pediatric subpopulations, and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The FDA may, on its own initiative or at the request of the applicant, grant deferrals for submission of some or all pediatric data until after approval of the product for use in adults, or full or partial waivers from the pediatric data requirements.

The FDA will issue a complete response letter describing deficiencies in the BLA and recommend actions if the agency decides not to approve the BLA. The applicant will have to address all of the deficiencies which could take substantial time to address.

If the product receives regulatory approval, the approval may be significantly limited to specific diseases and dosages or the indications for use may otherwise be limited, and 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.

*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, cGMP compliance for product manufacture, 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. Failure to comply with these or other FDA requirements can subject a manufacturer to possible legal or regulatory action, such as product reclass, 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.

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

Depending upon the timing, duration and specifics of the FDA approval of any of our biologic product candidates, we may apply 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 for one patent per product as compensation for patent term lost during

product development and the FDA regulatory review process of that product. The U.S. Patent and Trademark Office, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration.

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 generally not earlier than 12 years after the original BLA approval, although it can be shortened to four years if the biosimilar contains certification of patent invalidity or non-infringement to one of the patents listed with the FDA by the innovator BLA holders. The 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.

#### *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*

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. Significant uncertainty exists and will continue to exist 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 product 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. 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. Formulary placement by third-party payors is very competitive and can lead to lower prices and may effectively restrict patient access to our drugs. 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.

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. 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. 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 will 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.

Additional 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. 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 anti-kickback statutes and false claims laws analogous to the False Claims Act. Also, the Health Insurance Portability and Accountability Act of 1996 (HIPAA) created several new federal crimes, including healthcare fraud, and false statements relating to the delivery of or payments for healthcare benefits, items or services. HIPAA and its implementing regulations also 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.

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.

#### ***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, similar or more stringent than the U.S. laws.

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 <sup>95</sup>/<sub>46</sub> 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 December 31, 2016, we had 83 employees, all of whom were full-time, 28 of whom hold Ph.D. or M.D. degrees, 65 of whom were engaged in research and development activities and 18 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.

## **About Xencor**

We were incorporated in California in August 1997 under the name Xencor. In September 2004, we reincorporated in the state of Delaware under the name Xencor, Inc. Our principal offices are located at 111 West Lemon Avenue, Monrovia, CA 91016, and our telephone number (626) 305-5900. Our website address is [www.xencor.com](http://www.xencor.com). Our website and the information contained on, or that can be accessed through, the website will not be deemed to be incorporated by reference in, and are not considered part of, this Annual Report on Form 10-K. Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to reports filed or furnished pursuant to Section 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended, are available free of charge of the Investor Relations portion of our web site at [www.xencor.com](http://www.xencor.com) as soon as reasonably practical after we electronically file such material with, or furnish it to, the Securities and Exchange Commission (SEC).

We have a single operating segment and substantially all of our operating assets are located in the United States. For information regarding our revenue and research and development expenses for the last three fiscal years, see Item 7, "Management's Discussion and Analysis of Financial Conditions and Results of Operations."

## **Item 1 A. Risk Factors .**

*Except for the historical information contained herein or incorporated by reference, this Annual Report and the information incorporated by reference contains forward-looking statements that involve risks and uncertainties. These statements include projections about our accounting and finances, plans and objectives for the future, future operating and economic performance and other statements regarding future performance. These statements are not guarantees of future performance or events. Our actual results may differ materially from those discussed here. Factors that could cause or contribute to differences in our actual results include those discussed in the following section, as well as those discussed in Part II, Item 7 entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and elsewhere throughout this Annual Report and in any other documents incorporated by reference into this Annual Report. You should consider carefully the following risk factors, together with all of the other information included or incorporated in this Annual Report. Each of these risk factors, either alone or taken together, could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our common stock. There may be additional risks that we do not presently know of or that we currently believe are immaterial which could also impair our business and financial position.*

## **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 equity and debt financings and our research and development licensing agreements and have incurred significant operating losses since our inception in 1997. For the year ended December 31, 2016, we earned net income of \$23.6 million and our net losses for the years ended December 31, 2015, 2014 and 2013 respectively, was \$17.6 million, \$16.4 million and \$60.3 million (including a \$48.6 million loss on settlement of convertible notes). As of December 31, 2016 we had an accumulated deficit of \$238 million. We expect to incur additional losses in future years 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.

***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, XmAb7195, XmAb14045 and XmAb13676 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;
- obtaining satisfactory acceptance, formulary placement and reimbursement coverage for our approved products from third-party payors, including private health insurers, managed care providers and governmental payor programs, including Medicare and Medicaid;
- 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 Novartis, Amgen and MorphoSys, 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.***

As of December 31, 2016, we had \$403.5 million in cash, cash equivalents and marketable securities. We expect our expenses to increase in connection with our ongoing development activities, including additional clinical trials of XmAb5871 and XmAb7195, and, continued development of our pipeline of bispecific drug candidates including XmAb14045, XmAb13676, XmAb18087 and XmAb20717 and other research activities. Identifying potential product candidates and conducting preclinical testing and clinical trials are time-consuming, expensive and uncertain processes that take 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. 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 our existing cash, together with interest thereon, will be sufficient to fund our operations beyond the end of 2020. 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, XmAb7195, XmAb14045, XmAb13676, XmAb18087, XmAb20717 or clinical trials for other drug candidates may encounter technical, enrollment or other issues that could cause our development costs to increase more than we expect. Under the Novartis Agreement, we are co-developing XmAb14045 and XmAb13676 worldwide and sharing development costs equally. 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 XmAb5871, XmAb7195, XmAb14045, XmAb13676, XmAb18087 or XmAb20717 or any other 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, XmAb14045, XmAb13676, XmAb18087 and XmAb20717 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.

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 1b/2a clinical trial of XmAb5871, for example, some subjects reported mild to moderate gastrointestinal toxicities (nausea, vomiting and diarrhea). Other treatment related adverse events experienced in more

than two XmAb5871-treated patients were pyrexia (fever) and headache. Treatment related serious adverse events occurred in two patients that received XmAb5871: infusion related reaction and venous thrombosis. Further, in our Phase 1a clinical trial of XmAb7195 resulted in subjects having urticaria and dose limiting thrombocytopenia. If these or other side effects cause excessive discomfort, safety risks or reduction in acceptable dosage, then the development and commercialization of XmAb5871 or XmAb7195 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 four properties: immune inhibition, cytotoxicity, extended half-life and most recently, heterodimeric Fc domains enabling molecules with dual target binding. This platform has led to our lead product candidates, XmAb5871 and XmAb7195 and a pipeline of bispecific development candidates, XmAb14045, XmAb13676, XmAb18087 and XmAb20717 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 autoimmune diseases many of which are being developed or marketed by large multinational pharmaceutical companies. 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. There is also no approved therapy for IgG4-RD but we believe Rituxan is prescribed, off label. 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. Xolair is currently the only monoclonal antibody that we are aware of that is approved for the treatment of severe 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. Both Roche and Regeneron Pharmaceuticals have bispecific CD20 drug candidates in Phase 1 of development and there are many other companies developing their own bispecific platform technologies and drug candidates. MacroGenics has a bispecific CD123 x CD3 antibody currently in Phase 1 and CSL-Janssen has a CD123 monoclonal antibody that is currently in Phase 2.

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 Novartis, Amgen, MorphoSys, Novo Nordisk, CSL 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;
- our collaboration agreement with Novartis provides for us to co-develop worldwide with Novartis our two lead bispecific candidates, XmAb14045 and Xmab13676, and share development costs equally. Such an arrangement may require us to incur substantial costs in excess of our available resources;
- 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, 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 described in these risk factors relating to product development, regulatory approval and commercialization described in this Annual Report 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 for the production of XmAb5871 and XmAb7195 and third parties for fill and testing services. We rely on KBI for the production of our bispecific development candidates, XmAb14045, XmAb13676, XmAb18087 and XmAb20717. Any of our contract manufacturers may not perform as agreed, may be unable to comply with cGMP requirements and with FDA, state and foreign regulatory requirements or may terminate their respective agreements 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 KBI and are currently completely dependent on each of Catalent and KBI for the production of XmAb5871, XmAb7195, XmAb14045, XmAb13676, XmAb18087 and XmAb20717 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 KBI 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 any of XmAb5871, XmAb7195, XmAb14045, XmAb13676, XmAb18087 and XmAb20717 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 candidate. 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, XmAb7195, XmAb14045, XmAb13676, XmAb18087 and XmAb20717 we have not entered into a commercial supply agreement with either Catalent or KBI and neither has demonstrated that it will be capable of manufacturing XmAb5871, XmAb7195, XmAb14045, XmAb13676, XmAb18087 and XmAb20717 on a large commercial scale. We expect to move manufacturing services to another contract manufacturing organization to support late-stage clinical trials for XmAb5871 as well as commercial supplies. We might be unable to identify manufacturers for late stage clinical trials or commercial supply on acceptable terms or at all. A change to the manufacturing process for XmAb5871 or any of our product candidates 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 or other product candidates 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, XmAb7195, XmAb14045, XmAb13676, XmAb18087, XmAb20717 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 December 31, 2016, we held over 200 of issued patents and pending patent applications. We file 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 cannot 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 and certain product candidates. We have licensed and sublicensed certain intellectual property relating to our Xtend technology from a third party. We have also sublicensed certain intellectual property rights related to our bispecific technology from a third party and, we have licensed certain intellectual property rights from a third party related to our XmAb18087 product candidate. Under these licenses, we have no right to control patent prosecution of the intellectual property or to enforce the patents, and as such the licensed rights may not be adequately maintained by the licensors. The termination of these 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. It is also possible that we might knowingly or unknowingly in-license additional technology that is subject to U.S. government march-in rights.

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 parte 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 XmAb5871, XmAb7195 and XmAb5574/MOR208 or their manufacture. We believe that these patents and patent applications will expire in the United States in 2020 and 2021, respectively. Furthermore, we are aware of a recently issued patent owned by Merus B.V. (Merus) that may relate to and claim components of our bispecific product candidates, including XmAb14045 and XmAb13676, and will putatively expire in 2033. It is possible that these 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 five 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 the Genentech 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. We are currently evaluating the Merus patent; based on our analysis to date we believe there exists reasonable argument of invalidity and/or infringement; however, we cannot assure that this position will not

change upon further investigation. 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 planned growth and 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 are currently planning to increase the number of our employees and expand 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 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 at least \$10.0 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.

In addition, during the course of our operations our directors, executives, and employees may have access to material, nonpublic information regarding our business, our results of operations, or potential transactions we are considering. We may not be able to prevent a director, executive, or employee from trading in our common stock on the basis of, or while having access to, material, nonpublic information. If a director, executive, or employee was to be investigated or an action was to be brought against a director, executive, or employee for insider trading, it could have a negative impact on our reputation and our stock price. Such a claim, with or without merit, could also result in substantial expenditures of time and money, and divert attention of our management team from other tasks important to the success of our business.

***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 Ownership of Our Common Stock**

***The market price of our common stock is likely to be highly volatile, and you could lose all or part of your investment.***

Prior to our recently completed initial public offering, there was no public market for our common stock. The trading price of our common stock is likely to be volatile. Since our IPO, the trading price of our common stock has ranged from a low of approximately \$5.75 to a high of approximately \$29.38. 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 and biotechnology 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 and biotechnology companies 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.

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.

***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.***

Based on information available to us as of December 31, 2016 our executive officers, directors, 5% stockholders and their affiliates beneficially owned, as a group, approximately 27.4% of our voting stock. Further John S. Stafford III, a former director of the Company, beneficially owns approximately 15.0% of our voting stock and his family members beneficially own approximately an additional 6.4% of our voting stock.

Therefore, 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 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.

***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 have or are currently conducting early phase clinical trials for XmAb5871, XmAb7195, XmAb14045 and XmAb13676 but have not completed any late stage clinical trials for these or any other product candidate. We plan to begin a large randomized pivotal trial for XmAb5871 treating IgG4-RD in 2018. We have not yet demonstrated our ability to successfully complete any 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.

***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. If we fail to adequately staff our accounting and finance function to address the additional 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, it 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.

As a large accelerated filer effective for the year ended December 31, 2016, we are subject to additional internal control requirements of the Sarbanes-Oxley Act of 2002.

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

If our existing stockholders sell, or indicate an intention to sell, substantial amounts of our common stock in the public market, the trading price of our common stock could decline. In addition a substantial number of shares of common stock are subject to outstanding options that are or will become eligible for sale in the public market to the extent permitted by the provisions of various vesting schedules. If these additional shares of common stock are sold, or if it is perceived that they will be sold, in the public market, the trading price of our common stock could decline.

***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), subject to board approval, 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. As of December 31, 2016, we had options to purchase 4,045,801 shares outstanding under our equity compensation plans. We are also authorized to grant equity awards, including stock options, to our employees, directors and consultants, covering up to 7,027,349 shares of our common stock, pursuant to our equity compensation plans. We plan to register the number of shares available for issuance or subject to outstanding awards under our equity compensation plans. 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.

***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. Upon analysis, we believe that we triggered “ownership change” as a result of the sale of stock in connection with our IPO in December 2013 and our net operating loss and tax credit carryforwards have been limited as a result. The limitation of our tax credits and our net operating loss carryforwards 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. Any provision of our certificate of incorporation or bylaws or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock, and could also affect the price that some investors are willing to pay for our common stock.

***Requirements associated with being a public reporting company will continue to increase our costs significantly, as well as divert significant company resources and management attention.***

We have only been subject to the reporting requirements of the Exchange Act and the other rules and regulations of the Securities and Exchange Commission (SEC) since December 2013. We are working with our legal, independent accounting, and financial advisors to identify those areas in which changes should be made to our financial and management control systems to manage our growth and our obligations as a public reporting company. These areas include corporate governance, corporate control, disclosure controls and procedures, and financial reporting and accounting systems. We have made, and will continue to make, changes in these and other areas. Effective for the year-ended December 31, 2016, we are classified as a large accelerated filer and are subject to additional internal control and SEC reporting obligations. Compliance with the various reporting and other requirements applicable to public reporting companies will require considerable time, attention of management, and financial resources. In addition, the changes we make may not be sufficient to allow us to satisfy our obligations as a public reporting company on a timely basis.

Further, the listing requirements of The NASDAQ Global Market require that we satisfy certain corporate governance requirements relating to director independence, distributing annual and interim reports, stockholder meetings, approvals and voting, soliciting proxies, conflicts of interest and a code of conduct. Our management and other personnel will need to devote a substantial amount of time to ensure that we comply with all of these requirements. Moreover, the reporting requirements, rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. These reporting requirements, rules and regulations, coupled with the increase in potential litigation exposure associated with being a public company, could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors or board committees or to serve as executive officers, or to obtain certain types of insurance, including directors' and officers' insurance, on acceptable terms.

In addition, being a public company could make it more difficult or more costly for us to obtain certain types of insurance, including directors' and officers' liability insurance, and we may be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. The impact of these events could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers.

Any changes we make to comply with these obligations may not be sufficient to allow us to satisfy our obligations as a public company on a timely basis, or at all.

**Item 1 B. Unresolved Staff Comments.**

Not applicable.

**Item 2. Properties .**

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 June 2020, subject to our right to extend for an additional five years at then market rates. In addition we lease approximately 5,700 square feet of office space in San Diego, California. We

believe that our existing facilities are adequate to meet our current needs, and that suitable additional alternative spaces will be available to meet future needs on commercially reasonable terms.

**Item 3. Legal Proceedings .**

On March 3, 2015, a verified class action complaint, captioned DePinto v. John S. Stafford, et al., C.A. No. 10742, was filed in the Court of Chancery of the State of Delaware against certain of the Company's current and former directors alleging cause of action for Breach of Fiduciary Duty and Invalidity of Director and Stockholder Consents. In general, the complaint alleged that the plaintiff and the class he seeks to represent were shareholders of the Company during the recapitalization and certain related transactions that the Company underwent in 2013 and that the defendants breached their fiduciary duties in the course of approving that series of transactions. It also challenged as invalid certain corporate acts taken in the 2013 time period. On June 10, 2015, the Company filed a Verified Petition for Relief under Del. C. Section 205 (the 205 Petition) related to the corporate acts challenged in the complaint. The defendants filed an answer to the class action complaint on June 22, 2015. On July 9, 2015, the Court consolidated the 205 Petition with the class action, joined the Company as a defendant and ordered it to file the claims in the 205 Petition as counter-claims in the class action, which the Company has done.

On August 11, 2015, the Company filed a Motion for Leave to File an Amended Counter-Claim, along with the proposed Amended Counter-Claim and related documents. On October 5, 2015, the parties filed a Stipulation of Partial Settlement and related documents disclosing a settlement of the invalidity claims addressed in the complaint, the counter-claim and the proposed amended counter-claim including a request by plaintiff's counsel for reimbursement of legal fees up to \$950,000. On October 7, 2015, Xencor filed the Amended Counter-Claim and the related documents. On December 14, 2015, the Court entered an Order and Partial Final Judgement approving the settlement of the invalidity claims, validating each corporate act challenged in the complaint, dismissing with prejudice Count II of the complaint (the invalidity claims) and granting plaintiff's counsel a fee award of \$950,000. We have paid the plaintiff's legal award cost of \$950,000 net of insurance proceeds which has been reflected as a charge in our 2015 operations.

On September 27, 2016, the parties engaged involuntary mediation and agreed to settle the complaint's remaining claims for a total of \$2.375 million to the class certified by the Delaware Court of Chancery. The settlement, which is subject to approval by the Court, was reached without any party admitting wrongdoing. Under the terms of the settlement, no payments shall be made to the plaintiffs by the Company or any of the defendants in the lawsuit other than payments covered by the Company's insurance. The Court has scheduled a Settlement Hearing for April 4, 2017.

We continue to recognize legal costs related to the litigation as incurred and offset any insurance proceeds when approved and issued. For the period ended December 31, 2016 no amount of loss related to the settlement has been accrued. As of December 31, 2016, we have reported the outstanding settlement amount of \$2.355 million as a payable and also reflected a receivable of the same amount for the insurance coverage that will fund the remaining settlement costs.

**Item 4. Mine Safety Disclosures .**

Not applicable.

**PART II**

**Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities**

**Market Information**

Our common stock began trading on The NASDAQ Global Market on December 3, 2013 under the symbol "XNCR." Prior to such time, there was no public market for our common stock. The following table sets forth the high and low sales prices per share of our common stock as reported on The NASDAQ Global Market for the period indicated. On February 17, 2017, the closing price for our common stock as reported on the NASDAQ Global Market

was \$24.28. The following table sets forth the high and low sales prices per share of our common stock as reported on the NASDAQ Global Market for the periods indicated.

	Price Range	
	High	Low
<b>Year Ended December 31, 2016</b>		
Fourth Quarter	\$ 29.38	18.45
Third Quarter	26.50	17.65
Second Quarter	19.76	10.95
First Quarter	14.51	9.89
<b>Year Ended December 31, 2015</b>		
Fourth Quarter	\$ 17.28	\$ 10.68
Third Quarter	24.82	11.81
Second Quarter	22.23	13.00
First Quarter	19.50	13.67

#### Holders of Record

As of February 17, 2017, we had 46,573,700 shares of common stock outstanding held by approximately 226 stockholders of record. The actual number of stockholders is greater than this number of record holders, and includes stockholders who are beneficial owners, but whose shares are held in street name by brokers and other nominees. This number of holders of record also does not include stockholders whose shares may be held in trust by other entities.

