# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

# FORM 10-K

	rk One) ⊠	ANNUAL REPORT PURSUANT TO SECTION  For the fiscal	N 13 OR 15(d) OF THE SECURITIES EXCHA year ended December 31, 2017	ANGE ACT OF 1934			
I	□ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  For the transition period from to						
		Commissi	ion file number: 001-36182				
		X	encor, 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)	<b>20-162</b> 2 (I.R.S. Em Identificati <b>9101</b> (Zip Co	ployer on No.) <b>6</b>			
			(626) 305-5900 shone Number, Including Area Code)				
	Securities r	egistered pursuant to Section 12(b) of the Act:	V (F.1.F.1 WILLE 1 1				
	Commor	Title of Each Class Stock, par value \$0.01 per share	Name of Each Exchange on Which Registered The NASDAQ Stock Market LLC				
		egistered pursuant to Section 12(g) of the Act: <b>None</b>	The ThioDity of oak manner 220				
		check mark if the registrant is a well-known seasoned issu	er. as defined in Rule 405 of the Securities Act. Yes ⊠	No □			
	,	check mark if the registrant is not required to file reports p					
	Indicate by	check mark whether the registrant: (1) has filed all reports or for such shorter period that the registrant was required to	required to be filed by Section 13 or 15(d) of the Securi	ties Exchange Act of 1934 during the			
submitted a	and posteď p	check mark whether the registrant has submitted electronic ursuant to Rule 405 of Regulation S-T (§232.405 of this class). Yes $\boxtimes$ No $\square$					
		check mark if disclosure of delinquent filers pursuant to It in definitive proxy or information statements incorporated					
		check mark whether the registrant is a large accelerated fil itions of "large accelerated filer," "accelerated filer," "sma					
Larg	e accelerate	d filer $oxtimes$ Accelerated filer $oxtimes$	Non-accelerated filer □ (Do not check if a smaller reporting company)	Smaller reporting company $\Box$ Emerging growth company $\Box$			
		ing growth company, indicate by check mark if the registra andards provided pursuant to Section 13(a) of the Exchang		or complying with any new or revised			
	Indicate by	check mark whether the registrant is a shell company (as d	defined in Rule 12b-2 of the Securities Exchange Act of	1934). Yes □ No ⊠			
		ate market value of the voting and non-voting common equ 7 was \$939,648,825	uity held by non-affiliates computed by reference to the	price at which the common equity was last			
	The number	of outstanding shares of the registrant's common stock, p		7,009,966.			
			CORPORATED BY REFERENCE				
2017 Annu	al Meeting	the registrant's proxy statement to be filed with the Securit of Stockholders, which will be filed subsequent to the date s and Exchange Commission not later than 120 days follow	hereof, are incorporated by reference into Part III of this	s Form 10-K. Such proxy statement will be			

# Xencor, Inc. FORM 10-K

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# 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;
- $\cdot \quad \text{ the loss of key scientific or management personnel;} \\$
- 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 a Phase 2 trial and will be entering a Phase 3 trial in 2018 and is being developed for autoimmune disease and XmAb7195 has recently completed 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. We currently have three programs in Phase 1 stage of development and we plan to file Investigational New Drug Applications (IND's) for three additional programs in 2018:

- 1. XmAb14045 is currently in a Phase 1 trial for the treatment of acute myeloid leukemia,
- 2. XmAb13676 is currently in a Phase 1 trial for the treatment of B-cell malignancies,
- 3. XmAb18087 is currently in a Phase 1 trial for the treatment of neuroendocrine tumors (NET) and gastrointestinal stromal tumors (GIST),
- 4. XmAb20717 is a PD1 x CTLA4 bispecific antibody and is advancing to an IND filing in 2018 for the treatment of various cancers and is our first dual checkpoint inhibitor,

- 5. XmAb22841 is a CTLA4 x LAG3 bispecific antibody and is our second dual checkpoint inhibitor and will also target various cancers and we plan to file an IND in 2018 and,
- 6. XmAb23104 is a PD-1 x ICOS bispecific antibody and is the third dual checkpoint inhibitor program and targets both a checkpoint and co-stimulator for the treatment of various cancers and we plan to file an IND in 2018.

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:

- 1. Compounds we have created, we wholly-own and which we are currently developing,
- 2. Compounds we have created and are co-developing with Novartis Institutes for BioMedical Research, Inc. (Novatis) pursuant to a license and collaboration agreement,
- 3. Compounds that we have created, performed early-stage of development and licensed to our partners for further development and,
- 4. 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 five 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 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: three XmAb compounds that are currently in clinical trials and three additional compounds that are at an earlier-stage of development.