#### Dividend Policy

We have never declared or paid any cash dividends on our common 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.

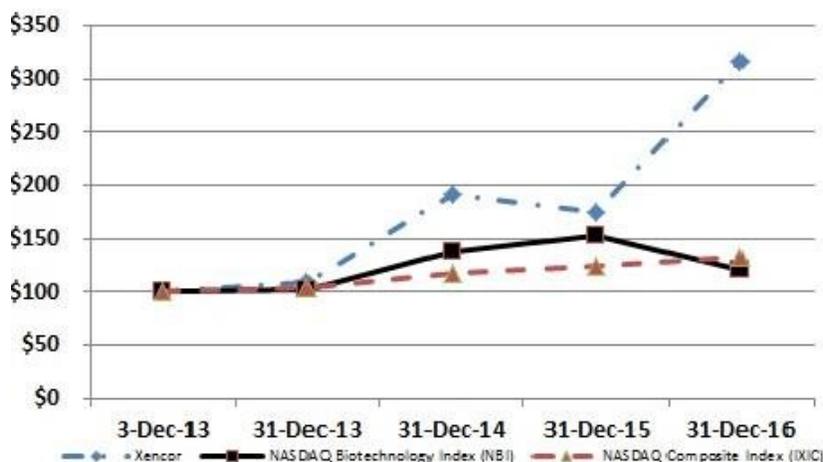
#### Securities Authorized for Issuance Under Equity Compensation Plans

Information about our equity compensation plans is incorporated herein by reference to Item 12 of Part III of this Annual Report.

#### Performance Graph

The following graph shows a comparison from December 3, 2013 through December 31, 2016 of the cumulative total return for our common stock, the NASDAQ Biotechnology Index (NBI) and the NASDAQ Composite Index (CCMP). The graph assumes an initial investment of \$100 on December 3, 2013 and assumes reinvestment of the

full amount of all dividends, if any. The comparisons in the graph are not intended to forecast or be indicative of possible future performance of our common stock.



The performance graph shall not be deemed to be incorporated by reference by means of any general statement incorporating by reference this Form 10-K into any filing under the Securities Act of 1933, as amended or the Exchange Act, except to the extent that we specifically incorporate such information by reference, and shall not otherwise be deemed filed under such acts.

#### Recent Sales of Unregistered Securities

There were no sales of unregistered securities during the year ended December 31, 2016.

#### Use of Proceeds

On December 2, 2013, we commenced our initial public offering (IPO) pursuant to a registration statement on Form S-1 (File No. 333-191689) that was declared effective by the SEC on December 3, 2013 and that registered an aggregate of 14,639,500 shares of our common stock for sale to the public at a price of \$5.50 per share and an aggregate offering price of \$80,517,250. The net offering proceeds to us, after deducting underwriting discounts and commissions and offering costs, were approximately \$72.5 million. We have used the net proceeds from our IPO in connection with our operations including research and development and administrative expenses incurred since the date of our IPO.

In March 2015, we completed the sale of 8,625,000 shares of common stock which included shares we issued pursuant to our underwriters' exercise of their over-allotment option pursuant to a follow-on financing. We received net proceeds of \$115.2 million, after underwriting discounts and offering expenses.

In December 2016, we completed the sale of 5,272,750 shares of common stock which included shares we issued pursuant to our underwriters' exercise of their over-allotment option pursuant to a follow-on financing. We received net proceeds of \$119.3 million, after deducting underwriter discounts and offering expenses.

#### Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None.

**Item 6. Selected Financial Data .**

*The selected financial data set forth below is derived from our audited financial statements and may not be indicative of future operating results. The following selected financial data should be read in conjunction with the financial statements and notes thereto and Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this Annual Report. 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 our future results. Amounts are in thousands, except share and per share amounts.*

	Year Ended December 31,				
	2016	2015	2014	2013	2012
<b>Statement of Operations Data:</b>					
Revenues	\$ 87,520	\$ 27,762	\$ 9,520	\$ 10,172	\$ 9,524
Operating expenses:					
Research and development	51,872	34,140	18,516	17,000	12,668
General and administrative	13,108	11,960	7,461	3,692	3,086
Total operating expenses	64,980	46,100	25,977	20,692	15,754
Income (loss) from operations	22,540	(18,338)	(16,457)	(10,520)	(6,230)
Other income (expenses)					
Interest income	2,091	744	33	14	11
Interest expense	(21)	(13)	(9)	(1,213)	(2,461)
Other income (expense)	6	15	11	16	86
Loss on settlement of convertible promissory notes	—	—	—	(48,556)	—
Total other income (expenses), net	2,076	746	35	(49,739)	(2,364)
Net income (loss) before income tax	24,616	(17,592)	(16,422)	(60,259)	(8,594)
Income tax provision	991	—	—	—	—
Net deemed contribution on exchange and sale of preferred stock	—	—	—	144,765	—
Net income (loss) attributable to common stockholders	\$ 23,625	\$ (17,592)	\$ (16,422)	\$ 84,506	\$ (8,594)
Other comprehensive income (loss)					
Net unrealized loss on marketable securities available-for-sale, net of tax	(925)	(516)	—	—	—
Comprehensive income (loss)	\$ 22,700	\$ (18,108)	\$ (16,422)	\$ (60,259)	\$ (8,594)
Net income (loss) per share attributable to common stockholders (1):					
Basic	\$ 0.57	\$ (0.45)	\$ (0.52)	\$ 34.18	\$ (118.86)
Diluted	\$ 0.56	\$ (0.45)	\$ (0.52)	\$ (3.85)	\$ (118.86)
Weighted average shares of common stock used in computing net income (loss) per share attributable to common stockholders:					
Basic	41,267,329	39,015,131	31,390,631	2,472,581	72,302
Diluted	42,388,867	39,015,131	31,390,631	15,645,789	72,302

- (1) See Note 1 to our Annual Financial Statements appearing elsewhere in this document for a description of the method used to calculate basic and diluted income (loss) per common share.

	As of December 31, (in thousands)				
	2016	2015	2014	2013	2012
<b>Balance Sheet Data:</b>					
Cash, cash equivalents and marketable securities	\$403,476	\$193,321	\$54,649	\$77,975	\$ 2,312
Working capital	35,367	54,246	51,553	70,615	(22,640)
Patents, licenses, and other intangible assets, net	10,362	9,971	9,116	8,814	8,460
Total assets	428,563	206,910	67,823	87,315	11,659
Deferred revenue	103,447	33,829	4,591	9,746	7,620
Convertible preferred stock	—	—	—	—	146,766
Total stockholders' equity (deficit)	\$313,954	\$162,432	\$59,290	\$73,533	\$(166,268)

## Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

*You should read the following discussion and analysis together with "Item 6. Selected Financial Data" and our financial statements and related notes included elsewhere in this Annual Report. The following discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those expressed or implied in any forward-looking statements as a result of various factors, including those set forth under the caption "Item 1A. Risk Factors."*

### 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 and controls antibody structure. 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 or stabilizing novel antibody structures, while maintaining 99.5% identity in structure and sequence to natural antibodies. The newest aspect of our platform is the XmAb bispecific Fc domains, which enable the rapid design and simplified development of antibodies that bind two or more antigens simultaneously. 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, allowing us to create new antibody drug candidates for our internal development or licensing, or to selectively license access to one or more of our XmAb technologies to pharmaceutical or biotechnology companies to use in developing their own proprietary antibodies with improved properties. We have applied our XmAb technology to:

- develop a pipeline of drug candidates that we wholly-own and are developing ourselves,
- develop our two leading bispecific candidates that we are co-developing with Novartis pursuant to a license and collaboration agreement,
- develop XmAb antibody candidates through early stage of development and then license them to our partners for continued development which requires no additional efforts on our part and,
- apply our Fc technologies to partner created antibodies. These transactions generally require very little effort on our part

The various partnership and licensing transactions provide us with multiple revenue streams that help fund development of our wholly-owned product candidates and usually require limited resources or efforts from Xencor. There are currently eleven antibody product candidates in clinical trials that have been engineered with XmAb technology, including seven candidates being advanced by licensees and development partners.

Our XmAb technology has created a suite of wholly-owned compounds: two XmAb compounds that are currently in clinical trials and two preclinical XmAb bispecific compounds that we plan to begin clinical trials in 2018. XmAb5871 uses our XmAb Immune Inhibitor Fc Domain and targets B cells an important component of the immune system. We are currently running two Phase 2 trials for XmAb5871, one in IgG4- RD and a trial in SLE, and we also completed an additional Phase 1 trial this year for a subcutaneous formulation of XmAb5871. In November 2016 we reported interim data from the IgG4-RD Phase 2 trial at the American College of Rheumatology (ACR) annual meeting. Complete data from this study are expected in 2017 and we plan on initiating subsequent trials with XmAb5871 treating IgG4-RD in 2018. We will also disclose data from the subcutaneous trial for XmAb5871 in 2017.

XmAb7195 uses our Immune Inhibitor Fc Domain and is being developed for the treatment of severe asthma and allergic diseases. In January 2015, we reported top-line interim data from Part 1 of the Phase 1a trial with XmAb7195 and in June 2015 we announced a continuation of the Phase 1a trial of XmAb7195, treating subjects with high baseline IgE levels. We are currently enrolling a multi-dose Phase 1 trial for XmAb7195 with a subcutaneous formulation and expect to announce initial data from the trial in 2017.

We are also co-developing our first two lead bispecific candidates, XmAb14045 and XmAb13676, with Novartis pursuant to the Novartis Agreement. We are currently enrolling Phase 1 clinical trials for XmAb14045 for the treatment of AML and XmAb13676, for the treatment of B-cell malignancies. Bispecific candidates are a rapidly emerging area of biotherapeutics development, particularly in immuno-oncology. Our XmAb® Bispecific Fc Domain technology is designed to maintain full-length antibody properties in a bispecific antibody, potentially enabling stable molecules with favorable in vivo half-life and allowing for the use of standard antibody production methods, issues that have frustrated previous industry efforts at bispecific antibody design. These bispecific Fc domains are used to generate a broad array of novel drug candidates.

In addition to the two lead bispecific candidates being co-developed with Novartis, we are developing a pipeline of additional bispecific candidates that are wholly-owned and will be developed by us.

We have also created antibodies which we have licensed to other pharmaceutical and biotechnology companies for further development. These include MOR208, an antibody in Phase 2 development, which we licensed to Morphosys, and XmAb13551, a bispecific CD38 x CD3 preclinical candidate, which we licensed to Amgen. There are also currently eight other programs where we have licensed our technology to partners for use in development programs with their own molecules. Six of these programs are in clinical development, the most advanced being Alexion which achieved a Phase 3 clinical development milestone in 2016 and CSL-Janssen which achieved a Phase 2 clinical development milestones in 2015.

We have over 200 issued and pending patents worldwide to protect our XmAb technology platform and XmAb drug candidates.

### **Key Company Milestones**

*Novartis Collaboration*. In June 2016, we entered into a Collaboration and License Agreement with Novartis (Novartis Agreement) to develop and commercialize bispecific and other Fc engineered antibody drug candidates using the Company's proprietary XmAb technologies and drug candidates. Under the Novartis Agreement, we licensed certain rights to our two lead bispecific candidates, XmAb14045 and XmAb13676, to Novartis including the right for Novartis to commercialize drug products from both programs in all worldwide territories outside the United States (US). We will co-develop both candidates with Novartis and share development costs equally. We will also apply our bispecific technology to up to four Novartis identified antibodies and will also license other Fc technologies to Novartis. We received a non-refundable upfront payment of \$150 million and are eligible to receive up to \$2.4 billion in milestones under the Agreement.

*XmAb5871.* In December 2010, we entered into a Collaboration and Option Agreement (Collaboration Agreement) with Amgen for an option for the acquisition by Amgen of exclusive rights to our XmAb5871 product candidate. In October 2014, pursuant to a request by us, Amgen agreed to terminate the Collaboration Agreement for convenience, provided we grant them a right of first negotiation (“ROFN”) to obtain an exclusive license to develop and commercialize any future XmAb5871 product.

We have completed enrollment for a Phase 2 open-label pilot study of XmAb5871 for IgG4-RD. We announced interim data from the trial in November at the annual ACR meeting. The trial enrolled 15 patients who received treatment for up to 24 weeks. The recently reported IgG4-RD Responder Index is being used to assess treatment activity as well as evaluation of several previously described biomarkers such as circulating plasmablast numbers. IgG4-RD is a fibro-inflammatory autoimmune disorder that impacts up to 40,000 patients in the United States. IgG4-RD affects multiple organ systems and is characterized by the distinct microscopic appearance of disease organs, including dense presence of IgG4-positive plasma cells that is required for diagnosis. This objective diagnostic criterion is atypical for autoimmune diseases and offers advantages for accurately identifying patients. There are currently no approved therapies for this newly recognized disorder and corticosteroids are the current standard of care.

We have also initiated a Phase 2 randomized, double blinded, placebo-controlled study of XmAb5871 in SLE. This trial is designed to assess the effect of XmAb5871 on SLE disease activity in a shorter timeframe and using fewer patients compared to standard SLE trials, and XmAb5871 is the first newly developed agent being assessed with this novel trial design. The trial design calls for treating patients with moderate to severe, non-organ-threatening SLE with XmAb5871 (or placebo) after their lupus disease activity has improved with a short course of intra-muscular (IM) steroid therapy. The trial will enroll approximately 90 subjects, 1:1 randomized to XmAb5871 or placebo, for up to 24 weeks. The unmet need in lupus remains high for the over 160,000 Americans with a definite lupus diagnosis. Patients are often subject to prolonged use of systemic corticosteroids and potent immunosuppressive agents with significant short and long term side effects. Current biologic treatments are limited by their modest efficacy or safety risks. Because B cells play a significant role in SLE pathogenesis, we believe that XmAb5871 is a potential treatment.

*XmAb7195.* We initiated the Phase 1 clinical trial for our XmAb7195 program in May 2014. We announced completed data from this trial in May 2016. We are currently enrolling a multi-dose Phase 1 clinical trial of a subcutaneous formulation of XmAb7195 in healthy volunteers and in atopic subjects and plan on announcing top line data from this trial in 2017.

*MOR208.* MorphoSys initiated a Phase 2 clinical trial with MOR208 in May 2013, treating patients with NHL and a second Phase 2 clinical trial in April 2013 to treat patients with ALL. In conjunction with the initiation of these trials, we received two milestone payments totaling \$3.0 million. In addition, an investigator-sponsored trial in CLL in combination with lenalidomide began in January 2014. MorphoSys has announced that they will begin a Phase 3 trial of Mor208 in 2017.

*Licensing Partnerships.* We currently have nine licensing partnerships for the licensing of our XmAb technology. These arrangements provide research funding, upfront payments and annual licensing fees in addition to potential milestones and contractual payments as our partners advance compounds that incorporate our technology into clinical development.

In December 2016, Alexion achieved a Phase 3 development milestone for an undisclosed compound and we received a \$5 million milestone payment. In September 2015, we announced the Amgen Agreement with Amgen to apply our bispecific Fc domain technology to five internal Amgen antibody programs, in addition to licensing to Amgen XmAb13551, our CD38 x CD3 bispecific compound. We received a \$45 million upfront payment. In 2016 we delivered five bispecific drug candidates under the Amgen Agreement. In June 2016 we announced the collaboration with Novartis that includes an agreement by us to apply our bispecific technology to four Novartis antibody programs.

There are currently seven compounds in clinical development from our partners that have incorporated our XmAb technology.

*Bispesific program.* We continue to advance our pipeline with bispesific Fc antibodies that incorporate our XmAb bispesific Fc domain, which allow us to create multiple-antigen targeting molecules. By using an Fc as an integral part of the molecule, we maintain the advantages of natural antibody features, including potentially enabling it to retain favorable half-life, simplify manufacturing and modulate potency to reduce toxicity.

We have initiated the Phase 1 clinical trials for our first two bispesific drug candidates, XmAb14045 and XmAb13676. We have also initiated development for our next two bispesific candidates, XmAb18087 and XmAb20717.

## Financial Operations Overview

### Revenues

Our revenues to date have been generated primarily from our collaboration agreements and our technology licensing agreements. Revenue recognized from our collaboration agreements includes non-refundable upfront payments and milestone payments while revenue from our technology licensing agreements includes upfront payments, annual maintenance fees, option payments to obtain commercial licenses and milestone payments. Since our inception through December 31, 2016, we have generated \$189.9 million in revenues under the 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.

### Summary of Collaboration and Licensing Revenue by Partner

The following is a comparison of collaboration and licensing revenue for the years ended December 31, 2016, 2015 and 2014 (in millions):

	Year Ended December 31,		
	2016	2015	2014
Amgen	\$ 18.7	\$ 13.8	\$ 6.9
Alexion	6.0	8.5	1.0
Novo Nordisk	2.7	2.9	—
Novartis	59.7	—	—
CSL	—	2.5	0.7
Other	0.4	0.1	0.9
Total	<u>\$ 87.5</u>	<u>\$ 27.8</u>	<u>\$ 9.5</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, clinical trial 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 contract manufacturing, preclinical study and clinical trial expenses based on the services performed pursuant to the contracts with manufacturing, research institutions and clinical research organizations that manufacture and 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 additional and later stage

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 \$296.8 million in research and development expenses from inception through December 31, 2016.

We expect that our research and development expenses may increase over spending levels in recent years if we are successful in advancing XmAb5871, XmAb7195, XmAb14045, XmAb13676, XmAb18087, XmAb20717 or any of our other 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, 2016, 2015 and 2014 (in millions):

	Year Ended		
	December 31,		
	2016	2015	2014
<b>Product programs:</b>			
Bispecific programs	\$ 23.7	\$ 18.1	\$ 5.1
XmAb5871 programs	17.3	7.9	4.1
XmAb7195 program	7.5	6.0	5.5
Other, research and early stage programs	3.4	2.1	3.8
<b>Total research and development expenses</b>	<b>\$ 51.9</b>	<b>\$ 34.1</b>	<b>\$ 18.5</b>

#### ***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.

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

For the years ended December 31, 2016 and 2015, other income (expense), net consists primarily of interest income (loss) from our investments during the year. For the year ended December 31, 2014 other income (expense), net consisted primarily of interest income and expense.

#### **Critical Accounting Policies, 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 have been prepared in accordance with accounting principles generally accepted in the

United States (GAAP). The preparation of our financial statements in conformity with GAAP requires our management to make estimates and assumptions that affect the amounts and disclosures reported in the financial statements and accompanying notes. Actual results could differ materially from those estimates. Our management believes judgment is involved in determining revenue recognition, the fair value-based measurement of stock-based compensation, the fair value estimate of marketable securities, the capitalization and recoverability of intellectual property costs, valuation of deferred tax assets and accruals. Our management evaluates estimates and assumptions as facts and circumstances dictate. As future events and their effects cannot be determined with precision, actual results could differ from these estimates and assumptions, and those differences could be material to the financial statements. If our assumptions change, we may need to revise our estimates, or take other corrective actions, either of which may also have a material adverse effect on our statements of operations, liquidity and financial condition.

While our significant accounting policies are described in more detail in Note 1 to our financial statements included elsewhere in this Annual Report on Form 10-K, 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 and development collaborations, which may include research and development services, licenses of our internally-developed technologies, licenses of our internally-developed drug candidates, or combinations of one or more of these. We recognize revenue when all of the following criteria are met: persuasive evidence of an arrangement exists, transfer of, or access to, the rights of our drug candidates or technologies 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, research funding, co-development reimbursements, 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 generally 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. To date, we have used our best estimate of selling price for each of our deliverables in our multiple element arrangements. 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 or collaborator that occurs in each transaction. The potential value of our technology or drug candidate 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 for our licensing transactions is the commercial license for our technology in the product candidate, and frequently a research license with an option for commercial license. We have also entered into multiple arrangements that involve the deliverable of drug candidates at various stages of development. 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 price 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 may 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 may 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.
- *Collaboration Arrangements:* The deliverables under our collaboration arrangements generally involve the license to certain rights to one or more of our product candidates in addition to a license to access to one or more of our technologies. These arrangements may require us to apply our technologies to a partner-identified or provided antibody and deliver a drug candidate that incorporates one of our technologies to the partner. To account for the element of the rights to a drug candidate that we have created, we evaluate whether the rights to the drug candidate has standalone value separate from the obligation to apply our technologies to partner-identified antibodies. We recognize arrangement consideration allocated to the rights to the drug candidates upon transfer of the rights to the partner which generally occurs upon execution of the agreement. We recognize arrangement consideration allocated to the obligation to apply our technologies to partner-identified antibodies as the partner accepts the drug candidates that incorporates our technologies, subject to any substitution or replacement provisions.
- *Research and Development Services:* The deliverables under our product development partnership and technology license arrangements may include 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 contractual payments related to achievement of specific research, development and regulatory milestones and sales-based milestone that are based solely upon the performance of the licensee or collaborator. Research, development and regulatory contingent contractual 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 contingent contractual payments are typically payable when annual sales of a covered product reach specific levels.

At the inception of each arrangement that includes contingent contractual payments, we evaluate whether each potential payment and milestone event is substantive and at risk to both parties based on the basis of the contingent nature of the milestone event. We evaluate factors such as scientific, regulatory, commercial and other risks that we must overcome to achieve the respective milestone event, whether the contractual payments due at each milestone event is reasonable relative to all deliverables and payment terms in the arrangement in making this assessment and whether the contingent contractual payment relates solely to past performance. Additionally, certain of our product development and technology license arrangements may include milestone payments related to the achievement of specific research and development milestones, which are achieved in whole or in part on our performance.

We recognize any payment that is contingent upon the achievement of a 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.

### ***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 net capitalized patents, licenses and other intangible assets as of December 31, 2016, 2015 and 2014 was \$10.4 million, \$10.0 million and \$9.1 million, respectively. 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 Comprehensive Income (Loss).

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 the write-off of 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 should be amortized. We recorded a charge for abandoned intangible assets of \$356,000, \$296,000 and \$509,000 for the years ended December 31, 2016, 2015 and 2014, respectively. Such charges are reflected in the General and Administrative section of our Statement of Comprehensive Income (Loss).

We 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.

### ***Accrued Research and Development Expenses***

As part of the process of preparing our financial statements, we are required to estimate our accrued research and development expenses. This process involves reviewing contracts and purchase orders, reviewing the terms of our license agreements, communicating with our applicable personnel to identify services that have been performed on our behalf, and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of actual cost. The majority of our service providers invoice us monthly in arrears for services performed. We make estimates of our accrued expenses as of each balance sheet date based on facts and circumstances known to us at that time. We periodically confirm the accuracy of our estimates with the service providers and make adjustments if necessary. Examples of estimated accrued research and development expenses include fees to:

- contract research organizations and other service providers in connection with clinical studies;
- contract manufacturers in connection with the production of and testing of clinical trial materials; and
- vendors in connection with preclinical development activities.

We base our expenses related to clinical studies on our estimates of the services received and efforts expended pursuant to contracts with multiple research institutions and contract research organizations that conduct and manage clinical studies on our behalf. The financial terms of these agreements are subject to negotiation, vary from contract to contract, and may result in uneven payment flows and expense recognition. Payments under some of these contracts depend on factors such as the successful enrollment of patients and the completion of clinical trial milestones. In accruing these costs, we estimate the time period over which services will be performed for which we have not been invoiced and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from our estimate, we adjust the accrual accordingly. Our understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and may result in our reporting changes in estimates in any particular period.

### ***Income Taxes***

Deferred tax assets and liabilities are determined based on differences between the financial reporting and tax basis of assets and liabilities and are measured using the enacted tax rates and laws that are expected to be in effect when the differences are expected to reverse. The effect on deferred tax assets and liabilities of a change in tax rates is recognized as income in the period that such tax rate changes are enacted. The measurement of a deferred tax asset is reduced, if necessary, by a valuation allowance if it is more likely than not that some portion or all of the deferred tax asset will not be realized. Financial statement recognition of a tax position taken or expected to be taken in a tax return is determined based on a more-likely-than not threshold of that position being sustained. If the tax position meets this threshold, the benefit to be recognized is measured as the largest amount that is more than 50% likely to be realized upon ultimate settlement. Our policy is to record interest and penalties related to uncertain tax positions as a component of income tax expense.

We recorded net deferred tax assets of \$69.7 million as of December 31, 2016, which have been fully offset by a valuation allowance due to uncertainties surrounding our ability to realize these tax benefits. The deferred tax assets are primarily comprised of federal and state tax net operating loss (NOL) carryforwards and research and development tax credit carryforwards. As of December 31, 2016, we had cumulative net operating loss carryforwards for federal and state income tax purposes of approximately \$145.2 million and \$91.6 million, respectively, and available tax credit carryforwards of approximately \$6.4 million for federal income tax purposes and \$5.2 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, state net operating losses expire starting in 2017 and, federal tax credit carryforwards expire starting in 2019. Upon analysis, we believe that our net operating losses and tax credits were subject to an annual limitation due to the ownership change provisions by the Internal

Revenue Code of 1986 under Section 382 and similar state provisions. As a result of the limitations under Section 382, our federal and state tax operating loss and tax credit carryforwards have been limited.

For the year ended December 31, 2016 we recorded a current tax expense of \$1.0 million related to federal and state alternative minimum taxes (AMT).

### ***Valuation of Stock-Based Compensation***

We record the fair value of stock options and shares issued under our Employee Stock Purchase Plan (ESPP) to employees as of the grant date as compensation expense over the service period, which is generally 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.

#### *Common Stock Options Fair Value*

We recognize stock-based compensation expense in accordance with the provisions of ASC Topic 718, *Compensation—Stock Compensation*. The use of a Black-Scholes model requires us to apply judgment and make assumptions and estimates that include the following:

- *Expected Volatility* —Volatility is a measure of the amount by which a financial variable such as a share price has fluctuated (historical volatility) or is expected to fluctuate (expected volatility) during a period. As we do not yet have sufficient history of our own volatility, we have identified several public entities of similar size, complexity and stage of development and calculate the historical volatility using the volatility of these companies.
- *Expected Dividend Yield* —We have never declared or paid dividends and have no plans to do so in the foreseeable future.
- *Risk-Free Interest Rate* —This is the U.S. Treasury rate for the week of each option grant during the year, having a term that most closely resembles the expected life of the option.
- *Expected Term* —This is the period of time that the options granted are expected to remain unexercised. Options granted have a maximum term of ten years and we have estimated the expected life of the option term to be between five and six years. We use a simplified method to calculate the average expected term.
- *Expected Forfeiture Rate* —The forfeiture rate is the estimated percentage of options granted that is expected to be forfeited or canceled on an annual basis before becoming fully vested. We use published surveys of employee retention rates of similar peer companies to estimate pre-vesting option forfeitures.

**Results of Operations****Comparison of the Year Ended December 31, 2016 and 2015**

The following table summarizes our results of operations for the year ended December 31, 2016 and 2015 (in millions):

	Year ended December 31,		
	2016	2015	Change
<b>Revenues:</b>			
Research collaboration	\$ 21.7	\$ 16.6	\$ 5.1
Milestone	5.0	6.0	(1.0)
Licensing	60.8	5.2	55.6
<b>Total revenues</b>	<b>87.5</b>	<b>27.8</b>	<b>59.7</b>
<b>Operating expenses:</b>			
Research and development	51.9	34.1	17.8
General and administrative	13.1	12.0	1.1
<b>Total operating expenses</b>	<b>65.0</b>	<b>46.1</b>	<b>18.9</b>
Other income, net	2.1	0.7	1.4
Income tax provision	1.0	—	1.0
<b>Net income (loss)</b>	<b>\$ 23.6</b>	<b>\$ (17.6)</b>	<b>\$ 41.2</b>

*Revenues*

Research collaboration revenues increased by \$5.1 million in 2016 over 2015 amounts primarily due to revenue recognized under our 2015 collaboration agreement with Amgen.

Milestone and contingent payments decreased by \$1.0 million in 2016 over 2015 amounts primarily due to receiving contractual milestones in 2015 from CSL offset by contractual milestones received from Alexion in 2015 and 2016.

Licensing revenue increased by \$55.6 million in 2016 over 2015 amounts primarily due to revenue earned under our Novartis agreement.

*Research and Development Expenses*

The following table summarizes our research and development expenses for the years ended December 31, 2016 and 2015, (in millions):

	Year Ended December 31,		
	2016	2015	Change
<b>Product programs:</b>			
Bispecific programs	23.7	18.1	5.6
XmAb5871 programs	\$ 17.3	\$ 7.9	\$ 9.4
XmAb7195 program	7.5	6.0	1.5
Other, research and early stage programs	3.4	2.1	1.3
<b>Total research and development expense</b>	<b>\$ 51.9</b>	<b>\$ 34.1</b>	<b>\$ 17.8</b>

Research and development expenses increased by \$17.8 million in 2016 over 2015 amounts. The increase is primarily due to additional spending associated with the XmAb5871 program related to the initiation of the Phase 2 clinical trials in IgG4-RD and SLE for XmAb 5871 and expenses incurred in advancing our initial bispecific candidates

XmAb14045 and XmAb13676, into clinical development as well as initial preclinical development on bispecific candidates XmAb18087 and XmAb20717.

#### *General and Administrative Expenses*

General and administrative expenses were \$13.1 million and \$12.0 million for the year ended December 31, 2016 and 2015, respectively, an increase of \$1.1 million. The increase is primarily due to an increase in stock-based compensation costs offset by reimbursement of legal costs related to the litigation described in Part I item 3.

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

Other income, net was \$2.1 million for the year ended December 31, 2016 compared to \$0.7 million for the same period in 2015. The change reflects increased interest income from investing the \$150 million upfront proceeds received from the Novartis agreement in 2016.

#### **Comparison of the Years Ended December 31, 2015 and 2014**

The following table summarizes the results of our operations for the years ended December 31, 2015 and 2014 (in millions):

	Year Ended December 31,		Change
	2015	2014	
Revenues:			
Research collaboration	\$ 16.6	\$ 7.1	9.5
Licensing	5.2	1.9	3.3
Milestone	6.0	0.5	5.5
Total revenues	27.8	9.5	18.3
Operating expenses:			
Research and development	34.1	18.5	15.6
General and administrative	12.0	7.4	4.6
Total operating expenses	46.1	25.9	20.2
Other income, net	0.7	—	0.7
Net loss	<u>\$(17.6)</u>	<u>\$(16.4)</u>	<u>\$ (1.2)</u>

#### *Revenues*

Research collaboration revenues increased by \$9.5 million in 2015 over 2014 amounts primarily due to revenue recognized under our 2015 collaboration agreement with Amgen.

Licensing revenues increased by \$3.3 million in 2015 over 2014 amounts primarily due to revenue earned under the agreement with Alexion.

Milestone and contingent payments increased by \$5.5 million in 2015 over 2014 amounts primarily due to receiving contractual milestones in 2015 from Alexion and CSL.

#### *Research and Development Expenses*

Research and development expenses increased by \$15.6 million in 2015 over 2014 amounts. The increase is primarily due to additional spending associated with the XmAb5871 program related to development and planned clinical trials in IgG4-RD and SLE and additional spending associated with bispecific programs to advancing our initial bispecific candidates, XmAb14045 and XmAb13676, into IND enabling studies, manufacturing or drug supply and additional work on our bispecific platform and other preclinical programs.

*General and Administrative Expenses*

General and administrative expenses were \$12.0 million and \$7.4 million for the year ended December 31, 2015 and 2014, respectively, an increase of \$4.6 million. The increase is primarily due to an increase in compensation costs related to increased staffing and legal costs related to litigation and proceedings described in Part I item 3 of this report.

*Other Income (Expense), Net*

Other income (expense), net was \$746,000 for the year ended December 31, 2015 compared to \$35,000 for the same period in 2014. The change reflects interest income on investing in marketable securities in 2015.

**Liquidity and Capital Resources**

Since our inception, our operations have been primarily financed through proceeds from our public offering, private sales of our equity, convertible notes and payments received under our collaboration and 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 substantial operating losses 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 as well as our pipeline of bispecific development candidates, XmAb104045, XmAb13676, XmAb18087 and XmAb20717 and evaluate opportunities for the potential clinical development of our other pre-clinical programs, and continue our research efforts.

In July 2016 we received a \$150 million upfront payment in connection with our collaboration with Novartis. On December 6, 2016, we finalized the sale of 5,272,750 shares of common stock at an offering price of \$24.00 per share, resulting in net proceeds of approximately \$119.3 million, after deducting underwriting discounts, commissions and offering expenses.

On March 3, 2015, we finalized the sale of 8,625,000 shares of common stock at an offering price of \$14.25 per share, resulting in net proceeds of approximately \$115.2 million, after deducting underwriting discounts, commissions and offering expenses. In September 2015 we received a \$45 million upfront payment in connection with our 2015 Amgen transaction.

On September 19, 2016, we entered into an Equity Distribution Agreement (the Distribution Agreement) with Piper Jaffray & Co (Piper Jaffray) pursuant to which we may sell from time to time, at our option, up to an aggregate of \$40 million of common stock through Piper Jaffray as sales agent. The issuance and sale of these shares by Xencor under the Distribution Agreement will be pursuant to our shelf registration statement on Form S-3 (File No.333-213700) declared effective by the SEC on October 5, 2016.

Piper Jaffray may sell the common stock by any method permitted under law deemed to be an “at the market” offering as defined by Rule 15 of the Securities Act of 1933, as amended including without limitation sales made by means of ordinary brokers on the NASDAQ Global market or otherwise at market prices prevailing at the time of sale or as otherwise directed by the Company. Piper Jaffray will use commercially reasonable efforts to sell the common stock from time to time, based on instructions from Xencor. Additionally, under the terms of the Distribution agreement, the Company may sell shares of its common stock through Piper Jaffray on terms agreed upon by both parties.

We are not obligated sell any shares of common stock under the Agreement. The offering of common stock pursuant to the Distribution Agreement will terminate upon the earlier of:

1. the issuance and sale of all of the shares of common stock subject to the Distribution agreement,
2. three years from the effective date of the registration statement, October 5, 2016,
3. the date the Company becomes ineligible to use the registration statement or,

4. the termination of the Distribution Agreement as provided for in the Distribution Agreement.

To date, we have not sold any shares under the Distribution Agreement.

At December 31, 2016, we had \$403.5 million of cash, cash equivalents and marketable securities compared to \$193.3 million at December 31, 2015. We expect to continue to receive additional payments from our collaborators for research and development services rendered, additional milestone, contingent payments, opt-in and annual license maintenance payments. Our ability to receive milestone payments and contingent payments from our partners is dependent upon either our ability or our partners' abilities to achieve certain levels of research and development activities and is therefore uncertain at this time.

### Funding Requirements

We have not generated any revenue from product sales and do not expect to do so until we obtain regulatory approval and commercialize one or more of our product candidates. As we are currently in early clinical stages of development, it will be some time before we expect to achieve this and it is uncertain that we ever will. We expect that our operating expenses will continue to increase in connection with ongoing as well as additional planned clinical and pre-clinical development of product candidates in our pipeline. We expect to continue our collaboration arrangements and will look for additional collaboration and licensing opportunities.

Although it is difficult to predict our funding requirements, based upon our current operating plan, we expect that our existing cash, cash equivalents and marketable securities and certain potential milestone payments will fund our operating expenses and capital expenditure requirements beyond 2020. 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.

### Cash Flows

The following table sets forth the primary sources and uses of cash and cash equivalents for each of the periods presented below (in thousands):

	Year Ended December 31,		
	2016	2015	2014
Net cash provided by (used in):			
Operating activities	\$ 94,617	\$ 26,666	\$ (21,351)
Investing activities	(213,653)	(185,106)	(2,283)
Financing activities	120,974	116,381	308
Net increase (decrease) in cash and cash equivalents	<u>\$ 1,938</u>	<u>\$ (42,059)</u>	<u>\$ (23,326)</u>

#### *Operating Activities*

Net cash provided by operating activities for the year ended December 31, 2016 reflects the upfront payment of \$150 million received under our Novartis collaboration and a milestone payment from Alexion in excess of operating expenses during the year.

Net cash provided by operating activities for the year ended December 31, 2015 reflects the upfront payment of \$45 million received under our 2015 Amgen collaboration and milestone and option payments from Alexion and CSL in excess of operating expenses during the year.

Net cash used in operations for the year ended December 31, 2014 reflects operating expenses in excess of licensing revenue during the year.

### *Investing Activities*

Investing activities in 2016 consist primarily of purchases of marketable securities available-for-sale, acquisition of intangible assets, and purchases of property and equipment. We invested \$210.6 million in marketable securities, net of \$105.5 million of sales and maturities in the year ended December 31, 2016. We acquired \$1.5 million and \$1.7 million of intangible assets in the year ended December 31, 2016 and December 31, 2015, respectively. We purchased \$1.5 million of capital equipment for the year ended December 31, 2016 compared to \$1.9 million for the same period in 2015. This decrease is primarily related to capital spending on laboratory and office equipment and leasehold improvements in our Monrovia facility in 2015.

Investing activities in 2015 consist primarily of purchases of marketable securities available-for-sale, acquisition of intangible assets, and purchases of property and equipment. We invested \$181.4 million in marketable securities, net of \$34.4 million of sales and maturities in the year ended December 31, 2015. We acquired \$1.7 million of intangible assets in the year ended December 31, 2015 and \$1.5 million for the year ended December 31, 2014. We purchased \$1.9 million of capital equipment for the year ended December 31, 2015 compared to \$780,000 for the same period in 2014. This increase is primarily related to additional capital spending on laboratory and office equipment and leasehold improvements in our Monrovia facility.

### *Financing Activities*

Net cash provided by financing activities during the year ended December 31, 2016 consists primarily of net proceeds from the follow-on equity offering and cash from stock option exercises and the sale of shares under the ESPP.

Net cash provided by financing activities during the year ended December 31, 2015 consists primarily of net proceeds from the follow-on equity offering and cash from stock option exercises and the sale of shares under the ESPP.

Financing activities for the year ended December 31, 2014 consist primarily of stock option exercises and sale of shares under the ESPP.