# **Compounds Wholly-Owned by Xencor**

		Primary		Stage of
Program	Fc Domain	Indication	Target	Development
XmAb5871	Immune Inhibitor	IgG4-RD, SLE	CD19	Phase 2
XmAb7195	Immune Inhibitor	Asthma/Allergy	IgE	Phase 1
XmAb18087	Bispecific	NET/GIST	SSTR2 x CD3	Phase 1
XmAb20717	Bispecific+Xtend	Oncology	PD1 x CTLA4	IND-enabling studies
XmAb 22841	Bispecific+Xtend	Oncology	CTLA4 x LAG3	IND-enabling studies
XmAb 23104	Bispecific+Xtend	Oncology	PD1 x LAG3	IND-enabling studies

*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 reversible 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 completed the IgG4-RD trial in December 2017 and completed enrollment for the Lupus trial in December 2017. We also completed a Phase 1 trial with a subcutaneous (SC) formulation of XmAb5871 in the fourth quarter of 2016.

In May 2017, we received Orphan Drug designation from the U.S. Food and Drug Administration (FDA) for XmAb5871 for the treatment of IgG4-RD. In January 2018, we received Orphan Medicinal Product designation from the European Commission.

*IgG4-RD*: in 2017 we completed a Phase 2 open-label pilot study of XmAb5871 for IgG4-RD with 20 enrolled patients. The main part of the trial with 15 patients was designed for patients to receive every other week intravenous (IV) administration of 5 mg/kg of XmAb5871 for up to 24 weeks and the primary objective of the study was to evaluate the effect of XmAb5871 on disease activity using the recently reported IgG4-RD Responder Index (RI) in patients with active IgG4-RD. Secondary objectives were to determine the safety and tolerability profile and to characterize the pharmacokinetics and immunogenicity of every other week IV administration of XmAb5871.

In November 2017 we presented final data from the trial at the American College of Rheumatology Annual (ACR) Meeting for the 15 patients that had been enrolled and received one or more doses of 5mg/kg of XmA5871. The data indicated that XmAb5871 was well tolerated by patients receiving drug in the study. Three patients had minor, transient gastrointestinal side-effects during the first infusion (all completed the study). Two serious adverse events (SAEs) unrelated to XmAb5871 were observed in one patient, pneumonia and recurrence of pneumonia due to non-compliance with antibiotic therapy (but the patient completed the study). All other XmAb5871-related adverse events (AEs) were graded as mild or moderate and no treatment related AE was reported in more than two patients. Three patients discontinued the study early. One discontinued patient was atypical with laryngeal involvement only who did not respond to XmAb5871 or to subsequent rituximab. A second patient responded, but flared at 12 weeks and did not

respond to subsequent rituximab therapy. The third patient responded but 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.

Efficacy data from the trial was very encouraging. 12 of 15 patients (80%) completed the study and all 12 achieved the primary endpoint of at least a two-point reduction in the IgG4-RD RI on Day 169. None of the 12 required corticosteroids (CS) after month two. Eight patients achieved remission (IgG4-RD RI of 0 and no CS after two months) and the other four achieved IgG4-RD RI scores of  $\leq$  4 at Day 169. 14 of 15 patients (93%) achieved a decrease of  $\geq$  5 in the IgG4-RD RI. One patient had been on baseline CS for two years (15 mg/day) and was able to discontinue CS within two months. Four others received CS at the start of the trial and tapered off within two months.

Five additional patients were enrolled in the study and received either a 90 mg or 180 mg fixed dose by IV infusion every other week. Four of the five patients completed the study. One patient discontiuned the study early after 3 doses due to SAEs of chronic inflammatory demyelinating polyneuropathy and small lymphocytic lymphoma/chronic lymphocytic leukemia, both unrelated to XmAb5871. Efficacy analysis for these five patients is ongoing. We believe that the promising data from the Phase 2 trial warrants further clinical development of XmAb5871 in treating IgG4-RD and we are planning to initiate a Phase 3 study in 2018.

In 2017 we met with the Division of Pulmonary, Allergy and Respiratory Products (DPARP) of the FDA in a Type B End of Phase 2 meeting to discuss the optimal pathway to advance XmAb5871 into Phase 3 development in IgG4-RD. The meeting resulted in guidance on endpoint definition and a path forward for Phase 3 development in IgG4-RD, which the FDA recognizes as a new disease entity with no regulatory precedence for an approval pathway. Based on the Phase 2 results and these preliminary discussions with DPARP, a randomized, placebo-controlled, double-blinded Phase 3 trial of approximately 200-250 patients evaluating the addition of XmAb5871 to standard of care therapy is planned. We are also seeking scientific advice from the European Medicines Agency in early 2018.

In October 2016 we completed a Phase 1 bioequivalence trial for XmAb5871 using a subcutaneous formulation. XmAb5871 was safe and well-tolerated as a subcutaneous (SC) injection in this trial. Pharmacokinetics and bioavailability data from the trial support an every-other-week dosing schedule. Our plan is to conduct further clinical studies with XmAb5871 in a subcutaneous formulation. Multiple dose SC administration of XmAb5871 were safe and well tolerated at doses of 125 to 375 mg in all 40 subjects administered SC XmAb5871. Treatment emergent adverse events (TEAEs) occurring in subjects receiving any dose of SC XmAb5871 were mild in severity. The only drug-related TEAE occurring in more than two subjects who received any dose of SC XmAb5871 was injection site bruising (three subjects, 8%). No subject receiving SC XmAb5871 discontinued the study due to an adverse event and there were no serious adverse events during the study.

SLE: in March 2016 we 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. In December 2017 we enrolled the last of 104 patients in this study. Patients in the trial were 1:1 randomized to XmAb5871 or placebo, and will receive treatment for up to 30 weeks. We plan on reporting topline data from this trial in late 2018.

*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 January 2015, we reported top-line interim data from Part 1 of the Phase 1a trial of XmAb7195, in which healthy volunteers received a single IV dose. In 2015, we continued the Phase 1a trial of XmAb7195, treating subjects with high baseline IgE levels, and in June 2015, we announced an expansion of the trial, adding cohorts of subjects that receive two IV doses of XmAb7195. We announced complete data from these studies in May 2016.

In September 2016, we initiated a multi-dose Phase 1b trial for XmAb7195 with a SC formulation. The first part of this study was an open-label bioequivalence trial evaluating four once-weekly doses of SC XmAb7195 ranging from 0.1 to 1.0 mg/kg in cohorts of six healthy volunteers. The second part of the trial, which we began in October 2016, was a randomized, double-blinded, placebo-controlled multiple-ascending dose study in atopic patients of SC XmAb7195 at doses of 1.5 and 2.0 mg/kg. Half-life of SC XmAb7195 ranged from 3.6 - 4.9 days, comparable to the previously reported half-life of 3.9 days of intravenously administered XmAb7195. Bioavailability after the fourth dose exceeded 50%, which is typical for monoclonal antibodies, and drug concentration levels increased with successive doses.

Subcutaneous administration of XmAb7195 was well tolerated. No severe AEs or serious treatment-emergent AEs occurred during the study. The most frequently occurring treatment-emergent AEs were injection-site related, including erythema, pruritis and/or urticaria, and most were mild. No diffuse urticaria or other systemic hypersensitivity reactions were reported. No apparent consistent effect of SC XmAb7195 on platelet count was seen when dosed at 0.1 - 1.0 mg/kg weekly for four weeks. At 1.5 - 2.0 mg/kg weekly for four weeks mild platelet count reductions were observed. Four of 15 patients in the 2.0 mg/kg group had at least one platelet count of less than  $150 \times 10^3$ / $\Box$ L at some time point. The lowest count observed was  $126 \times 10^3$ / $\Box$ L, and a recovery to within normal range occurred within a few days of the doses.

In 23 of 27 (85%) subjects with detectable baseline free IgE ( $\geq$  9.59 ng/mL); (median 76.2 ng/mL, range: 17.4-846 ng/mL), treated with four weekly SC XmAb7195 doses of 0.3 to 2.0 mg/kg, free IgE was suppressed to BLQ at some time point during the treatment period. In 20 (74%) of the 27 subjects, once suppression of free IgE to BLQ was observed, BLQ values were maintained for the remainder of the treatment period and for at least seven days following the last dose. Similarly, in the subgroup of atopic subjects, 14 of 14 (100%) subjects with detectable baseline free IgE (median 150.0 ng/mL, range: 46.4-846 ng/mL) treated with 4 weekly SC XmAb7195 doses of 1.5 to 2.0 mg/kg, free IgE was suppressed to BLQ at some time point during the treatment period. In 12 (86%) atopic subjects, once suppression of free IgE to BLQ was observed, BLQ values were maintained for the remainder of the treatment period and for at least seven days following the last dose.

In 28 of 31 (90%) subjects with detectable baseline total IgE ( $\geq$  2.0 IU/mL),; (median 68.1 IU/mL, range: 7.13-736 IU/mL) treated with four weekly SC XmAb7195 doses of 0.3 to 2.0 mg/kg, total IgE was suppressed to BLQ at some time point during the treatment period. In the other three subjects, total IgE levels were reduced to < 1% of baseline values. In 23 (82%) of 28 subjects, once suppression of total IgE to BLQ was observed, BLQ values were maintained for the remainder of the treatment period and for at least seven days following the last dose. Similarly, in the subgroup of atopic subjects, 12 of 14 (86%) subjects with detectable baseline total IgE (median 153.5 IU/mL, range: 38.9-736.0 IU/mL) treated with four weekly SC XmAb7195 doses of 1.5 to 2.0 mg/kg, total IgE was suppressed to BLQ at some time point during the treatment period. In the other two atopic subjects, total IgE levels were reduced to < 1% of baseline values. In eight (67%) of 12 subjects once suppression of free IgE to BLQ was observed, BLQ values were maintained for the remainder of the treatment period and for at least seven days following the last dose. In three of the other four atopic subjects that had suppression of total IgE level to BLQ, subsequent total IgE levels through seven days after the fourth dose were < 2% of baseline values.

These results support subcutaneous delivery for future development, and pharmacokinetic/pharmacodynamic modeling is proceeding to determine the optimal dosing schedule. Xencor is seeking a development partner for XmAb7195.

*XmAb18087* is our first bispecific oncology candidate that targets solid tumors. XmAb18087 binds to somastatin receptor 2 (SSTR2), a target on NETS and GISTs and CD3, an activating receptor on T cells. We filed an IND for this compound in 2017 and dosed our first patient in a Phase 1 trial in February 2018.