### **Contractual Obligations and Commitments**

The following table summarizes our contractual obligations at December 31, 2016 (in thousands):

	<b>Payments due by period</b>				
	<b>Total</b>	<b>Less than 1 year</b>	<b>1 - 3 Years</b>	<b>3 - 5 Years</b>	<b>More than 5 years</b>
Operating lease obligation relating to facility (1)	\$ 2,965	\$ 807	\$ 2,158	\$ —	\$ —

(1) Consists of operating leases on our corporate headquarters in Monrovia and on our San Diego offices encompassing 24,000 square feet and 5,710 square feet that expire in June 2020 and July 2020 respectively.

We are obligated to make future payments to third parties under in-license agreements, including sublicense fees, royalties, and payments that become due and payable on the achievement of certain development and commercialization milestones.

In February 2015, we entered into a license agreement with BIO-TECHNE Corporation for a non-exclusive license to certain antibody technology including monoclonal antibodies which recognize human somatostatin reception 2. The variable domain of this antibody is incorporated in our XmAb18087 drug candidate. Under this license agreement, we may be required to make \$2.75 million in additional contingent payments which include \$500,000 of clinical milestones and \$2.25 million of regulatory milestones, in addition to royalties upon commercial sales of products of less than 1%. We made an upfront payment of \$200,000 in connection with this license and did not make any milestone payments in 2016.

In December 2015, we entered into a worldwide exclusive license agreement with Receptor Logic, Inc. to research, develop, and commercialize products derived from antibodies that bind NY-eso-1 peptide in complex with MHC Class 1 HLA-A2. Under the terms of the Agreement, we may be required to make up to \$20.25 million in additional contingent payments which include \$8.5 million in development stage milestones and \$12.0 million in regulatory milestones, in addition to royalties upon commercial sales. We made an upfront payment of \$200,000 in connection with this license and paid a \$250,000 milestone in 2016 in connection with a research stage milestone.

In November 2015, we entered into a worldwide exclusive commercial license agreement with Selexis SA to develop and commercialize products produced from the Selixis cell line that was manufactured in connection with our XmAb14045 drug candidate. We made an upfront payment of 50,000 Swiss Francs (CHF 50,000) in connection with the license and may be required to make CHF 1.7 million in additional contingent obligations which include CHF500,000 in development milestones, CHF 400,000 in regulatory milestones and CHF 800,000 in sales milestones, in addition to royalties upon commercial sales of products of less than 1%. During 2016, we made a CHF 100,000 milestone payment in connection with an IND filing.

In February 2016, we entered into a worldwide exclusive commercial license agreement with Selexis SA to develop and commercialize products produced from the Selixis cell line that was manufactured in connection with our XmAb13676 drug candidate. In connection with the license we may be required to make CHF 1.7 million in additional contingent obligations which include CHF 500,000 in development milestones, CHF 400,000 in regulatory milestones and CHF 800,000 in sales milestones, in addition to royalties upon commercial sales of products of less than 1%. During 2016, we made a CHF 100,000 milestone payment in connection with an IND filing.

In December 2015, we entered into a Cell Line Sale Agreement with Catalent Pharma Solutions LLC for a worldwide license to develop and commercialize products produced from the Catalent cell line that was manufactured in connection with our XmAb5871 drug candidate. Under the terms of the agreement, we may be obligated to make contingent payments upon transfer of the XmAb5871 manufacturing process to a third party. These contingent payments total \$2.75 million and include \$500,000 in development milestones and \$2.25 million in regulatory milestones in addition to royalties on net sales of Xmab5871 approved products with such royalties less than 1%. We did not make any milestone payments under this Agreement in 2016.

In December 2011, we entered into a Cell Line Sale Agreement with Catalent Pharma Solutions LLC for a worldwide license to develop and commercialize products produced from the Catalent cell line that was manufactured in connection with our XmAb7195 drug candidate. This Agreement was subsequently amended in April 2015. Under the terms of the agreement, we may be obligated to make contingent payments upon transfer of the XmAb7195 manufacturing process to a third party. These contingent payments total \$2.75 million and include \$500,000 in development milestones and \$2.25 million in regulatory milestones in addition to royalties on net sales of Xmab5871 approved products with such royalties less than 1%. We did not make any milestone payments under this Agreement in 2016.

As the amount and timing of sublicense fees and the achievement and timing of these milestones are not probable and estimable, such commitments have not been included on our balance sheet or in the contractual obligations tables above.

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

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

#### **New Accounting Pronouncements**

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers*, as a new Topic, Accounting Standards Codification Topic 606 (“ASU 2014-09”). The new revenue recognition standard provides a five-step analysis of transactions to determine when and how revenue is recognized. The core principle is that a company should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects

the consideration to which the entity expects to be entitled in exchange for those goods or services. In March 2016, the FASB issued ASU No. 2016-08, *Revenue from Contracts with Customer Topic 606, Principal versus Agent Considerations*, which clarifies the implementation guidance on principal versus agent considerations. In April 2016, the FASB issued ASU 2016-10, *Revenue from Contracts with Customers Topic 606, Identifying Performance Obligations and Licensing*, which clarifies certain aspects of identifying performance obligations and licensing implementation guidance. In May 2016, the FASB issued ASU 2016-12, *Revenue from Contracts with Customers Topic 606, Narrow-Scope Improvements and Practical Expedients*, related to disclosures of remaining performance obligations, as well as other amendments to guidance on collectibility, non-cash consideration and the presentation of sales and other similar taxes collected from customers. In December 2016, the FASB issued ASU No. 2016-20, *Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers*, which amends certain narrow aspects of the guidance issued in ASU 2014-09 including guidance related to the disclosure of remaining performance obligations and prior-period performance obligations, as well as other amendments to the guidance on loan guarantee fees, contract costs, refund liabilities, advertising costs and the clarification of certain examples. These ASUs are effective for public entities for interim and annual reporting periods beginning after December 15, 2017, including interim periods within that year, which for us is the period beginning January 1, 2018. The Company will adopt the new standard in 2018 and will evaluate and plan for its implementation including assessing its overall impact during the second and third quarter of 2017.

In January 2016, the FASB issued ASU 2016-01, *Financial Instruments – Overall: Recognition and Measurement of Financial Assets and Liabilities*, which eliminates the available-for-sale classification for equity securities and requires equity securities to be measured at fair value with changes in the fair value recognized through net income. In addition it updates certain presentation and disclosure requirements. The new standard will be effective for reporting periods beginning after December 15, 2017. While we are assessing the impact of the guidance on our financial statements, we would be required to recognize mark-to-market gains and losses associated with any available-for-sale equity securities through net income instead of accumulated other comprehensive income. We do not carry any equity securities in our investment portfolio. We continue to review the requirements of the revised standard and any potential impact it may have on our financial statements.

In February 2016, the FASB issued ASU 2016-02 *Leases*. The new guidance requires lessees to recognize in the statement of financial position a liability to make lease payments (the lease liability) and a right-of-use asset representing its right to use the underlying asset for the lease term for all leases not considered short term. The new standard will be effective for reporting periods beginning after December 15, 2018. In transition, we are required to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach, including the option to utilize a number of practical expedients. We will evaluate our operating lease arrangements to determine the impact of this amendment on the financial statements. This evaluation includes a review of our lease expenses, which are primarily operating lease arrangements for our facilities in Monrovia and San Diego.

In March 2016, the FASB issued ASU No. 2016-09, *Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*, which amends the current stock compensation guidance. The amendments simplify the accounting for the taxes related to stock based compensation, including adjustments to how excess tax benefits and a company's payments for tax withholdings should be classified. In addition, the standard allows an entity-wide accounting policy election to either estimate the number of awards that are expected to vest, as currently required, or account for forfeitures when they occur. We are adopting the new standard in the first quarter of 2017 and established an accounting policy election to account for forfeitures when they occur. As such, we will recognize a cumulative-effect adjustment in retained earnings on awards that were in process of vesting as of December 31, 2016. We do not expect the adoption to have a material impact on our results of operations or financial position.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, which amends the guidance on reporting credit losses for assets held at amortized cost basis and available for sale debt securities. Credit losses relating to available-for-sale debt securities will be recorded through an allowance for credit losses rather than as a direct write-down to the security. Credit losses on available-for-sale securities will be required when the amortized cost is below the fair market value. The amendment is effective for fiscal years beginning after December 15, 2019 including interim periods within those fiscal years. We will apply the standard's provision as a cumulative effect adjustment to retained earnings as of the beginning

of the first effective reporting period. We do not expect the adoption to have a material impact on our results of operations or financial position.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments*, which addresses eight specific cash flow issues with the objective of reducing the existing diversity in practice. The standard clarifies when cash receipts and cash payments have aspects of more than one class of cash flows and cannot be separated, classification will depend on the predominant source or use. The amendment is effective for fiscal years beginning after December 15, 2017 with early adoption permitted. We continue to review the requirements of this standard and any potential impact it may have on our financial statements.

There have been no other material changes to the significant accounting policies previously disclosed in the Company's Annual Report on Form 10-K for the year ended December 31, 2015.

#### **Item 7 A. Quantitative and Qualitative Disclosures 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 and cash equivalents have significant risk of default or illiquidity. While we believe our cash and cash equivalents 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.

#### **Item 8. Financial Statements and Supplementary Data**

##### **Xencor, Inc. Financial Statements**

#### **Audited Financial Statements for the Years Ended December 31, 2016, 2015 and 2014:**

<a href="#">Report of Independent Registered Public Accounting Firm (RSM US LLP)</a>	71
<a href="#">Report of Independent Registered Public Accounting Firm (BDO USA LLP)</a>	73
<a href="#">Balance Sheets</a>	74
<a href="#">Statements of Comprehensive Income (Loss.)</a>	75
<a href="#">Statements of Stockholders' Equity</a>	76
<a href="#">Statements of Cash Flows</a>	77
<a href="#">Notes to Financial Statements</a>	78

**Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Stockholders  
Xencor, Inc.

We have audited the accompanying balance sheets of Xencor, Inc. as of December 31, 2016 and 2015, and the related statements of comprehensive income (loss), stockholders' equity and cash flows for each of the two years in the period ended December 31, 2016. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Xencor, Inc. as of December 31, 2016 and 2015, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2016, in conformity with U.S. generally accepted accounting principles.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Xencor, Inc.'s internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013, and our report dated February 28, 2017 expressed an unqualified opinion on the effectiveness of Xencor, Inc.'s internal control over financial reporting.

/s/ RSM US LLP

Los Angeles, California  
February 28, 2017

**Report of Independent Registered Public Accounting Firm  
Regarding Internal Control Over Financial Reporting**

To the Board of Directors and Stockholders  
Xencor, Inc.

We have audited Xencor Inc.'s internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013. Xencor, Inc.'s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting . Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

We conducted our audit 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 effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (a) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (b) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (c) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Xencor, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the financial statements of Xencor, Inc. and our report dated February 28, 2017 expressed an unqualified opinion.

/s/ RSM US LLP

Los Angeles, California  
February 28, 2017

**Report of Independent Registered Public Accounting Firm**

Board of Directors  
Xencor, Inc.  
Monrovia, California

We have audited the related statements of comprehensive loss, stockholders' equity (deficit), and cash flows for Xencor, Inc. (the "Company") for the year ended December 31, 2014. 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 audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the results of its operations and its cash flows for the year ended December 31, 2014 of Xencor, Inc., in conformity with accounting principles generally accepted in the United States of America.

/s/ BDO USA, LLP

Los Angeles, California  
February 20, 2015

**Xencor, Inc.****Balance Sheet s****(in thousands, except share and per share data)**

	<b>December 31,</b>	
	<b>2016</b>	<b>2015</b>
<b>Assets</b>		
Current assets		
Cash and cash equivalents	\$ 14,528	\$ 12,590
Marketable securities	115,608	83,840
Accounts receivable	8,616	44
Prepaid expenses and other current assets	2,901	1,201
Total current assets	141,653	97,675
Property and equipment, net	3,105	2,310
Patents, licenses, and other intangible assets, net	10,362	9,971
Marketable securities - long term	273,340	96,891
Other assets	103	63
Total assets	<u>\$ 428,563</u>	<u>\$ 206,910</u>
<b>Liabilities and stockholders' equity</b>		
Current liabilities		
Accounts payable	\$ 3,880	\$ 6,400
Accrued expenses	6,692	3,634
Current portion of deferred rent	128	108
Current portion of deferred revenue	95,521	33,287
Income taxes	65	—
Total current liabilities	106,286	43,429
Deferred rent, less current portion	397	507
Deferred revenue, less current portion	7,926	542
Total liabilities	<u>114,609</u>	<u>44,478</u>
Commitments and contingencies (see note 8)		
Stockholders' equity		
Preferred stock, \$0.01 par value: 10,000,000 authorized shares; -0- issued and outstanding shares at December 31, 2016 and 2015	—	—
Common stock, \$0.01 par value: 200,000,000 authorized shares; 46,567,978 issued and outstanding shares at December 31, 2016 and 40,551,039 issued and outstanding at December 31, 2015	466	405
Additional paid-in capital	552,889	424,128
Accumulated other comprehensive loss	(1,441)	(516)
Accumulated deficit	(237,960)	(261,585)
Total stockholders' equity	<u>313,954</u>	<u>162,432</u>
Total liabilities and stockholders' equity	<u>\$ 428,563</u>	<u>\$ 206,910</u>

See accompanying notes to the financial statements.

Xencor, Inc.

Statements of Comprehensive Income (Loss)

(in thousands, except share and per share data)

	Year Ended December 31,		
	2016	2015	2014
<b>Revenue</b>			
Collaborations, licenses and milestones	\$ 87,520	\$ 27,762	\$ 9,520
<b>Operating expenses</b>			
Research and development	51,872	34,140	18,516
General and administrative	13,108	11,960	7,461
<b>Total operating expenses</b>	64,980	46,100	25,977
<b>Income (loss) from operations</b>	22,540	(18,338)	(16,457)
<b>Other income (expenses)</b>			
Interest income	2,091	744	33
Interest expense	(21)	(13)	(9)
Other income	6	15	11
<b>Total other income, net</b>	2,076	746	35
<b>Income (loss) before income tax</b>	24,616	(17,592)	(16,422)
<b>Income tax provision</b>	991	—	—
<b>Net income (loss)</b>	23,625	(17,592)	(16,422)
<b>Other comprehensive income (loss)</b>			
Net unrealized loss on marketable securities available-for-sale, net of tax	(925)	(516)	—
<b>Comprehensive income (loss)</b>	\$ 22,700	\$ (18,108)	\$ (16,422)
Net income (loss) per share attributable to common stockholders:			
Basic	\$ 0.57	\$ (0.45)	\$ (0.52)
Diluted	\$ 0.56	\$ (0.45)	\$ (0.52)
Weighted average shares used to compute net income (loss) per share attributable to common stockholders:			
Basic	41,267,329	39,015,131	31,390,631
Diluted	42,388,867	39,015,131	31,390,631

See accompanying notes to the financial statements.

**Xencor, Inc.**

**Statements of Stockholders' Equity**

(in thousands, except share data)

Stockholders' Equity	Common Stock		Additional Paid in-Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount				
<b>Balance, December 31, 2013</b>	31,354,467	\$ 314	\$ 300,790	\$ —	\$ (227,571)	\$ 73,533
Issuance of common stock upon exercise and vesting of stock awards	15,941	—	11	—	—	11
Issuance of common stock under the Employee Stock Purchase Plan	63,864	—	307	—	—	307
Net loss	—	—	—	—	(16,422)	(16,422)
Stock-based compensation	—	—	1,861	—	—	1,861
<b>Balance, December 31, 2014</b>	31,434,272	314	302,969	—	(243,993)	59,290
Sale of common stock, net of issuance cost	8,625,000	86	115,118	—	—	115,204
Issuance of common stock upon exercise of stock awards	379,268	4	550	—	—	554
Issuance of common stock under the Employee Stock Purchase Plan	112,499	1	622	—	—	623
Comprehensive loss	—	—	—	(516)	(17,592)	(18,108)
Stock-based compensation	—	—	4,869	—	—	4,869
<b>Balance, December 31, 2015</b>	40,551,039	405	424,128	(516)	(261,585)	162,432
Sale of common stock, net of issuance cost	5,272,750	53	119,216	—	—	119,269
Issuance of common stock upon exercise of stock awards	699,066	7	1,153	—	—	1,160
Issuance of common stock under the Employee Stock Purchase Plan	45,123	1	544	—	—	545
Comprehensive income (loss)	—	—	—	(925)	23,625	22,700
Stock-based compensation	—	—	7,848	—	—	7,848
<b>Balance, December 31, 2016</b>	<b>46,567,978</b>	<b>\$ 466</b>	<b>\$ 552,889</b>	<b>\$ (1,441)</b>	<b>\$ (237,960)</b>	<b>\$ 313,954</b>

See accompanying notes to the financial statements.

**Xencor, Inc.**

**Statements of Cash Flow s**

(in thousands)

	<b>Year ended December 31,</b>		
	<b>2016</b>	<b>2015</b>	<b>2014</b>
<b>Cash flows from operating activities</b>			
Net income (loss)	\$ 23,625	\$ (17,592)	\$ (16,422)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Depreciation and amortization	1,466	1,113	882
Amortization of premium on marketable securities	2,037	1,096	—
Stock-based compensation	7,848	4,869	1,861
Abandonment of capitalized intangible assets	356	296	509
Gain on disposal of assets	—	(9)	(2)
Gain on sale of marketable securities available-for-sale	(5)	(5)	—
Changes in operating assets and liabilities:			
Accounts receivable	(8,572)	2,922	(2,907)
Interest receivable	(530)	(898)	—
Prepaid expenses and other current assets	(1,700)	(1,068)	(73)
Other assets	(40)	(3)	41
Accounts payable	(2,520)	4,710	(943)
Accrued expenses	3,058	1,425	859
Deferred rent	(89)	572	—
Deferred tax liability	65	—	—
Deferred revenue	69,618	29,238	(5,156)
Net cash provided by (used in) operating activities	<u>94,617</u>	<u>26,666</u>	<u>(21,351)</u>
<b>Cash flows from investing activities</b>			
Proceeds from sale and maturities of marketable securities available-for-sale	105,505	34,358	—
Proceeds from sale of property and equipment	—	9	2
Purchase of marketable securities	(316,149)	(215,798)	—
Purchase of intangible assets	(1,502)	(1,745)	(1,505)
Purchase of property and equipment	(1,507)	(1,930)	(780)
Net cash used in investing activities	<u>(213,653)</u>	<u>(185,106)</u>	<u>(2,283)</u>
<b>Cash flows from financing activities</b>			
Proceeds from issuance of common stock upon exercise of stock awards	1,160	554	9
Proceeds from issuance of common stock from Employee Stock Purchase Plan	545	623	307
Proceeds from issuance of common stock	126,546	122,906	—
Common stock issuance costs	(7,277)	(7,702)	—
Payments on capital lease obligations	—	—	(8)
Net cash provided by financing activities	<u>120,974</u>	<u>116,381</u>	<u>308</u>
<b>Net increase (decrease) in cash and cash equivalents</b>	1,938	(42,059)	(23,326)
<b>Cash and cash equivalents</b> , beginning of year	12,590	54,649	77,975
<b>Cash and cash equivalents</b> , end of year	<u>\$ 14,528</u>	<u>\$ 12,590</u>	<u>\$ 54,649</u>
<b>Supplemental disclosures of cash flow information</b>			
Cash paid for:			
Interest	\$ 21	\$ 13	\$ 9
Taxes	\$ 936	\$ 1	\$ 1
<b>Supplemental Schedule of Noncash Investing Activities</b>			
Net unrealized loss on marketable securities available-for-sale	\$ 925	\$ 516	\$ —

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, extend half-life and most recently create bispecific antibodies.