*XmAb20717* is our first bispecific checkpoint inhibitor and targets PD1 and CTLA4; we plan to file an IND and begin clinical trials for this compound in 2018.

*XmAb22841* is our second bispecific checkpoint inhibitor and targets CTLA4 and LAG3; we plan to file an IND for this compound in 2018 and begin clinical trials in late 2018 or early 2019.

*XmAb23014* is our third bispecific checkpoint inhibitor and targets PD1 and ICOS; we plan to file an IND in 2018 and begin clinical trials in 2019.

# Compounds that we are Co-developing with Novartis

In June 2016 we entered into a Collaboration and License Agreement (Novartis Agreement) with Novartis to develop and commercialize bispecific and other Fc engineered antibody drug candidates using our proprietary XmAb® technologies. Pursuant to the Novartis Agreement, we granted Novartis certain exclusive rights to research, develop and commercialize XmAb14045 and XmAb13676, the Company's two lead bispecific clinical candidates. For each of XmAb14045 and XmAb13676 candidates, we are eligible to receive up to \$325 million in milestone payments including \$90 million in development milestones, \$110 million in regulatory milestones and \$125 million in sales milestones. We are also eligible to receive low double-digit royalties on sales of approved products in all territories outside the U.S. 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 (U.S.).

The Company and Novartis are co-developing XmAb14045 and XmAb13676 worldwide and sharing development costs. 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 U.S.

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 targets 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 2018 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 or 2019 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 AMG424, a bispecific CD38 x CD3 preclinical candidate, which we developed and licensed to Amgen Inc. (Amgen).

# **Xencor Out-licensed Compounds**

			Primar		
Program	Target	Fc Domain	Indication	Development	Partner
XmAb5574/MOR208	CD19	Cytotoxic	CLL/NHL/ALL	Phase 3	Morphosys
AMG424	CD38 x CD3	Bispecific	Myeloma	Open IND	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 3 clinical trials of MOR208 in patients with non-Hodgkin lymphomas (NHL) and a Phase 2 clinical trial in chronic lymphocytic leukemia (CLL). MorphoSys has indicated that it has received Breakthrough Therapy designation from the FDA for targeting diffuse large B-cell lymphoma (DLBCL) in combination with lenalidomide.

In 2017 MorphoSys advanced development of MOR208 into a Phase 3 clinical trial for which we received a \$12.5 million milestone payment. We are also eligible to receive additional milestones for development of the MorphoSys compounds in oncology and additional milestones for development of compounds under the Agreement under different indications. Total additional milestones for development of compounds in oncology total \$135.5 million which are comprised as follows: \$23.5 million in clinical development milestones, \$112.0 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. If MorphoSys advances compounds under the MorphoSys Agreement for indications other than oncology, we are eligible to receive an additional \$101 million in milestones which include \$26.0 million in development and \$75.0 million in regulatory milestones.

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

*AMG424 (CD38 x CD3)* is a clinical stage andidate originally created entirely from antibody components built by us and licensed to Amgen in September 2015. It is being developed for the treatment of multiple myeloma. AMG424 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. In November 2017 Amgen filed an IND for this drug candidate for which we received a \$10 million milestone payment.

Amgen licensed the worldwide development rights to Xencor CD38 x CD3 bispecific antibodies as part of a Research and License Agreement executed in September 2015 (.Amgen Agreement). We received a \$45 million upfront payment and will be eligible to receive an additional \$345 million milestone payments for AMG424 and royalties on global net sales of approved products. Royalty payments are tiered from high single to low double digits.

#### **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 program is with Alexion which started a Phase 3 clinical trial in 2016 for ALXN1210, a longer acting half-life version of its marketed Soliris drug candidate.

# **Xencor Technology Licenses**

						Current
		Xencor				Development
Licensee	Year	Technology	Indication	Milestones	Royalties	Stage
Alexion	2013	Xtend	PNH/aHUS	Yes	Yes	Phase 3
CSL-Janssen Biotech	2009	Cytotoxic	Oncology	Yes	Yes	Phase 2
						Phase 1
Boehringer Ingelheim	2007	Cytotoxic	Oncology	Yes	Yes	(2 candidates)
Janssen Biotech	2009	Xtend	Autoimmune disease	Yes	Yes	Preclinical
NIH (not licensed)		Xtend	HIV	N/A	N/A	Phase 1
						5 Preclinical
Amgen	2015	Bi-specific	Oncology/Autoimmune	Yes	Yes	candidates
		Various, including				
Novartis	2016	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 U.S. profits on net sales of the product.

We completed delivery of one bispecific antibody candidate for a Global Discovery Program in 2017.

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 CD38 x CD3 drug candidate, including XmAb13551 and antibody components used to assemble AMG424, and pursuant to the Amgen Agreement, Xencor also applied 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 had the right to substitute up to three of the originally 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. In 2017 Amgen exercised its option to substitute a second original identified antibody and its option to substitute a third antibody expired. Amgen is responsible for all further development of the Amgen 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 Phase 1 development milestone for ALXN1210, a second generation of Soliris with an improved half-life over the original compound. In November 2015, Alexion exercised an option for a commercial license for ALXN1210 and we received a \$4 million option fee. In the fourth quarter of 2015, Alexion achieved a Phase 2 dosing milestone for ALXN1210 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 ALXN1210 and we received a \$5 million milestone payment.