Our operations are based in Monrovia and San Diego, California.

***Basis of Presentation***

The Company's financial statements as of December 31, 2016, 2015, and 2014 and for the years then-ended have been prepared in accordance with accounting principles generally accepted in the United States.

***Reclassification of Prior Year Presentation***

Certain prior year balances within Other Income have been reclassified for consistency with the current period presentation. These reclassifications had no effect on the reported results of operations.

***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. Significant estimates include useful lives of long-lived assets, the periods over which certain revenues and expenses will be recognized including collaboration revenue recognized from non-refundable upfront licensing payments, the amount of non-cash compensation costs related to share-based payments to employees and non-employees and the period over which these costs are expensed.

***Recent Accounting Pronouncements***

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers*, as a new Topic, Accounting Standards Codification Topic 606 ("ASU 2014-09"). The new revenue recognition standard provides a five-step analysis of transactions to determine when and how revenue is recognized. The core principle is that a company should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. In March 2016, the FASB issued ASU No. 2016-08, *Revenue from Contracts with Customer Topic 606, Principal versus Agent Considerations*, which clarifies the implementation guidance on principal versus agent considerations. In April 2016, the FASB issued ASU 2016-10, *Revenue from Contracts with Customers Topic 606, Identifying Performance Obligations and Licensing*, which clarifies certain aspects of identifying performance obligations and licensing implementation guidance. In May 2016, the FASB issued ASU 2016-12, *Revenue from Contracts with Customers Topic 606, Narrow-Scope Improvements and Practical Expedients*, related to disclosures of remaining performance obligations, as well as other amendments to guidance on collectibility, non-cash consideration and the presentation of sales and other similar taxes collected from customers. In December 2016, the FASB issued ASU No. 2016-20, *Technical Corrections and*

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

*Improvements to Topic 606, Revenue from Contracts with Customers*, which amends certain narrow aspects of the guidance issued in ASU 2014-09 including guidance related to the disclosure of remaining performance obligations and prior-period performance obligations, as well as other amendments to the guidance on loan guarantee fees, contract costs, refund liabilities, advertising costs and the clarification of certain examples. These ASUs are effective for public entities for interim and annual reporting periods beginning after December 15, 2017, including interim periods within that year, which for us is the period beginning January 1, 2018. The Company will adopt the new standard in 2018 and will evaluate and plan for its implementation including assessing its overall impact during the second and third quarter of 2017.

In January 2016, the FASB issued ASU 2016-01, *Financial Instruments – Overall: Recognition and Measurement of Financial Assets and Liabilities*, which eliminates the available-for-sale classification for equity securities and requires equity securities to be measured at fair value with changes in the fair value recognized through net income. In addition it updates certain presentation and disclosure requirements. The new standard will be effective for reporting periods beginning after December 15, 2017. While we are assessing the impact of the guidance on our financial statements, we would be required to recognize mark-to-market gains and losses associated with any available-for-sale equity securities through net income instead of accumulated other comprehensive income. We do not carry any equity securities in our investment portfolio. We continue to review the requirements of the revised standard and any potential impact it may have on our financial statements.

In February 2016, the FASB issued ASU 2016-02 *Leases*. The new guidance requires lessees to recognize in the statement of financial position a liability to make lease payments (the lease liability) and a right-of-use asset representing its right to use the underlying asset for the lease term for all leases not considered short term. The new standard will be effective for reporting periods beginning after December 15, 2018. In transition, we are required to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach, including the option to utilize a number of practical expedients. We will evaluate our operating lease arrangements to determine the impact of this amendment on the financial statements. This evaluation includes a review of our lease expenses, which are primarily operating lease arrangements for our facilities in Monrovia and San Diego.

In March 2016, the FASB issued ASU No. 2016-09, *Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*, which amends the current stock compensation guidance. The amendments simplify the accounting for the taxes related to stock based compensation, including adjustments to how excess tax benefits and a company's payments for tax withholdings should be classified. The standard is effective for fiscal periods beginning after December 15, 2016, with early adoption permitted. In addition, the standard allows an entity-wide accounting policy election to either estimate the number of awards that are expected to vest, as currently required, or account for forfeitures when they occur. We are adopting the new standard in the first quarter of 2017 and established an accounting policy election to account for forfeitures when they occur. As such, we will recognize a cumulative-effect adjustment in retained earnings on awards that were in process of vesting as of December 31, 2016. We do not expect the adoption to have a material impact on our results of operations or financial position.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, which amends the guidance on reporting credit losses for assets held at amortized cost basis and available for sale debt securities. Credit losses relating to available-for-sale debt securities will be recorded through an allowance for credit losses rather than as a direct write-down to the security. Credit losses on available-for-sale securities will be required when the amortized cost is below the fair market value. The amendment is effective for fiscal years beginning after December 15, 2019 including interim periods within those fiscal years. We will apply the standard's provision as a cumulative effect adjustment to retained earnings as of the beginning of the first effective reporting period. We do not expect the adoption to have a material impact on our results of operations or financial position.

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments*, which addresses eight specific cash flow issues with the objective of reducing the existing diversity in practice. The standard clarifies when cash receipts and cash payments have aspects of more than one class of cash flows and cannot be separated, classification will depend on the predominant source or use. The amendment is effective for fiscal years beginning after December 15, 2017 with early adoption permitted. We continue to review the requirements of this standard and any potential impact it may have on our financial statements.

There have been no material changes to the significant accounting policies previously disclosed in the Company's Annual Report on Form 10-K for the year ended December 31, 2015.

***Revenue Recognition***

We have, to date, earned revenue from research and development collaborations, which may include research and development services, licenses of our internally-developed technologies, licenses of our internally-developed drug candidates, or combinations of these. We recognize revenue when all of the following criteria are met: persuasive evidence of an arrangement exists; transfer of, or access to, the rights of our drug candidates or technologies 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 and collaboration agreements generally include non-refundable upfront payments, research funding, co-development reimbursements, license fees and, 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 contractual payment obligations 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. To date, we have used our best evidence of selling price for each of our deliverables.

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 price 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 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

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

various development stages. The most common deliverable for our licensing transactions is the commercial license for our technology in the product candidate, and frequently a research license with an option for commercial license. We have also entered into multiple arrangements that involve the deliverable of drug candidates at various stages of development. The upfront payments, annual license fees, contingent payments, 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 may 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 may 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 developments services.
- *Collaboration Arrangements* The deliverables under our collaboration arrangements generally involve the license to certain rights to one or more of our product candidates in addition to a license to access one or more of our technologies. These arrangements may require us to apply our technologies to a partner-identified or provided antibody and deliver a drug candidate that incorporates one of our technologies to the partner. To account for the element of the rights to a drug candidate that we have created, we evaluate whether the rights to the drug candidate has standalone value separate from the obligation to apply our technologies to partner-identified antibodies. We recognize arrangement consideration allocated to the rights to the drug candidates upon transfer of the rights to the partner which generally occurs upon execution of the agreement. We recognize arrangement consideration allocated to the obligation to apply our technologies to partner-identified antibodies as the partner accepts the drug candidates that incorporates our technologies, subject to any substitution or replacement provisions.
- *Research and Development Services* The deliverables under our collaboration and license arrangements may include research and development services we perform on behalf of or with 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 contractual payments related to achievement of specific research, development and regulatory milestones and sales-based milestones that are based solely upon the performance of the licensee or collaborator. Research, development and regulatory contingent contractual payments and milestone payments are typically payable under our collaborations when our

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

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 contingent contractual payments are typically payable when annual sales of a covered product reach specific levels.

At the inception of each arrangement that includes contingent contractual payments, we evaluate whether each potential payment and milestone is substantive and at risk to both parties based on the basis of the contingent nature of the milestone event. We evaluate factors such as scientific, regulatory, commercial and other risks that we must overcome to achieve the respective milestone event, whether the contractual payment due at each milestone event is reasonable relative to all deliverables and payment terms in the arrangement in making this assessment and whether the contingent contractual payment relates solely to past performance. Additionally, certain of our product development and technology license arrangements may include milestone payments related to the achievement of specific research and development milestones, which are achieved in whole or in part on our performance.

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**

***Novartis***

In June 2016, the Company entered into a Collaboration and License Agreement (the Novartis Agreement) with Novartis Institutes for BioMedical Research, Inc., (Novartis), to develop and commercialize bispecific and other Fc engineered antibody drug candidates using the Company's proprietary XmAb® technologies and drug candidates. Pursuant to the Novartis Agreement:

- The Company granted Novartis certain exclusive rights to research, develop and commercialize XmAb14045 and XmAb13676, two development stage products that incorporate the Company's bispecific Fc technology,
- The Company will apply its bispecific technology in up to four target pair antibodies identified by Novartis (each a Global Discovery Program) and,
- The Company will provide Novartis with a non-exclusive license to certain of its Fc technologies to apply against up to ten targets identified by Novartis.

The Company received a non-refundable upfront payment under the Novartis Agreement of \$150 million in July 2016 and is eligible to receive up to \$2.4 billion in future development, regulatory and sales milestones in total for all programs that could be developed under the Agreement.

Under the Novartis Agreement, the Company granted Novartis a worldwide co-exclusive license with Xencor to research, develop and manufacture XmAb14045 and XmAb13676. The Company also granted Novartis an exclusive license to commercialize XmAb14045 and XmAb13676 in all worldwide territories outside the United States (U.S.). XmAb14045 is a clinical candidate that binds the CD123 antigen and the cytotoxic T-cell binding domain CD3 (the XmAb14045 Program) and targets acute myeloid leukemia (AML). XmAb13676 is a clinical candidate that binds the CD20 antigen and the cytotoxic T-cell binding domain CD3 (the XmAb13676 Program) and targets B-cell malignancies. Assuming successful development and commercialization of a product, the Company could receive up to \$325 million in

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

milestone payments for each of XmAb14045 and XmAb13676. The total potential milestones for each product include \$90 million in development milestones, \$110 million in regulatory milestones and, \$125 million in sales milestones. If commercialized, the Company is eligible to receive tiered low double-digit royalties on global net sales of approved products outside the US.

The Company and Novartis will co-develop XmAb14045 and XmAb13676 worldwide and share development costs equally. The Company may elect to opt-out of the development of either program by providing notice to Novartis. If the Company elects to opt-out with respect to a program, Novartis will receive the Company's U.S. rights to the program and the Company will receive low double-digit royalties on U.S. net sales in addition to the royalties on net sales outside the US.

Pursuant to the Novartis Agreement, the Company will apply its bispecific technology to up to four target pair antibodies selected, if available for exclusive license to Novartis and not subject to a Xencor internal program. The Company will apply its bispecific technology to generate bispecific antibody candidates from starting target pair antibodies provided by Novartis for each of the four Global Discovery Programs and return the bispecific product candidate to Novartis for further testing, development and commercialization. Novartis has the right to substitute up to four of the original selected target pair antibodies during the research term provided that Novartis has not filed and received acceptance for an Investigational New Drug Application (IND) with the Xencor provided bispecific candidate. The research term is five years from the date of the Novartis Agreement.

Novartis will assume full responsibility for development and commercialization of each product candidate under each of the Global Discovery Programs. Assuming successful development and commercialization of each Global Discovery Program compound, the Company could receive up to \$250.0 million in milestones for each Global Discovery Program which includes \$50.0 million in development milestones, \$100.0 million in regulatory milestones and \$100.0 million in sales milestones. If commercialized, the Company is eligible to receive mid-single digit royalties on global net sales of approved products.

Under the Novartis Agreement, the Company has the right to participate in the development and commercialization of one of the Global Discovery Programs prior to filing an IND for Global Discovery Program. If the Company elects to participate in development, it will assume responsibility for 25% of the worldwide development costs for the program and 50% of commercialization costs and will receive 50% of the US profits on net sales of the product.

Under the Novartis Agreement, the Company is also granting Novartis a non-exclusive research license to use certain of the Company's Fc technologies, specifically Cytotoxic, Xtend and Immune Inhibitor to research, develop, commercialize and manufacture antibodies against up to ten targets selected by Novartis, if available for non-exclusive license and not subject to a Xencor internal program. Novartis will assume all research, development and commercialization costs for products that are developed from application of the Fc technologies. Assuming successful development and commercialization of a compound that incorporates an Fc technology, the Company could receive up to \$76.0 million in milestones for each target which includes \$16.0 million in development milestones, \$30.0 million in regulatory milestones and \$30 million in sales milestones. If commercialized, the Company is eligible to receive low single-digit royalties on global net sales of approved products.

The Company evaluated the Novartis Agreement and determined that it is a revenue arrangement with multiple deliverables or performance obligations. The Company's substantive performance obligations under the Agreement include:

- delivery of an exclusive license to commercialize XmAb14045 in worldwide territories outside the U.S., with worldwide co-exclusive rights with Xencor to research, develop and manufacture XmAb14045
- delivery of an exclusive license to commercialize XmAb13676 in worldwide territories outside the U.S., with worldwide co-exclusive rights with Xencor to research, develop and manufacture XmAb13676

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

- application of its bispecific technology to four Novartis selected target pair antibodies and delivery of four bispecific product candidates and,
- delivery of a non-exclusive license to its Fc technologies: Cytotoxic, Xtend and Immune Inhibitor

The Company determined that the \$150 million upfront payment represents the total initial consideration and was allocated to each of the deliverables using the best estimate of selling price which was allocated using the relative selling price method. The Company determined that each of the development and regulatory milestones is substantive. Although sales milestones are not considered substantive, they are still recognized upon achievement of a milestone. After identifying each of the deliverables included in the arrangement, the Company determined the relative selling price using its best estimate of selling price for each of the deliverables.

The estimated selling price for the licensing rights to the XmAb13676 Program are the Company's best estimate of selling price and was determined based on market conditions, similar arrangements entered into by third parties including the Company's understanding of pricing terms offered for comparable transactions that involve licensing bispecific antibody development candidates. The Company reviewed recent published market transactions that are comparable to the license of the XmAb13676 Program in the Novartis Agreement. The Company adjusted the value of the published market information to reflect differences in stage of development and rights and potential markets to determine the estimated selling price for the license rights to the XmAb13676 program. This amount represents the value that a third party would be willing to pay for certain rights to the XmAb13676 Program including the exclusive right to commercialize XmAb13676 in all territories outside the U.S.

The Company determined the estimated selling price for the rights to the XmAb14045 Program using the income approach by calculating a risk-adjusted present value of the potential revenue that could be earned from the license reduced by the minimum development costs that the Company is obligated to fund under the Agreement. This amount represents the value that a third party would be willing to pay for certain rights to the XmAb14045 Program including the right to commercialize XmAb14045 in all territories outside the U.S.

The best estimated selling price for each Global Discovery Programs was determined using the income approach by calculating a risk-adjusted net present value of the potential revenue that could be earned from each Global Program license reduced by the estimated cost of the Company's efforts to deliver the completed Global Program bispecific candidate to Novartis. These amounts represent the value that a third party would be willing to pay as an upfront for access to the Company's bispecific technology and capabilities.

The Company's best estimated selling price for the Fc licenses is its best estimate and was determined by considering market and entity-specific factors. The Company has previously licensed its Fc technologies on a limited basis to third parties. The Company considered the term of the Novartis license, scope of the rights granted for each license, the type of technologies subject to the license, and the potential number of targets that may be applied in establishing its best estimate for the Fc license.

The total allocable consideration of \$150 million was allocated to the deliverables based on the relative selling price method as follows:

- \* \$27.1 million to the XmAb14045 Program,
- \* \$31.4 million to the XmAb13676 Program,
- \* \$20.05 million to each of the four Global Discovery Programs and,
- \* \$11.3 million to the Fc licenses

The Company recognized as license revenue the amount of the total allocable consideration allocated to the XmAb13676 and XmAb14045 Programs upon delivery of the exclusive license to Novartis both of which were

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

transferred as of the effective date of the Agreement.

At the time that each Global Discovery Program is accepted by Novartis, the Company will recognize collaboration revenue of \$20.05 million for each program. Since Novartis has substitution rights for up to four target pair antibodies, revenue recognition may be delayed until the earlier that Novartis has an open IND for a delivered bispecific Discovery Program or the right to substitute the target pair lapses. No bispecific antibodies for Global Discovery Programs were delivered during 2016.

The Company will recognize as licensing revenue the amount of the total consideration allocated to the Fc license over the five year research term beginning from the effective date of the Agreement.

During the year ended December 31, 2016, we recognized \$59.7 million of revenue under this arrangement. As of December 31, 2016 there is a receivable of \$809,000 and \$90.3 million in deferred revenue related to the arrangement.

***Amgen Inc.***

2015 Agreement

In September 2015, the Company entered into a research and license agreement (the 2015 Agreement) with Amgen Inc. (Amgen) to develop and commercialize bispecific antibody product candidates using the Company's proprietary XmAb® bispecific Fc technology. Under the 2015 Agreement, the Company granted an exclusive license to Amgen to develop and commercialize bispecific drug candidates from the Company's preclinical program that bind the CD38 antigen and the cytotoxic T-cell binding domain CD3, (the CD38 Program). The Company will also apply its bispecific technology to five previously identified Amgen provided targets (each a Discovery Program). The Company received a \$45 million upfront payment from Amgen and is eligible to receive up to \$1.7 billion in future development, regulatory and sales milestones in total for all six programs and is eligible to receive royalties on any global net sales of products.

Following the Company's transfer of the DNA sequences, constructs and preclinical data related to its CD38 Program to Amgen, Amgen will assume full responsibility for the further development and commercialization of product candidates under the CD38 Program. Assuming successful development and commercialization of a product, the Company could receive up to \$355 million in milestones payments which include \$55 million in development milestones, \$70 million in regulatory milestones and, \$230 million in sales milestones. If commercialized, the Company is eligible to receive from high single-digit up to low double-digit royalties on global net sales of approved products under the CD38 Program.

Under the 2015 Agreement, for each of the five Discovery Programs the Company will apply its bispecific technology to antibody molecules provided by Amgen that bind Discovery Program Targets and return the bispecific product candidates to Amgen for further testing, development and commercialization. Amgen has the right to substitute up to three of the previously identified targets during the research term provided that Amgen has not initiated non-human primate studies with the Xencor provided bispecific candidate. The initial research term is three years from the date of the agreement but Amgen, at its option, may request an extension of one year if Xencor has not completed delivery of all five Discovery Program bispecific candidates to Amgen.

Amgen will assume full responsibility for development and commercialization of product candidates under each of the Discovery Programs. Assuming successful development and commercialization of each Discovery Program compound, the Company could receive up to \$260.5 million in milestones for each compound which include \$35.5 million in development milestones, \$55 million in regulatory milestones and \$170 million in sales milestones. If

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

commercialized, the Company is eligible to receive mid to high single-digit royalties on global net sales of approved products.

The Company evaluated the 2015 Agreement with Amgen and determined that it is a revenue arrangement with multiple deliverables or performance obligations. The Company's substantive performance obligations under the 2015 Agreement include delivery of the DNA sequences, constructs and preclinical data related to its CD38 Program and application of its bispecific technology to five Amgen provided targets and delivery of the five bispecific product candidates. The Company evaluated the 2015 Agreement with Amgen and determined that the CD38 Program and each of the five Discovery Programs represent separate units of accounting.

The \$45 million upfront payment represents the total initial consideration and was allocated to each of the deliverables using the relative selling price method. After identifying each of the deliverables included in the arrangement, the Company determined its best estimate of selling price for each of the deliverables. In order to determine the best estimate of selling price for the CD38 Program, the Company determined the value of the CD38 Program by calculating a risk-adjusted present value of the potential revenue from the future development and regulatory milestones under the 2015 Agreement. This amount represents the value that a third party would be willing to pay as an upfront fee to license the Company's CD38 Program.

The Company determined the value of each of the Discovery Programs by calculating a risk-adjusted net present value of the potential revenue from future development and regulatory milestones reduced by the estimated cost of the Company's efforts to apply its bispecific technology to the Amgen targets and deliver the five bispecific product candidates. These amounts represent the value that a third party would be willing to pay as an upfront fee for access to the Company's bispecific technology and capabilities.

The total allocable consideration of \$45 million was allocated to the deliverables based on the relative selling price method as follows:

\$13.75 million to the CD38 Program and,  
\$6.25 million to each of the five Discovery Programs

During the fourth quarter of 2015 we delivered the CD38 DNA sequences, constructs and preclinical data to Amgen. At the time that each bispecific Discovery Program is accepted by Amgen, the Company will recognize as collaboration revenue \$6.25 million for each program. Since Amgen has substitution rights for up to three targets, revenue recognition may be delayed until the earlier that Amgen initiates non-human primate studies for a delivered bispecific Discovery Program or the right to substitute the target lapses. During 2016, the Company delivered bispecific antibody candidates for five Discovery Programs and Amgen elected to substitute one of the originally identified antibody candidates.

During the year ended December 30, 2016 and 2015, we recognized \$18.75 million and \$13.75 million in revenue, respectively under this arrangement. As of December 31, 2016 there was \$12.5 million in deferred revenue related to the arrangement.

**2010 Agreement**

In December 2010, we entered into a Collaboration and Option Agreement (the 2010 Agreement) with Amgen, pursuant to which we agreed to collaborate with Amgen on development of XmAb5871 in rheumatoid arthritis (RA) through completion of a Phase 2 proof-of-concept (POC) trial.

In October 2014, we entered into an agreement with Amgen to terminate the 2010 Agreement pursuant to which all worldwide rights to develop and commercialize XmAb5871 reverted back to us. Our obligations to continue

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

development of XmAb5871 under the terms of the 2010 Agreement terminated effective as of the date of the termination agreement. As a result of and effective as of the date of the termination agreement, all of Amgen's rights to XmAb5871 terminated including the right to exercise an exclusive option to acquire the worldwide rights to XmAb5871. Amgen's obligations to make any further payments to us are also terminated. In connection with the termination, we granted Amgen a right of first negotiation (ROFN) to obtain an exclusive license to develop and commercialize any XmAb5871 product.

The ROFN requires us to notify Amgen if we decide to pursue a licensing transaction with a third party involving XmAb5871. Upon receipt of the notification, Amgen will have a limited time to review the data from XmAb5871 and enter into negotiations to obtain an exclusive license to develop and commercialize any future XmAb5871 product. The ROFN will expire upon the earlier of: (1) October 27, 2019, (2) initiation by us of a Phase 3 clinical trial with XmAb5871 or (3) the transfer or sale to a third party of substantially all of our business.

We have determined that the termination results in a cancellation of all our obligations to Amgen under the 2010 Agreement. We have evaluated the terms of the ROFN and determined that it has de minimis value because Amgen's rights under the ROFN are limited to an exclusive negotiating period of a short duration and there is no bargain element in the ROFN. As a result of the termination, we have recognized \$5.2 million of income which represents the balance of the deferred revenue related to the agreement at the time of the termination.

The total revenue recognized under this arrangement was zero for each of the year ended December 2016 and 2015 and \$6.9 million for the year ended December 31, 2014. As of December 31, 2016 we have no deferred revenue related to this agreement.

***Novo Nordisk A/S***

In December 2014, we entered into a Collaboration and License Agreement with Novo Nordisk A/S (Novo). Under the terms of the agreement, we granted Novo a research license to use certain Xencor technologies including our bispecific, Ilb, Xtend and others during a two year research term. We received an upfront payment of \$2.5 million and received research funding of \$1.6 million per year over the research term.

We recognized the \$2.5 million upfront payment as income over the two year research term. The research funding is being recognized into income over the period that the services are being provided. We determined that future milestone payments were substantive and contingent and we did not allocate any of the upfront consideration to these milestones.

The total revenue recognized under this agreement was \$2.7 million, \$2.9 million and \$0.1 million for the years ended December 31, 2016, 2015 and 2014 respectively. As of December 31, 2016 we have no deferred revenue related to the agreement.

***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 of \$13 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. If certain developmental, regulatory and sales milestones are achieved, we are eligible to receive future milestone payments and royalties.

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

There were no revenues recognized under this arrangement for the years ended December 31, 2016, 2015 and 2014. As of December 31, 2016, we have no deferred revenue related to this agreement.

***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 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.

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 sub licensees, 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.

In the third quarter of 2014, Alexion achieved a clinical development milestone with an undisclosed molecule to be used against an undisclosed target. In the fourth quarter of 2015, Alexion exercised its option to take an exclusive commercial license and achieved a further clinical development milestone. In December 2016, Alexion achieved a Phase 3 clinical development milestone for an undisclosed target.

The total revenue recognized under this arrangement was \$6.0 million, \$8.5 million and \$1.0 million for the years ended December 31, 2016, 2015 and 2014, respectively. As of December 31, 2016 there was a receivable of \$5.0 million and deferred revenue related to this agreement of \$0.6 million.

***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 were 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 and recognized the payment as revenue in the period the milestone event occurred. No revenue related to this arrangement was recognized in 2016, 2015 or 2014. There is no deferred revenue related to this agreement at December 31, 2016.

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

***CSL Limited***

2009 Agreement

In 2009 we entered into a Research License and Commercialization Agreement with CSL Limited (CSL-2009). 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 were recognized as revenue ratably over the five-year term of the research license.

In May 2013, we entered into an amendment to the February 2009 Research License and Commercialization Agreement with CSL, which eliminated a contingent milestone payment requirement and reduced the royalty rate on net sales for a product in development. 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 expired in February 2014 and four additional options to take commercial licenses through the term of the research period. The options were 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 were recognized into income over the remaining period of the research term.

In 2013 CSL sublicensed CSL362 (now called JNJ-56022473) to Janssen Biotech Inc. (Janssen Biotech). In August 2015, CSL, through its sub licensee, Janssen Biotech, initiated a Phase 2 clinical trial for CSL362 for which we received a milestone payment.

Total revenue recognized for the years ended December 31, 2016, 2015 and 2014 was \$0, \$2.5 million and \$0.7 million respectively. As of December 31, 2016 we have no deferred revenue related to this agreement.

***Merck Sharp & Dohme Corp.***

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.

In the first quarter of 2014, Merck initiated a Phase 1 clinical trial which triggered a \$0.5 million milestone payment to us. For each of the years ended December 31, 2016 and 2015 total revenue recognized was \$0.1 million, and for the year ended December 31, 2014, total revenue recognized was \$0.6 million. As of December 31, 2016, we had deferred revenue of \$50,000 related to this agreement.

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

**Potential Milestones**

As of December 31, 2016, 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:

Partner	Potential Milestones (in millions)			Total Milestones
	Development-based	Regulatory- based	Sales-based	
Alexion (1)	\$ 42.5	\$ 168.0	\$ 180.0	\$ 390.5
Amgen	232.5	345.0	1,080.0	1,657.5
BI (1)	9.0	6.0	12.0	27.0
CSL Janssen 2009 (1)	6.0	4.0	5.0	15.0
Janssen (1)	6.0	—	4.0	10.0
Merck (1)	3.5	6.0	—	9.5
MorphoSys (1)	62.0	187.0	50.0	299.0
Novartis	540.0	920.0	950.0	2,410.0
<b>Total</b>	<b>\$ 901.5</b>	<b>\$ 1,636.0</b>	<b>\$ 2,281.0</b>	<b>\$ 4,818.5</b>

(1) The payments are solely dependent upon activities of the collaborative partner or licensee.

**Revenue earned**

The \$87.5 million, \$27.8 million and \$9.5 million of revenue recorded for the years ended December 31, 2016, 2015 and 2014, respectively was earned principally from the following licensees (in millions):

	Year Ended December 31,		
	2016	2015	2014
Amgen	\$ 18.7	\$ 13.8	\$ 6.9
Alexion	6.0	8.5	1.0
Novo Nordisk	2.7	2.9	—
Novartis	59.7	—	—
CSL	—	2.5	0.7
Other	0.4	0.1	0.9
<b>Total</b>	<b>\$ 87.5</b>	<b>\$ 27.8</b>	<b>\$ 9.5</b>

A 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, 2016, 2015 and 2014 is as follows (in millions):

	Year Ended December 31,		
	2016	2015	2014
U.S. Revenue	\$ 84.8	\$ 22.4	\$ 8.6
Non-U.S. Revenue	2.7	5.4	0.9
<b>Total</b>	<b>\$ 87.5</b>	<b>\$ 27.8</b>	<b>\$ 9.5</b>

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

***Deferred Revenue***

Deferred revenue arises from payments received in advance of the culmination of the earnings process. We have classified deferred revenue for which we stand ready to perform 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 \$103.4 million and \$33.8 million at December 31, 2016 and 2015, 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, 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.

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.

***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.

***Marketable Securities***

The Company has an investment policy that includes guidelines on acceptable investment securities, minimum credit quality, maturity parameters and concentration and diversification. The Company invests its excess cash primarily in marketable securities issued by investment grade institutions.

The Company considers its marketable securities to be “available-for-sale”, as defined by authoritative guidance issued by the FASB. These assets are carried at fair value and the unrealized gains and losses are included in accumulated other comprehensive income (loss). Accrued interest on marketable securities is included in marketable securities. Accrued interest was \$1.4 million and \$0.9 million at December 31, 2016 and 2015, respectively. If a decline in the value of a marketable security in the Company’s investment portfolio is deemed to be other-than-temporary, the Company writes down the security to its current fair value and recognizes a loss as a charge against income. The Company reviews its portfolio of marketable securities, using both quantitative and qualitative factors, to determine if declines in fair value below cost are other-than-temporary.

***Concentrations of Risk***

Cash, cash equivalents and marketable securities are financial instruments that potentially subject the Company to concentrations of risk. Xencor invests its cash in corporate debt securities and U.S. sponsored agencies with strong

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

credit ratings. Xencor has established guidelines relative to diversification and maturities that are designed to help ensure safety and liquidity. These guidelines are periodically reviewed to take advantage of trends in yields and interest rates.

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. Amounts on deposit in excess of federally insured limits at December 31, 2016 and 2015 approximated \$14.0 million and \$12.1 million, respectively.

We have payables with two service providers that represent 28% of our total payables and three service providers that represented 55% of our total payables for the years ended December 31, 2016 and 2015, respectively. We rely on two critical suppliers for the manufacture of our drug product for use in our clinical trials. While we believe that there are alternative vendors available, a change in manufacturing vendors could cause a delay in the availability of drug product and result in a delay of conducting and completing our clinical trials. No other vendor accounted for more than 10% of total payables at December 31, 2016 or 2015.

***Fair Value of Financial Instruments***

Our financial instruments primarily consist of cash and cash equivalents, marketable securities, accounts receivable, accounts payable and accrued expenses. Marketable securities and cash equivalents are carried at fair value. The fair value of the other financial instruments closely approximate their fair value due to their short maturities.

The Company accounts for recurring and non-recurring fair value measurements in accordance with FASB Accounting Standards Codification (ASC) 820, *Fair Value Measurements and Disclosures* (ASC 820). ASC 820 defines fair value, establishes a fair value hierarchy for assets and liabilities measured at fair value, and requires expanded disclosure about fair value measurements. The ASC 820 hierarchy ranks the quality of reliable inputs, or assumptions, used in the determination of fair value and requires assets and liabilities carried at fair value to be classified and disclosed in one of the following three categories:

*Level 1*— Fair Value is determined by using unadjusted quoted prices that are available in active markets for identical assets or liabilities.

*Level 2*— Fair Value is determined by using inputs other than Level 1 quoted prices that are directly or indirectly observable. Inputs can include quoted prices for similar assets or liabilities in active markets or quoted prices for identical assets or liabilities in markets that are not active. Related inputs can also include those used in valuation or other pricing models, such as interest rates and yield curves that can be corroborated by observable market data.

*Level 3*— Fair value is determined by inputs that are unobservable and not corroborated by market data. Use of these inputs involves significant and subjective judgments to be made by the reporting entity –e.g. determining an appropriate discount factor for illiquidity associated with a given security.

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

The Company measures the fair value of financial assets using the highest level of inputs that are reasonably available as of the measurement date. The assets recorded at fair value are classified within the hierarchy as follows for the periods reported (in thousands):

	<b>December 31, 2016</b>		
	<b>Total Fair Value</b>	<b>Level 1</b>	<b>Level 2</b>
Money Market Funds in Cash and Cash Equivalents	\$ 12,137	\$ 12,137	\$ —
Corporate Securities	181,483	—	181,483
Government Securities	207,465	—	207,465
	<u>\$ 401,085</u>	<u>\$ 12,137</u>	<u>\$ 388,948</u>

	<b>December 31, 2015</b>		
	<b>Total Fair Value</b>	<b>Level 1</b>	<b>Level 2</b>
Money Market Funds in Cash and Cash Equivalents	\$ 9,453	\$ 9,453	\$ —
Corporate Securities	114,846	—	114,846
Government Securities	65,885	—	65,885
	<u>\$ 190,184</u>	<u>\$ 9,453</u>	<u>\$ 180,731</u>

***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. 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

***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 period of the decision to abandon. During 2016, 2015 and 2014, we abandoned previously capitalized patent and licensing related charges of \$356,000, \$296,000 and \$509,000, respectively.

**Xencor, Inc.****Notes to Financial Statements (Continued)**

The carrying amount and accumulated amortization of patents, licenses, and other intangibles is as follows (in thousands):

	<b>December 31,</b>	
	<b>2016</b>	<b>2015</b>
Patents, definite life	\$ 7,570	\$ 6,488
Patents, pending issuance	4,134	4,051
Licenses and other amortizable intangible assets	2,011	2,072
Nonamortizable intangible assets (trademarks)	399	399
Total gross carrying amount	14,114	13,010
Accumulated amortization—patents	(2,792)	(2,214)
Accumulated amortization—licenses and other	(960)	(825)
Total intangible assets, net	<u>\$ 10,362</u>	<u>\$ 9,971</u>

Amortization expense for patents, licenses, and other intangible assets was \$755,000, \$594,000 and \$694,000 for the years ended December 31, 2016, 2015 and 2014, respectively.

Future amortization expense for patent, licenses, and other intangible assets recorded as of December 31, 2016, and for which amortization has commenced, is as follows:

	<b>Year ended</b>	
	<b>December 31,</b>	
	<b>(in thousands)</b>	
2017	\$	700
2018		693
2019		682
2020		627
2021		558
Thereafter		2,290
Total	<u>\$</u>	<u>5,550</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, 2016, the Company has \$4.1 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 assets which include fixed assets and amortizable 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.

We did not recognize a loss from impairment for the years ended December 31, 2016, 2015 or 2014.

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

***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. We did not have any material uncertain tax positions at December 31, 2016 or 2015.

Our policy is to recognize interest and penalties on taxes, if any, as a component of income tax expense.

***Stock-Based Compensation***

We recognize compensation expense using a fair-value-based method for costs related to all share-based payments, including stock options and shares issued under our Employee Stock Purchase Plan (ESPP). 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 periods if actual forfeitures differ from those estimates. We use historical data and industry published statistics 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 and expense for stock-based awards to employees, directors and consultants of approximately \$7.8 million, \$4.9 million and \$1.8 million for the years ended December 31, 2016, 2015 and 2014, respectively. Included in the 2016 and 2015 balances for total compensation expense is \$378,000 and \$341,000, relating to our ESPP, 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 Income (Loss) Per Share***

Basic net income (loss) per common share is computed by dividing the net income or loss by the weighted-average number of common shares outstanding during the period. Potentially dilutive securities consisting of stock options at December 31, 2015 and 2014, and stock purchases under the Employee Stock Purchase Plan were not

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

included in the diluted net loss per common shares calculation because the inclusion of such shares would have had an antidilutive effect as follows:

	Year Ended December 31,		
	2016	2015	2014
	(in thousands)		
Options to purchase common stock	—	1,281	2,827
Employee stock purchase plan shares	—	75	25
<b>Total</b>	<b>—</b>	<b>1,356</b>	<b>2,852</b>

	Year Ended December 31,		
	2016	2015	2014
	(in thousands, except per share data)		
<b>Basic</b>			
Numerator:			
Net income (loss) attributable to common stockholders for basic net income (loss) per share	\$ 23,625	\$ (17,592)	\$ (16,422)
Denominator:			
Weighted-average common shares outstanding	41,267,329	39,015,131	31,390,631
Basic net income (loss) per common share	<u>\$ 0.57</u>	<u>\$ (0.45)</u>	<u>\$ (0.52)</u>
<b>Diluted</b>			
Numerator:			
Net income (loss) attributable to common stockholders for diluted net income (loss) per share	\$ 23,625	\$ (17,592)	\$ (16,422)
Denominator:			
Weighted average number of common shares outstanding used in computing basic net income (loss) per common share	41,267,329	39,015,131	31,390,631
Dilutive effect of employee stock options and ESPP	1,121,538	—	—
Weighted-average number of common shares outstanding used in computing diluted net income (loss) per common share	42,388,867	39,015,131	31,390,631
Diluted net income (loss) per common share	<u>\$ 0.56</u>	<u>\$ (0.45)</u>	<u>\$ (0.52)</u>

**Segment Reporting**

The Company determines its segment reporting based upon the way the business is organized for making operating decisions and assessing performance. The Company has only one operating segment related to the development of pharmaceutical products.

**2. Comprehensive Income (Loss)**

Comprehensive income (loss) is comprised of net income (loss) and other comprehensive income (loss). For the years ended December 31, 2016 and 2015, the only component of other comprehensive loss is net unrealized losses on marketable securities. There were no material reclassifications out of accumulated other comprehensive loss during the year ended December 31, 2016.