Under the Alexion Agreement, we are eligible to receive regulatory milestones on submission and approval of ALXN1210 to U.S. and foreign authorities. We are also eligible to receive royalties in the low single-digits on sales of ALXN1210 upon approval. 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 (CSL Agreement) with CSL Limited (CSL). Under the CSL 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 sublicensee, Janssen Biotech, initiated a Phase 2 clinical trial for CSL362. In March 2017, Janssen Biotech initiated a Phase 3 trial for CSL362 and we received a milestone of \$3.5 million. In July 2017, Janssen discontinued the Phase 3 trial for CSL362. It is currently in a Phase 2 trial.

# 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. In February 2018, Merck provided notice terminating the Merck Agreement.

# 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 XmAb5871for the treatment of autoimmune diseases, including IgG4-RD and SLE, and are developing XmAb7195 for the treatment of asthma and allergic diseases. In 2017 we completed a Phase 2 trial for XmAb5871 treating IgG4-RD and we plan on advancing development of this compound into Phase 3 studies in 2018. We are also completing the Phase 2 trial for the treatment of Lupus and will report topline data from the trial in late 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.
- 3. *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 Phase 1 trials for our first three bispecific oncology candidates, XmAb14045, XmAb13676, and XmAb18087; and, we will be filing IND's for three bispecific checkpoint inhibitor candidates in 2018 that will enter into clinical development in 2018 and 2019. These tumor microenvironment checkpoint inhibitor candidates include XmAb20717, XmAb22841 and XmAb23104.
- 4. 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. In 2017 we received \$31 million in milestone payments from our partners Alexion, Janssen, MorphoSys and Amgen.
- 5. **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, XmAb22841 and XmAb23104.
- 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:

- 1. 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
- 3. *Cytotoxic Fc Domain*—increased cytotoxicity, targeting the receptors FcγRIIIa on natural killer (NK) cells and FcγRIIa on other immune system cells

# 4. 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 results of these efforts are the Phase 1 trials ongoing for XmAb14045, XmAb13676 and XmAb18087. The next focus of our bispecific platform was 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 results of these efforts are the three INDs we plan on filing in 2018 for XmAb20717, XmAb22841 and XmAb23104.

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 program, CD38 x CD3 bispecific antibodies (now AMG424), and applied our bispecific technology to five identified Amgen antibodies. 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 three bispecific candidates, XmAb14045, XmAb13676 and XmAb18087, and have three additional bispecific candidates for which we plan to file INDs in 2018. In November 2017, Amgen filed an IND for AMG424 and we expect that this compound entered a Phase 1 clinical trial in 2018.

# XmAb Immune Inhibitor Fc Domain technology

FcyRIIb is an inhibitory receptor that is expressed on B cells and other cells. FcyRIIb, 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. FcyRIIb 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 FcyRIIb 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 FcyRIIb.

We have discovered a series of Fc $\gamma$ RIIb immune inhibitor Fc variants with increased binding affinity to Fc $\gamma$ RIIb 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 Fc $\gamma$  receptors. This binding improvement drives increased antibody-dependent cell cytotoxicity, 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 Fc $\gamma$ RIIIa, the activating receptor expressed on 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 Fc $\gamma$ RIIa 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: one program currently in Phase 3, one program 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 the rapeutic antibody performance in several ways including:

- 1. 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.
- 2. 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 ALXN1210, a second generation of their marketed Soliris drug with a longer acting half-life.

# 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 Fcy 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 XmAb5871development 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, frequently including the presence of IgG4-positive plasmablast cells. 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 XmAb5871is 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 Center for Disease Control, 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 U.S. 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*, *XmAb13676*, *XmAb18087*, *XmAb20717*, *XmAb22841* and *XmAb23104*: 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 2018 there will be approximately 1.7 million new cases of cancer and approximately 609,000 deaths from cancer. The NIH 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 21,000 new cases of AML and over 26,000 new cases of multiple myeloma were reported in the United States in 2017.

# **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 500 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 and platforms. We also have a large number of issued patents and pending patent applications with claims directed specifically to our XmAb technology and candidates. The patent expiration in the U.S. and major foreign countries for our key technologies and drug candidates is:

Technology	Patent Expiry
Cytotoxic	2025 U.S., 2023 Ex-U.S.
Immune Inhibitor	2025 U.S., 2023 Ex-U.S.
Xtend	2028 U.S. and Ex-U.S.
Bispecific	2033 U.S. and Ex-U.S.
Drug candidate	Patent Expiry
MOR208	2028 U.S. and Ex-U.S.
XmAb 5871	2028 U.S. and Ex-U.S.
XmAb 7195	2031 U.S. and Ex-U.S.
XmAb's 14045 and 13676	2034 U.S. and Ex-U.S.
XmAb 18087	2037 U.S. and Ex-U.S.
Checkpoint XmAb's 20717, 22841, 23104	2037-2038 U.S. and Ex-U.S.

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 pipeline of bispecific development candidates including: XmAb14045, XmAb13676, XmAb18087, XmAb20717, XmA22841, and XmAb23104. 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. XmAb5871and 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 have successfully completed clinical trials with subcutaneous formulations for both 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 have manufactured 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%. In 2017 we transferred the cell line for XmAb5871 to a third party manufacturer.

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.

# Master Bioprocessing Services Agreement with FUJIFILM Diosynth Biotechnologies

In June 2017, we entered into a bioprocessing services agreement (FUJI Agreement) with FUJIFILM Diosynth Biotechnologies U.S.A. (FUJI). We have engaged FUJI under the FUJI Agreement for manufacturing and development services related to drug substance for our XmAb5871 program in accordance with cGMP regulations. The FUJI Agreement may be terminated by either party for a breach or default that is not remedied within forty-five days or for an additional forty-five days if such cure has commenced by the responsible party but it is unable to cure it within the original forty-five-day notice period. If such cure is not completed within the ninety-day period, we have the right to terminate the FUJI Agreement. We have the unilateral right to terminate the Agreement upon 30 days written notice to FUJI.

#### Cell Line Agreements with Selexis

In December 2015, we entered into a Master Service Agreement (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 the antibody candidates provided by us and upon completion of the cell lines we have the option to take an unrestricted commercial license to the cell line. The terms of each commercial license require us to make 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 has manufactured cell lines for our bispecific drug candidates and we currently have commercial licenses to the Selexis cell line for the following bispecific clinical candidates: XmAb14045, XmAb13676, XmAb18087, XmAb20717, XmAb22841 and XmAb23104.

# License Agreement with BIO-TECHNE

In February 2015, we entered into a license agreement with BIO-TECHNE Corporation (BIO-TECHNE) 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 the terms of this agreement, we made an upfront payment and are 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 this agreement, we made an upfront payment and are 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. We terminated this agreement in December 2017 and have no further obligations under this agreement.

# **Boehringer Ingelheim International GmBH**

In February 2012, we entered into a collaboration agreement with 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. 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.

We are not pursuing further development of this program without a partner.

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, XmAb20717, XmAb22841, and XmAb23104 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 three monoclonal antibodies for treatment of severe asthma, all targeting IL-5, that are marketed as Nucala by GSK, Cinqair by Teva and Fasenra by AstraZeneca. 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 FcyRIIb 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:

- 1. completion of preclinical laboratory tests, animal studies and formulation studies performed in accordance with the FDA's current Good Laboratory Practices (GLP) regulations;
- 2. submission to and acceptance by the FDA of IND which must become effective before human clinical trials in the United States may begin;
- 3. 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;
- 4. 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;

- 6. potential audits by the FDA of the nonclinical and clinical trial sites that generated the data in support of the BLA:
- 7. potential review of the BLA by an external Advisory Committee to the FDA, whose recommendations are not binding on the FDA; and
- 8. 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.

- 1. *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.
- 2. *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.
- 3. *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.

Once accepted for filing, the FDA reviews the BLA to determine, among other things, whether the proposed product is safe and effective for its intended use, and whether the product is being manufactured in accordance with cGMP to assure and preserve the product's identity, strength, quality and purity 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 review 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, 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 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. In the United States, there has been heightened government scrutiny over the manner in which manufacturers set prices for their marketed products, which has resulted in several Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, reduce the cost of products under Medicare, and reform government program reimbursement methodologies for products. In addition, Congress and the Trump administration have each indicated that it will continue to seek new legislation and/or administrative measures to control pharmaceutical costs. In other countries, pricing and reimbursement schemes differ. 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.

For example, in March 2010, President Obama signed into law the Patient Protection and Affordable Care Act, which, as amended by the Health Care and Education Reconciliation act of 2010 (Affordable Care Act) is a sweeping law intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add new transparency requirements for the healthcare and health insurance industries, impose new taxes and fees on the health industry and impose additional health policy reforms. In the years since its enactment, there have been, and continue to be, significant developments in, and continued legislative activity around,

attempts to repeal or repeal and replace the Affordable Care Act. In addition, other reform measures have been proposed and adopted since the Affordable Care Act was enacted.

Additional new laws may result in additional reductions in funding to Medicare and other healthcare progamrs and other healthcare funding, which could have a material adverse effect on our customers and our financial operations. Further, new laws may, among other things, increase drug rebates or discounts owed under federal health care programs, impose additional reporting or compliance obligations, and/or otherwise put additional downward pressure on drug prices or increase the burden of compliance on pharmaceutical manufacturers.