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

**3. Marketable Securities**

The Company's marketable securities held as of December 31, 2016 and 2015 are summarized below:

	December 31, 2016			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
(in thousands)				
Money Market Funds	\$ 12,137	\$ —	\$ —	\$ 12,137
Corporate Securities	182,394	6	(917)	181,483
Government Securities	207,986	44	(565)	207,465
	<u>\$ 402,517</u>	<u>\$ 50</u>	<u>\$ (1,482)</u>	<u>\$ 401,085</u>
Reported as				
Cash and cash equivalents				\$ 12,137
Marketable securities				388,948
Total investments				<u>\$ 401,085</u>

	December 31, 2015			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
(in thousands)				
Money Market Funds	\$ 9,453	\$ —	\$ —	\$ 9,453
Corporate Securities	115,148	6	(308)	114,846
Government Securities	66,099	—	(214)	65,885
	<u>\$ 190,700</u>	<u>\$ 6</u>	<u>\$ (522)</u>	<u>\$ 190,184</u>

The maturities of the Company's marketable securities as of December 31, 2016 are as follows:

	Amortized Cost	Estimated Fair Value
(in thousands)		
Mature in one year or less	\$ 115,748	\$ 115,608
Mature after one year through five years	274,632	273,340
	<u>\$ 390,380</u>	<u>\$ 388,948</u>

The unrealized losses on available-for-sale investments and their related fair values as of December 31, 2016 are as follows:

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

	Less than 12 months		12 months or greater	
	Fair value	Unrealized losses	Fair value	Unrealized losses
(in thousands)				
Corporate Securities	\$ 82,215	\$ (133)	\$ 88,990	\$ (784)
Government Securities	17,573	(16)	149,694	(549)
	<u>\$ 99,787</u>	<u>\$ (149)</u>	<u>\$ 238,684</u>	<u>\$ (1,333)</u>

The unrealized losses from the listed securities are due to a change in the interest rate environment and not a change in the credit quality of the securities. There were no securities that were in a loss position for more than twelve months at December 31, 2015.

**4. Sale of Additional Common Stock**

In March 2015, we completed the sale of 8,625,000 shares of common stock which included shares we issued pursuant to our underwriters' exercise of their over-allotment option pursuant to a follow-on offering. We received net proceeds of \$115.2 million, after underwriting discounts, commissions and estimated offering expenses.

In December 2016, we completed the sale of 5,272,750 shares of common stock which included shares we issued pursuant to our underwriters' exercise of their over-allotment option pursuant to a follow-on financing. We received net proceeds of \$119.3 million after underwriting discounts, commissions and offering expenses.

On September 19, 2016, we entered into an Equity Distribution Agreement (the Distribution Agreement) with Piper Jaffray & Co (Piper Jaffray) pursuant to which we may sell from time to time, at our option, up to an aggregate of \$40 million of common stock through Piper Jaffray as sales agent. The issuance and sale of these shares by Xencor under the Distribution Agreement will be pursuant to our shelf registration statement on Form S-3 (File No.333-213700) declared effective by the SEC on October 5, 2016. We are not obligated to sell any shares of common stock under the Agreement and to date, we have not sold any shares under the Distribution Agreement.

**5. Property and Equipment**

Property and equipment consist of the following:

	December 31,	
	2016	2015
	(In thousands)	
Computers, software and equipment	\$ 6,735	\$ 5,338
Furniture and fixtures	125	102
Leasehold and tenant improvements	3,790	3,754
	<u>10,650</u>	<u>9,194</u>
Less accumulated depreciation and amortization	<u>(7,545)</u>	<u>(6,884)</u>
	<u>\$ 3,105</u>	<u>\$ 2,310</u>

Depreciation expense in 2016, 2015 and 2014 was \$712,000, \$519,000 and \$188,000, respectively.

**6. Income Taxes**

Our effective tax rate differs from the statutory federal income tax rate, primarily as a result of the changes in valuation allowance. The provision for income taxes of \$1.0 million for the year ended December 31, 2016 represents

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

federal and state alternative minimum tax. For the years ended December 31, 2015 and 2014 there was no current provision for federal or state income taxes due to taxable losses subject to a valuation allowance incurred in each of the years.

A reconciliation of the federal statutory income tax to our effective income tax is as follows (in thousands):

	Year Ended		
	December 31,		
	2016	2015	2014
Federal statutory income tax	\$ 7,718	\$ (6,157)	\$ (5,583)
State and local income taxes	1,451	—	—
Non-deductible research and development credit	—	708	435
Stock based compensation	733	651	478
Application of net operating loss carryforwards	(3,544)	—	—
Alternative minimum tax	1,000	—	—
Other	8	14	2
Net change in valuation allowance	(6,366)	4,784	4,668
<b>Income tax provision</b>	<b>\$ 1,000</b>	<b>\$ —</b>	<b>\$ —</b>

The tax effect of temporary differences that give rise to a significant portion of the deferred tax assets and liabilities at December 31, 2016 and 2015 is presented below (in thousands):

	2016	2015
<b>Deferred income tax assets</b>		
Net operating loss carryforwards	\$ 54,860	\$ 69,348
Research credits	11,561	8,096
Depreciation	668	735
Unrealized loss on securities	573	206
Accrued compensation	719	511
Deferred revenue	5,236	1,032
State taxes	97	—
<b>Gross deferred income tax assets</b>	<b>73,714</b>	<b>79,928</b>
<b>Valuation allowance</b>	<b>(69,670)</b>	<b>(76,036)</b>
<b>Net deferred income tax assets</b>	<b>4,044</b>	<b>3,892</b>
<b>Deferred income tax liabilities</b>		
Patent costs	(3,725)	(3,489)
Licensing costs	(261)	(339)
Capitalized legal costs	(58)	(64)
<b>Gross deferred income tax liabilities</b>	<b>(4,044)</b>	<b>(3,892)</b>
<b>Net deferred income tax asset</b>	<b>\$ —</b>	<b>\$ —</b>

Due to the uncertainty surrounding the realization of the benefits of our deferred tax assets in future tax periods, we have placed a valuation allowance against our deferred tax assets. The Company recognizes valuation allowances to reduce deferred tax assets to the amount that is more likely than not to be realized. The Company's net deferred income tax asset is not more likely than not to be realized due to the lack of sufficient sources of future taxable income and cumulative losses that have resulted over the years. During the year ended December 31, 2016, the valuation allowance decreased by \$6.4 million. Upon analysis, there were changes in ownership under Section 382 of the Internal Revenue Code and related state provisions as a result of our sale of preferred stock and sale of common stock during 2013. Section 382 limits the amount of net operating losses and tax credit forwards that may be available after a change in

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

ownership. The Company has adjusted its net operating loss and tax credit carryforwards to reflect the impact of the section 382 limitations. The Company's tax returns remain open to potential inspection for the years 2013 and onwards for federal purposes and 2012 and onwards for state purposes.

As of December 31, 2016, we had cumulative net operating loss carryforwards for federal and state income tax purposes of \$145.2 million and \$91.6 million respectively, and available tax credit carryforwards of approximately \$6.4 million for federal income tax purposes and \$5.2 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, state net operating losses expire starting in 2017 including \$19.9 million that will expire in 2017, and federal tax credit carryforwards expire starting in 2019. Utilization of the net operating losses and tax credits are subject to a substantial annual limitation due to ownership changes which occurred. As a result of these changes, provisions in the Internal Revenue Code of 1986 under Section 382 and similar state provisions may result in the expiration of certain of our net operating losses and tax credits before we can use them.

**7. Stock-Based Compensation**

Our Board of Directors and the requisite stockholders previously approved the 2010 Equity Incentive Plan (the 2010 Plan). In October 2013, our Board of Directors approved the 2013 Equity Incentive Plan (the 2013 Plan) and in November 2013 our stockholders approved the 2013 Plan. The 2013 Plan became effective as of December 3, 2013, the date of the Company's IPO. As of December 2, 2013, we suspended the 2010 Plan and no additional awards may be granted under the 2010 Plan. Any shares of common stock covered by awards granted under the 2010 Plan that terminate after December 2, 2013 by expiration, forfeiture, cancellation or other means without the issuance of such shares will be added to the 2013 Plan reserve.

As of December 31, 2016, the total number of shares of common stock available for issuance under the 2013 Plan was 7,027,349. Unless otherwise determined by the Board, beginning January 1, 2014, and continuing until the expiration of the 2013 Plan, the total number of shares of common stock available for issuance under the 2013 Plan will automatically increase annually on January 1 by 4% of the total number of issued and outstanding shares of common stock as of December 31 of the immediate preceding year. On January 1, 2016, the total number of shares of common stock available for issuance under the 2013 Plan was automatically increased by 1,400,000 shares, which number is included in the number of shares available for issuance above. As of December 31, 2016 a total of 3,434,250 options have been issued under the 2013 Plan.

In November 2013, our Board of Directors and stockholders approved the 2013 Employee Stock Purchase Plan (ESPP), which became effective as of December 5, 2013. Under the ESPP our employees may elect to have between 1-15% of their compensation withheld to purchase Company stock at a discount. The ESPP had an initial two-year term that includes four six-month purchase periods and employee withholding amounts may be used to purchase Company stock during each six-month purchase period. The initial two-year term ended in December 2015 and pursuant to the provisions of the ESPP, the second two-year term began automatically upon the end of the initial term. The total number of shares that can be purchased with the withholding amounts are based on the lower of 85% of the Company's stock price at the initial offering date or, 85% of the Company's stock price at each purchase date. We have reserved a total of 581,286 shares of common stock for issuance under the ESPP. Unless otherwise determined by our Board, beginning on January 1, 2014, and continuing until the expiration of the ESPP, the total number shares of common stock available for issuance under the ESPP will automatically increase annually on January 1 by the lesser of (i) 1% of the total number of issued and outstanding shares of common stock as of December 31 of the immediately preceding year, or (ii) 621,814 shares of common stock. On January 1, 2014, the total number of shares of common stock available for issuance under the ESPP was automatically increased by 313,545 shares, which number is included in the number of shares reserved for issuance above. Pursuant to approval by our board, there was no increase in the number of authorized shares in the ESPP

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

in 2016 or 2015. As of December 31, 2016 and 2015, we have issued a total of 221,486 and 176,383 shares of common stock, respectively, under the ESPP.

Information with respect to stock options outstanding is as follows:

	December 31,		
	2016	2015	2014
Exercisable options	1,743,765	1,600,351	1,393,729
Weighted average exercise price per share of exercisable options	\$ 8.87	\$ 3.99	\$ 1.01
Weighted average grant date fair value per share of options granted during the year	\$ 10.30	\$ 10.66	\$ 7.39
Options available for future grants	2,943,216	2,917,182	2,583,186
Weighted average remaining contractual life	7.82	6.98	6.43

The following table summarizes stock option activity for the years ended December 31, 2016 and 2015:

	Number of Shares	Weighted- Average Exercise Price (Per Share)	Weighted- Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands) <sup>(2)</sup>
Balances at December 31, 2014	2,826,794	\$ 5.12	6.43	
Options granted	940,250	15.94		
Options forfeited	(9,375)	18.75		
Options expired	(7,500)	11.76		
Options exercised(3)	(379,268)	1.46		
Balances at December 31, 2015	3,370,901	8.50	6.98	\$ 21,854
Options granted	1,429,500	15.08		
Options forfeited	(54,503)	12.21		
Options expired	(1,031)	15.69		
Options exercised(3)	(699,066)	1.66		
Balances at December 31, 2016	4,045,801	\$ 11.95	7.82	\$ 58,131
As of December 31, 2016				
Options vested and expected to vest	3,811,024	\$ 11.73	7.75	\$ 55,588
Exercisable	1,743,765	\$ 8.87	6.67	\$ 30,435

(1) The weighted average exercise price per share is determined using exercise price per share for stock options.

(2) The aggregate intrinsic value is calculated as the difference between the exercise price of the option and the fair value of our common stock for in- the-money options at December 31, 2016 and 2015.

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

- (3) The total intrinsic value of stock options exercised was \$11.2 million, \$5.4 million and \$155,000 for the years ended December 31, 2016, 2015 and 2014 respectively. The stock options outstanding and exercisable by exercise price at December 31, 2016 are as follows:

Stock Options Outstanding				Stock Options Exercisable		
Range of Exercise Prices	Number of Shares	Weighted-Average Remaining Contractual Term (in years)	Weighted-Average Exercise Price Per Share	Number of Shares	Weighted-Average Exercise Price Per Share	
\$0.59 – \$4.25	781,051	5.42	\$ 2.83	699,072	\$ 2.66	
\$5.50 – \$9.26	17,157	7.03	\$ 5.97	15,188	\$ 5.55	
\$9.78 – \$14.75	2,142,530	8.30	\$ 12.1	646,252	\$ 11.31	
\$14.77 – \$22.35	877,063	8.27	\$ 16.4	383,253	\$ 16.20	
\$24.38 – \$26.76	228,000	9.86	\$ 25.3	—	\$ —	
	<u>4,045,801</u>	7.82	\$ 11.95	<u>1,743,765</u>	\$ 8.87	

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. Management estimates the probability of non-employee awards being vested based upon an evaluation of the non-employee achieving their specific performance goals.

Options granted after our Initial Public Offering, are issued at the fair market value of our stock at the date the grant is approved by our board of directors.

The fair value of employee stock options was estimated using the following weighted average assumptions for the years ended December 31, 2016, 2015 and 2014:

	Options		
	2016	2015	2014
Common stock fair value per share	\$ 11.50 - 26.76	\$ 11.82 - 22.35	\$ 8.56 - 16.52
Expected volatility	75.77% - 90.83%	69.17% - 86.46%	77.4%
Risk-free interest rate	1.03% - 2.18%	1.44% - 1.84%	1.67% - 1.96%
Expected dividend yield	—	—	—
Expected term (in years)	5.23 - 6.08	5.23 - 6.08	6.0

	ESPP		
	2016	2015	2014
Expected term (years)	0.5 - 2.0	0.5 - 2.0	0.5 - 2.0
Expected volatility	67.8% - 79.8%	67.8% - 82.9%	70.6% - 71.8%
Risk-free interest rate	.47% - .93%	.07% - .93%	.06% - .46%
Expected dividend yield	—	—	—

**Xencor, Inc.****Notes to Financial Statements (Continued)**

Total employee, director and non-employee stock-based compensation expense recognized was as follows:

<b>(In thousands)</b>	<b>Year Ended December 31,</b>		
	<b>2016</b>	<b>2015</b>	<b>2014</b>
General and administrative	\$ 3,592	\$ 2,218	\$ 848
Research and development	4,256	2,650	1,013
	<u>\$ 7,848</u>	<u>\$ 4,869</u>	<u>\$ 1,861</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, 2016, 2015 and 2014 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 for an extended period and we do not have a track record of our stock being traded on the public markets for sufficient time to establish the volatility of our stock.

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.

As of December 31, 2016 and 2015, the unamortized compensation expense related to unvested stock options was \$18.1 million and \$10.8 million, respectively. The remaining unamortized compensation expense will be recognized over the next 2.72 years. At December 31, 2016 and 2015, the unamortized compensation expense was \$481,000 and \$395,000 respectively under our ESPP. The remaining unamortized expense will be recognized over the next 11.5 months.

**8. Commitments and Contingencies*****Operating leases***

The Company leases office and laboratory space in Monrovia, CA. In January 2015, we entered into a new lease agreement for the property. The new lease replaces the previous lease and extends our lease term to June 2020 with an option to renew for an additional five years. The new lease is a non-cancelable operating lease.

The Company also leased office space in San Diego, CA through April 2018 which included an option to renew for a period of one year. In March 2016, the Company signed a lease for additional space contiguous with its existing office space. The combined lease expires in June 2020. At December 31, 2016 the future minimum lease payments under

**Xencor, Inc.****Notes to Financial Statements (Continued)**

the operating leases were as follows:

<b>Years ending December 31,</b>	<b>Operating Leases</b>
2017	\$ 807
2018	833
2019	859
2020	466
Thereafter	—

Rent expense for the years ended December 31, 2016, 2015 and 2014 was \$638,000, \$558,000 and \$597,000 respectively.

***Contingencies***

From time to time, the Company may be subject to various litigation and related matters arising in the ordinary course of business. The Company does not believe it is currently subject to any material matters where there is at least a reasonable possibility that a material loss may be incurred.

On March 3, 2015, a verified class action complaint, captioned DePinto v. John S. Stafford, et al., C.A. No. 10742, was filed in the Court of Chancery of the State of Delaware against certain of the Company's current and former directors alleging cause of action for Breach of Fiduciary Duty and Invalidity of Director and Stockholder Consents. In general, the complaint alleged that the plaintiff and the class he seeks to represent were shareholders of the Company during the recapitalization and certain related transactions that the Company underwent in 2013 and that the defendants breached their fiduciary duties in the course of approving that series of transactions. It also challenged as invalid certain corporate acts taken in the 2013 time period.

On June 10, 2015, the Company filed a Verified Petition for Relief under Del. C. Section 205 (the 205 Petition) related to the corporate acts challenged in the complaint. The defendants filed an answer to the class action complaint on June 22, 2015. On July 9, 2015, the Court consolidated the 205 Petition with the class action, joined the Company as a defendant and ordered it to file the claims in the 205 Petition as counter-claims in the class action, which the Company has done.

On August 11, 2015, the Company filed a Motion for leave to File an Amended Counter-Claim, along with the proposed Amended Counter-Claim and related documents. On October 5, 2015, the parties filed a Stipulation of Partial Settlement and related documents disclosing a settlement of the invalidity claims addressed in the complaint, the counter-claim and the proposed amended counter-claim including a request by plaintiff's counsel for reimbursement of legal fees up to \$950,000. On October 7, 2015, we filed the Amended Counter-Claim and the related documents. On December 14, 2015, the Court entered an Order and Partial Final Judgment approving the settlement of the invalidity claims, validating each corporate act challenged in the complaint, dismissing with prejudice Count II of the complaint (the invalidity claims) and granting plaintiff's counsel a fee award. We have paid the plaintiff's legal award cost of \$950,000 net of insurance proceeds of \$187,500 which has been reflected as a charge in our 2015 operations.

On September 27, 2016, the parties engaged in voluntary mediation and agreed to settle the complaint's remaining claims for a total payment of \$2.375 million to the class certified by the Delaware Court of Chancery. The settlement, which is subject to approval by the Court, was reached without any party admitting wrong-doing. Under the terms of the settlement, no payments shall be made to the plaintiffs by the Company or any of the defendants in the lawsuit other than payments covered by the Company's insurance. The Court has scheduled a Settlement hearing for April 4, 2017.

**Xencor, Inc.**

**Notes to Financial Statements (Continued)**

We continue to recognize legal costs related to the litigation as incurred and offset any insurance proceeds when approved and issued. For the year ended December 31, 2016 no amount of loss related to the settlement has been accrued. As of December 31, 2016, we have reported an outstanding settlement amount of \$2.355 million as a payable and also reflected a receivable of the same amount for the insurance coverage that will fund the remaining settlement costs.

We are obligated to make future payments to third parties under in-license agreements, including sublicense fees, royalties, and payments that become due and payable on the achievement of certain development and commercialization milestones. As the amount and timing of sublicense fees and the achievement and timing of these milestones are not probable and estimable, such commitments have not been included on our balance sheet.

***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, 2016 and 2015.

**9. 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, 2016, 2015 or 2014.

**10. Condensed Quarterly Financial Data (unaudited)**

The following table contains selected unaudited financial data for each quarter of 2016 and 2015. The unaudited information should be read in conjunction with the Company's financial statements and related notes included elsewhere in this report. The Company believes that the following information reflects all normal recurring adjustments necessary for a fair presentation of the information for the periods presented. The operating results for any quarter are not necessarily indicative of results for any future period.