# 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 the Centers for Medicare and Medicaid Services, other divisions of Health and Human Services (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, among other things, 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 federal 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 statues and false claims laws analogous to the federal False Claims Act. Also, the Health Insurance Portability and Accountability Act of 1996 (HIPAA) created several additional federal crimes, including healthcare fraud, and false statements relating to the delivery of or payments for healthcare benefits, items or services. HIPAA, as amended Health Information Technology for Economic and Clinical Health Act (HITECH), and its implementing regulations also established uniform federal standards for certain "covered entities" (healthcare providers, health plans and healthcare clearinghouses) and their information for or on behalf of a covered entity) governing the conduct of certain electronic healthcare transactions and protecting the security and privacy of protected health information. In addition, we may be subject to physician payment transparency laws and patient privacy and security regulation by the federal government and by the states and foreign jurisdictions in which we conduct our business.

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, additional integrity obligations, 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, 2017, we had 114 employees, all of whom were full-time, 37 of whom hold Ph.D. or M.D. degrees, 88 of whom were engaged in research and development activities and 26 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. 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 as soon as reasonably practical after we electronically file such material with, or furnish it to, the Securities and Exchange Commission.

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 1A. 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, Regulatory Approval of Our Product Candidates and other Legal Compliance Matters

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, 2017, our net loss was \$48.9 million and our net loss for the year ended December 31, 2015 was \$17.6 million. The only year that we did not sustain a net loss was the year ended December 31, 2016 when we earned a net income of \$23.6 million. As of December 31, 2017 we had an accumulated deficit of \$287.3 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, XmAb13676 and XmAb18087 and advancing into clinical development our current earlier stage programs including XmAb20717, XmAb22841 and XmAb23104 as well as the product candidates that are being developed by our partners and licensees;
- 2. seeking and obtaining marketing approvals for product candidates that successfully complete clinical trials;
- 3. 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;
- 4. 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;
- 5. identifying and developing new XmAb-engineered therapeutic antibody candidates;

- 6. establishing and maintaining supply and manufacturing relationships with third parties;
- 7. obtaining additional licensing and partnering opportunities, similar to our partnership with Novartis, Amgen and MorphoSys, with leading pharmaceutical and biotechnology companies;
- 8. achieving the milestones set forth in our agreements with our partners;
- 9. conducting further research into the function and application of antibody Fc domains in order to expand the scope of our proprietary XmAb technology platform;
- 10. maintaining, protecting, expanding and enforcing our intellectual property; and
- 11. 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, 2017, we had \$363.3 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 continued development of our pipeline of bispecific drug candidates including XmAb14045, XmAb13676, XmAb18087, XmAb20717, XmAb22841 and XmAb23104 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 current and our planned clinical trials for XmAb5871, XmAb14045, XmAb13676, XmAb18087, XmAb20717, XmAb22841 and XmAb23104 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. We do not have sufficient cash to complete the clinical development of any of our product candidates and will require additional funding to complete the development activities required for regulatory approval of XmAb5871, XmAb14045, XmAb13676, XmAb18087, XmAb20717, XmAb22841 or XmAb23104 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, XmAb20717, XmAb22841 and XmAb23104 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:

- 1. may not deem our product candidate to be adequately safe and effective;
- 2. 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;
- 3. may not approve the manufacturing processes or facilities associated with our product candidate;
- 4. 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;
- 5. may change approval policies or adopt new regulations; or
- 6. 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:

- 1. restrictions on the marketing or manufacturing of the product;
- 2. requirements to include additional warnings on the label;
- 3. requirements to create a medication guide outlining the risks to patients;
- 4. withdrawal of the product from the market;
- 5. voluntary or mandatory product recalls;
- 6. requirements to change the way the product is administered or for us to conduct additional clinical trials;
- 7. fines, warning letters or holds on clinical trials;
- 8. 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;

- 9. product seizure or detention, or refusal to permit the import or export of products;
- 10. injunctions or the imposition of civil or criminal penalties; and
- 11. harm to our reputation.

Additionally, if any of our product candidates receives marketing approval, the FDA could require us to adopt a 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:

- 1. the severity of the disease under investigation;
- 2. the patient eligibility criteria for the study in question;
- 3. the perceived risks and benefits of the product candidate under study;
- 4. our payments for conducting clinical trials;
- 5. the patient referral practices of physicians;
- 6. the ability to monitor patients adequately during and after treatment; and
- 7. 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, XmAb20717, XmAb22841 and XmAb23104 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 targeting IgE that we are aware of that is approved for the treatment of severe asthma. Three other monoclonal antribodies, Nucala, Cinquair and Fasenra have recently been approved for 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 Janssen has a CD123 x CD3 bispecific antibody that is currently in Phase 1.

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

- 1. discover and develop products that are superior to other products in the market;
- 2. attract qualified scientific, product development and commercial personnel;
- 3. obtain and maintain patent and/or other proprietary protection for our products and technologies;
- 4. obtain required regulatory approvals; and
- 5. 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.

Our current and future relationships with healthcare professionals, principal investigators, consultants, customers and third-party payors in the United States and elsewhere may be subject, directly or indirectly, to applicable anti-kickback, fraud and abuse, false claims, physician payment transparency, health information privacy and security and other healthcare laws and regulations, which could expose us to penalties.