**Xencor, Inc.****Notes to Financial Statements (Continued)****Quarterly Financial Data (in thousands, except per share data):**

	<b>2016 Quarter Ended</b>			
	<b>March 31,</b>	<b>June 30,</b>	<b>September 30,</b>	<b>December 31,</b>
Total revenue	\$ 7,252	\$ 66,007	\$ 7,821	\$ 6,440
Income (loss) from operations	(6,733)	48,556	(9,255)	(10,028)
Net income (loss)	(6,398)	47,165	(8,077)	(9,065)
Basic net income (loss) per common share	(0.16)	1.16	(0.20)	(0.21)
Diluted net income (loss) per common share	\$ (0.16)	\$ 1.13	\$ (0.20)	\$ (0.21)

	<b>2015 Quarter Ended</b>			
	<b>March 31,</b>	<b>June 30,</b>	<b>September 30,</b>	<b>December 31,</b>
Total revenue	\$ 1,491	\$ 1,014	\$ 3,503	\$ 21,754
Income (loss) from operations	(6,478)	(8,986)	(10,312)	7,438
Net income (loss)	(6,444)	(8,868)	(10,037)	7,757
Basic net income (loss) per common share	(0.19)	(0.22)	(0.25)	0.19
Diluted net income (loss) per common share	\$ (0.19)	\$ (0.22)	\$ (0.25)	\$ 0.19

**Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure**

Not applicable.

**Item 9 A. Controls and Procedures**

**Evaluation of Disclosure Controls and Procedures**

Our management, Chief Executive Officer and Vice President of Finance, evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2016. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Vice President of Finance, as appropriate, to allow timely decisions regarding required disclosure. Based on this evaluation our Chief Executive Officer and Vice President of Finance concluded that our disclosure controls and procedures were effective as of December 31, 2016 at the reasonable assurance level.

**Management's Report on Internal Control over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended). Our management, Chief Executive Officer and Vice President of Finance, assessed the effectiveness of our internal control over financial reporting as of December 31, 2016. In making this assessment, our management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (2013 Framework) ("COSO") in Internal Control—Integrated Framework. Based on that assessment and using the COSO criteria, our management, Chief Executive Officer and Vice President of Finance have concluded that, as of December 31, 2016, our internal control over financial reporting was effective.

**Changes in Internal Control over Financial Reporting**

There has been no change in our internal control over financial reporting during the year ended December 31, 2016, that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

**Inherent Limitations of Controls**

Management does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent or detect all error and all fraud. Controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with the policies or procedures. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

### **Attestation in Internal Control over Financial Reporting**

RSM US LLP, our independent registered public accounting firm, has audited our financial statements for the year ended December 31, 2016 and has issued an audit report on the effectiveness of the Company's internal control over financial reporting as of December 31, 2016, which is included in Item 8 of this Annual Report on Form 10-K.

### **Item 9 B. Other Information**

Not applicable.

## **PART III**

### **Item 1 0. Directors, Executive Officers and Corporate Governance**

We have adopted a code of ethics for directors, officers (including our principal executive officer, principal financial officer and principal accounting officer) and employees, known as the Code of Business Conduct and Ethics. The Code of Business Conduct and Ethics is available on our website at <http://www.xencor.com> under the Corporate Governance section of our Investor Relations page. We will promptly disclose on our website (i) the nature of any amendment to the policy that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions and (ii) the nature of any waiver, including an implicit waiver, from a provision of the policy that is granted to one of these specified individuals that is required to be disclosed pursuant to SEC rules and regulations, the name of such person who is granted the waiver and the date of the waiver.

The other information required by this item and not set forth below will be set forth in the sections headed "Election of Directors" and "Executive Officers" in our Proxy Statement for our 2017 Annual Meeting of Stockholders, or Proxy Statement, to be filed with the SEC within 120 days after the end of the fiscal year ended December 31, 2016, and is incorporated herein by reference.

#### **Audit Committee**

The information required by this item relating to our audit committee is set forth in our Proxy Statement and incorporated herein by reference.

### **Item 1 1. Executive Compensation**

The information required by this item will be set forth in the section headed "Executive Compensation" in our Proxy Statement and is incorporated herein by reference.

### **Item 1 2. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters**

The information required by this item will be set forth in the section headed "Security Ownership of Certain Beneficial Owners and Management" in our Proxy Statement and is incorporated herein by reference.

The information required by Item 201(d) of Regulation S-K will be set forth in the section headed "Executive Compensation" in our Proxy Statement and is incorporated herein by reference.

### **Item 1 3. Certain Relationships and Related Transactions, and Director Independence**

The information required by this item will be set forth in the section headed "Transactions with Related Persons" in our Proxy Statement and is incorporated herein by reference.

**Item 1 4. Principal Accounting Fees and Services**

The information required by this item will be set forth in the section headed “Ratification of Selection of Independent Registered Public Accounting Firm” in our Proxy Statement and is incorporated herein by reference.

**Item 1 5. Exhibits, Financial Statement Schedules**

1. *Financial Statements.* We have filed the following documents as part of this Annual Report:

	<u>Page</u>
<a href="#">Report of Independent Registered Public Accounting Firm (RSM US LLP)</a>	71
<a href="#">Report of Independent Registered Public Accounting Firm (BDO USA LLP)</a>	73
<a href="#">Balance Sheets</a>	74
<a href="#">Statements of Comprehensive Income (Loss)</a>	75
<a href="#">Statements of Stockholders' Equity</a>	76
<a href="#">Statements of Cash Flows</a>	77
<a href="#">Notes to Financial Statements</a>	78

2. *Financial Statement Schedules.* All schedules have been omitted because they are not applicable or required, or the information required to be set forth therein is included in the Financial Statements or notes thereto included in Item 8 of this Annual Report on Form 10-K.

3. *Exhibits.* See the Exhibit Index and Exhibits filed as part of this report.



**EXHIBIT INDEX**

<b>Exhibit Number</b>	<b>Description</b>
3.1	Amended and Restated Certificate of Incorporation of the Company (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K, filed with the SEC on December 11, 2013).
3.2	Amended and Restated Bylaws of the Company (incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K, filed with the SEC on December 11, 2013).
4.1	Form of Common Stock Certificate of the Company (incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form S-1, as amended (File No. 333-191689), originally filed with the SEC on October 25, 2013).
4.2*	Third Amended and Restated Investor Rights Agreement, dated June 26, 2013, among the Company and certain of its stockholders incorporated by reference to Exhibit 4.2 to the Company's Registration Statement on Form S-1, as amended (File No. 333-191689), originally filed with the SEC on October 11, 2013).
10.1*	Form of Indemnity Agreement between the Company and its directors and officers (incorporated by reference to Exhibit 10.1 to the Company's Registration Statement on Form S-1, as amended (File No. 333-191689), originally filed with the SEC on October 11, 2013).
10.2*	Xencor, Inc. 2010 Equity Incentive Plan, as amended, and Form of Stock Option Grant Notice, Option Agreement and Form of Notice of Exercise (incorporated by reference to Exhibit 10.2 to the Company's Registration Statement on Form S-1, as amended (File No. 333-191689), originally filed with the SEC on October 11, 2013).
10.3*	Xencor, Inc. 2013 Equity Incentive Plan and Form of Stock Option Agreement and Form of Stock Option Grant Notice thereunder (incorporated by reference to Exhibit 10.3 to the Company's Registration Statement on Form S-1, as amended (File No. 333-191689), originally filed with the SEC on October 11, 2013).
10.4*	Xencor, Inc. 2013 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.4 to the Company's Registration Statement on Form S-1, as amended (File No. 333-191689), originally filed with the SEC on October 11, 2013).
10.5*	Xencor, Inc. Non-Employee Director Compensation Policy (incorporated by reference to Exhibit 10.5 to the Company's Registration Statement on Form S-1, as amended (File No. 333-191689), originally filed with the SEC on October 11, 2013).
10.6*	Second Amended and Restated Executive Employment Agreement, dated January 1, 2007, by and between the Company and Dr. Bassil I. Dahiyat (incorporated by reference to Exhibit 10.6 to the Company's Registration Statement on Form S-1, as amended (File No. 333-191689), originally filed with the SEC on October 11, 2013).
10.7*	Offer Letter, dated January 12, 2010, by and between the Company and Dr. Edgardo Baracchini, Jr. (incorporated by reference to Exhibit 10.7 to the Company's Registration Statement on Form S-1, as amended (File No. 333-191689), originally filed with the SEC on October 11, 2013).
10.8*	Offer Letter, dated September 28, 2009, by and between the Company and Dr. Bruce Carter (incorporated by reference to Exhibit 10.8 to the Company's Registration Statement on Form S-1, as amended (File No. 333-191689), originally filed with the SEC on October 11, 2013).

- 10.9\* Amendment to Offer Letter, dated November 18, 2010, by and between the Company and Dr. Bruce Carter (incorporated by reference to Exhibit 10.9 to the Company's Registration Statement on Form S-1, as amended (File No. 333-191689), originally filed with the SEC on October 11, 2013).
- 10.10\* Amended Consulting Agreement, dated January 1, 2011, by and between the Company and Development and Strategic Consulting Associates, LLC (incorporated by reference to Exhibit 10.10 to the Company's Registration Statement on Form S-1, as amended (File No. 333-191689), originally filed with the SEC on October 11, 2013).
- 10.11\* Offer Letter, dated August 1, 2012, by and between the Company and Dr. Paul Foster (incorporated by reference to Exhibit 10.11 to the Company's Registration Statement on Form S-1, as amended (File No. 333-191689), originally filed with the SEC on October 11, 2013).
- 10.12\* Amended and Restated Executive Employment Agreement, dated September 4, 2013, by and between the Company and Dr. Bassil I. Dahiyat (incorporated by reference to Exhibit 10.12 to the Company's Registration Statement on Form S-1, as amended (File No. 333-191689), originally filed with the SEC on October 11, 2013).
- 10.13\* Offer Letter, dated September 5, 2013, by and between the Company and Dr. Edgardo Baracchini, Jr. (incorporated by reference to Exhibit 10.13 to the Company's Registration Statement on Form S-1, as amended (File No. 333-191689), originally filed with the SEC on October 11, 2013).
- 10.14\* Amended and Restated Severance Agreement, dated September 5, 2013, by and between the Company and Dr. John R. Desjarlais (incorporated by reference to Exhibit 10.14 to the Company's Registration Statement on Form S-1, as amended (File No. 333-191689), originally filed with the SEC on October 11, 2013).
- 10.15\* Amended and Restated Change in Control Agreement, dated September 5, 2013, by and between the Company and John J. Kuch (incorporated by reference to Exhibit 10.15 to the Company's Registration Statement on Form S-1, as amended (File No. 333-191689), originally filed with the SEC on October 11, 2013).
- 10.16\* Offer Letter, dated August 12, 2013, by and between the Company and Dr. Paul Foster (incorporated by reference to Exhibit 10.16 to the Company's Registration Statement on Form S-1, as amended (File No. 333-191689), originally filed with the SEC on October 11, 2013).
- 10.17† Collaboration and License Agreement, dated June 27, 2010, by and between the Company and MorphoSys AG (incorporated by reference to Exhibit 10.19 to the Company's Registration Statement on Form S-1, as amended (File No. 333-191689), originally filed with the SEC on October 11, 2013).
- 10.18† First Amendment to the Collaboration and License Agreement, dated March 23, 2012, by and between the Company and MorphoSys AG (incorporated by reference to Exhibit 10.20 to the Company's Registration Statement on Form S-1, as amended (File No. 333-191689), originally filed with the SEC on October 11, 2013).
- 10.19† Option and License Agreement, dated January 28, 2013, by and between the Company and Alexion Pharmaceuticals, Inc. (incorporated by reference to Exhibit 10.23 to the Company's Registration Statement on Form S-1, as amended (File No. 333-191689), originally filed with the SEC on October 11, 2013).
- 10.20† Collaboration Agreement, dated February 10, 2012, by and between the Company and Boehringer Ingelheim International GmbH (incorporated by reference to Exhibit 10.24 to the Company's Registration Statement on Form S-1, as amended (File No. 333-191689), originally filed with the SEC on October 11, 2013).

- 10.21† Cross-License Agreement, dated December 19, 2012, by and between the Company and MedImmune, LLC (incorporated by reference to Exhibit 10.26 to the Company's Registration Statement on Form S-1, as amended (File No. 333-191689), originally filed with the SEC on October 11, 2013).
- 10.22\* Employment Agreement dated August 29, 2014 by and between the Company and Lloyd Rowland (incorporated by reference to Exhibit 10.1 to the Company's Form 10-Q filed with the SEC on November 10, 2014).
- 10.23 Lease dated January 1, 2015 by and between the Company and BF Monrovia, LLC (incorporated by reference to Exhibit 99.1 to the Company's Form 8-K filed with the SEC on January 5, 2015).
- 10.24 Master Service Agreement dated July 14, 2014 by and between the Company and KBI Biopharma, Inc. (incorporated by reference to Exhibit 10.26 to the Company's Form 10-K filed with the SEC on February 20, 2015)
- 10.25 Amendment to Lease dated January 27, 2015 by and between the Company and BF Monrovia, LLC. (incorporated by reference to Exhibit 10.27 to the Company's Form 10-K filed with the SEC on February 20, 2015).
- 10.26 Research and License Agreement effective September 15, 2015 between the Company and Amgen Inc., (incorporated by reference to Exhibit 10.1 to the Company's Form 10-Q filed with the SEC on November 3, 2015).
- 10.27\* Employment Agreement dated December 16, 2015 by and between the Company and Dr. Paul Foster (incorporated by reference to Exhibit 10.29 to the Company's Form 10-K filed with the SEC on March 8, 2016).
- 10.28\* Severance Agreement, dated May 26, 2016 by and between the Company and Bassil Dahiyat (incorporated by reference to Exhibit 10.1 to the Company's Form 10-Q filed with the SEC on August 3, 2016).
- 10.29\* Severance Agreement, dated May 26, 2016 by and between the Company and John Kuch (incorporated by reference to Exhibit 10.2 to the Company's Form 10-Q filed with the SEC on August 3, 2016).
- 10.30\* Severance Agreement, dated May 26, 2016 by and between the Company and John Desjarlais (incorporated by reference to Exhibit 10.3 to the Company's Form 10-Q filed with the SEC on August 3, 2016).
- 10.31\* Severance Agreement, dated May 26, 2016 by and between the Company and Lloyd Rowland (incorporated by reference to Exhibit 10.4 to the Company's Form 10-Q filed with the SEC on August 3, 2016).
- 10.32\* Severance Agreement, dated May 26, 2016 by and between the Company and Edgardo Baracchini (incorporated by reference to Exhibit 10.5 to the Company's Form 10-Q filed with the SEC on August 3, 2016).
- 10.33\*\* Collaboration and License Agreement, dated June 26, 2016, by and between the Company and Novartis Institutes for BioMedical Research, Inc. (incorporated by reference to Exhibit 10.6 to the Company's Form 10-Q filed with the SEC on August 3, 2016).

[Table of Contents](#)

10.34	Equity Distribution Agreement, dated September 19, 2016, by and between the Company and Piper Jaffray & Co. (incorporated by reference to Exhibit 99.1 to the Company's Form 8-K filed with the SEC on September 19, 2016).
10.35**	Amendment No. 1, dated September 21, 2016, to the Collaboration and License Agreement by and between the Company and Novartis Institutes for BioMedical Research, Inc. (incorporated by reference to Exhibit 10.2 to the Company's Form 10-Q filed with the SEC on November 2, 2016).
23.1	Consent of Independent Registered Public Accounting Firm (RSM US LLP).
23.2	Consent of Independent Registered Public Accounting Firm (BDO USA LLP).
31.1	Certification of the Principal Executive Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934.
31.2	Certification of the Principal Financial Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934.
32.1**	Certification of the Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2**	Certification of the Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document.
101.SCH	XBRL Taxonomy Extension Schema Document.
101.CAL	XBRL Taxonomy Extension Schema Document.
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.

---

† We have received confidential treatment for certain portions of this agreement, which have been omitted and filed separately with the SEC pursuant to Rule 406 under the Securities Act of 1933, as amended.

\* Indicates management contract or compensatory plan.

\*\* These certifications are being furnished solely to accompany this annual report pursuant to 18 U.S.C. Section 1350, and are not being filed for purposes of Section 18 of the Securities Exchange Act of 1934 and are not to be incorporated by reference into any filing of the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in Registration Statement No. 333-192635 on Form S-8 and Registration Statement No. 333-213700 on Form S-3 of Xencor, Inc. of our report dated February 28, 2017 related to our audits of the financial statements, and internal controls over financial reporting which appear in this Annual Report on Form 10-K of Xencor, Inc. for the year ended December 31, 2016.

/s/ RSM US LLP

Los Angeles, California  
February 28, 2017

---

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (No. 333-213700) and Form S-8 (No. 333-192635) of Xencor, Inc. of our report dated February 20, 2015, relating to the 2014 financial statements of Xencor, Inc., which appears in this Form 10-K.

/s/ BDO USA LLP

BDO USA, LLP  
Los Angeles, California

February 28, 2017

---

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO SECTION 302 OF THE  
SARBANES-OXLEY ACT OF 2002**

I, Bassil I. Dahiyat, Ph.D., certify that:

1. I have reviewed this Annual Report on Form 10-K for the fiscal year ended December 31, 2016 of Xencor, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this report;
4. The Company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act rules 13a-15(f) and 15(d) – 15(f) for the Company and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company is made known to us particularly during the period in which this report is being prepared;
  - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with general accepted accounting principles;
  - c) Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the Company's most recent fiscal quarter (the Company's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and
5. The Company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company's board of directors (or persons performing the equivalent functions):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

/s/ Bassil I. Dahiyat

Bassil I. Dahiyat, Ph.D.

*President & Chief Executive Officer*

Date: February 28, 2017

---

**CERTIFICATION OF THE CHIEF FINANCIAL OFFICER PURSUANT TO SECTION 302 OF THE  
SARBANES-OXLEY ACT OF 2002**

I, John J. Kuch, certify that:

1. I have reviewed this Annual Report on Form 10-K for the fiscal year ended December 31, 2016 of Xencor, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this report;
4. The Company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15(d) – 15(f)) for the Company and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company is made known to us, particularly during the period in which this report is being prepared;
  - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the Company's most recent fiscal quarter (the Company's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and
5. The Company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company's board of directors (or persons performing the equivalent functions):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

/s/ John J. Kuch

\_\_\_\_\_  
John J. Kuch  
*Vice President, Finance (Principal Financial Officer)*

Date: February 28, 2017

---

**CERTIFICATION**  
**Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**  
**(Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code)**

In connection with the Annual Report on Form 10-K of Xencor, Inc. (the "Company") for the period ended December 31, 2016, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Bassil I. Dahiyat, Ph.D., as President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

1. the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company .

Date: February 28, 2017

/s/ Bassil I. Dahiyat

\_\_\_\_\_  
Bassil I. Dahiyat, Ph.D.

*President & Chief Executive Officer*

The foregoing certification is being furnished solely to accompany the Report pursuant to 18 U.S.C. § 1350, and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and is not to be incorporated by reference into any filing of the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing. A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

---

**CERTIFICATION**  
**Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**  
**(Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code)**

In connection with the Annual Report on Form 10-K of Xencor, Inc. (the "Company") for the period ended December 31, 2016, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, John J. Kuch, as Principal Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

1. the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 28, 2017

/s/ John J. Kuch

---

John J. Kuch  
*Vice President, Finance*

The foregoing certification is being furnished solely to accompany the Report pursuant to 18 U.S.C. § 1350, and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and is not to be incorporated by reference into any filing of the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing. A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

---