Healthcare providers, physicians and third-party payors in the United States and elsewhere will play a primary role in the recommendation and prescription of any product candidates for which we obtain marketing approval. Our current and future arrangements with healthcare professionals, principal investigators, consultants, customers and third-party payors may expose us to broadly applicable fraud and abuse and other healthcare laws, including, without limitation, the federal Anti-Kickback Statute and the federal civil False Claims Act, that may constrain the business or financial arrangements and relationships through which we sell, market and distribute any product candidates for which we obtain marketing approval. In addition, we may be subject to physician payment transparency laws and patient

privacy and security regulation by the federal government and by the states and foreign jurisdictions in which we conduct our business. The applicable federal, state and foreign healthcare laws that may affect our ability to operate include the following:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully
  soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or
  reward, or in return for, either the referral of an individual for, or the purchase, lease, order or recommendation
  of, any good, facility, item or service, for which payment may be made, in whole or in part, under federal and
  state healthcare programs such as Medicare and Medicaid;
- federal civil and criminal false claims laws, including, without limitations, the federal civil False Claims Act, which impose criminal and civil penalties, including through civil whistleblower or qui tam actions, against individuals or entities for, among other things, knowingly presenting, or causing to be presented, to the federal government, including federal health care programs, such as, the Medicare and Medicaid programs, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;
- the civil monetary penalties statute, which imposes penalties against any person or entity who, among other
  things, is determined to have presented or caused to be presented a claim to a federal health program that the
  person knows or should know is for an item or service that was not provided as claimed or is false or
  fraudulent:
- HIPAA, which created additional federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of whether the payor is public or private, knowingly and willfully embezzling or stealing from a health care benefit program, willfully obstructing a criminal investigation of a health care offense and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false statements in connection with the delivery of, or payment for, healthcare benefits, items or services relating to healthcare matters;
- HIPAA, as amended by HITECH, and their respective implementing regulations, which impose obligations on "covered entities," including healthcare providers, health plans, and healthcare clearinghouses, as well as their respective "business associates" that create, receive, maintain or transmit individually identifiable health information for or on behalf of a covered entity, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;
- the Physician Payments Sunshine Act, created under Section 6002 of the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010 (collectively, the "Affordable Care Act"), imposed annual reporting requirements for certain manufacturers of drugs, devices, biologics and medical supplies for certain payments and "transfers of value" provided to physicians and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members. Failure to submit timely, accurately and completely the required information for all payments, transfers of value and ownership or investment interests may result in civil monetary penalties of up to an aggregate of \$165,786 per year and up to an aggregate of \$1,105,241 per year for "knowing failures," for an aggregate potential annual liability of \$1,271,027; and
- analogous state and foreign laws, such as state anti-kickback and false claims laws, which may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers; state and foreign laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government or to adopt compliance programs as prescribed by state laws and regulations, or that otherwise restrict payments that may be made to healthcare providers; state and foreign laws that require manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures; and state and foreign laws governing the privacy and security of health information in certain

circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Further, the Affordable Care Act, among other things, amended the intent requirement of the federal Anti-Kickback Statute and the healthcare fraud statute. A person or entity no longer needs to have actual knowledge of these statutes or specific intent to violate them. In addition, the Affordable Care Act provided that the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal civil False Claims Act.

Efforts to ensure that our future business arrangements with third parties will comply with applicable healthcare laws and regulations may involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, including, without limitation, damages, fines, imprisonment, disgorgement, exclusion from participation in government healthcare programs, such as Medicare and Medicaid, additional reporting requirements and/or oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, and the curtailment or restructuring of our operations, as well as reputational harm, which could significantly harm our business.

Recently enacted and future legislation may increase the difficulty and cost for us to obtain marketing approval of and commercialize our product candidates and affect the prices we may obtain.

Among policy makers and payors in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives. In March 2010, President Obama signed into law the Affordable Care Act, a sweeping law intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add new transparency requirements for the healthcare and health insurance industries, impose new taxes and fees on the health industry and impose additional health policy reforms.

The Affordable Care Act established an annual, nondeductible fee on any entity that manufactures or imports certain specified branded prescription drugs and biologic agents, addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected, increased the minimum Medicaid rebates owed by most manufacturers under the Medicaid Drug Rebate Program, extended the Medicaid Drug Rebate program to utilization of prescriptions of individuals enrolled in Medicaid managed care organizations, and provided incentives to programs that increase the federal government's comparative effectiveness research. In addition, the Affordable Care Act implemented payment system reforms including a national pilot program on payment bundling to encourage hospitals, physicians and other providers to improve the coordination, quality and efficiency of certain healthcare services through bundled payment models.

There have been judicial and Congressional challenges to certain aspects of the Affordable Care Act, as well as recent efforts by the Trump administration to repeal or replace certain aspects of the Affordable Care Act. Since January 2017, President Trump has signed two Executive Orders and other directives designed to delay the implementation of certain provisions of the Affordable Care Act or otherwise circumvent some of the requirements for health insurance mandated by the Affordable Care Act. Concurrently, Congress has considered legislation that would repeal or repeal and replace all or part of the Affordable Care Act. While Congress has not passed comprehensive repeal legislation, two bills affecting the implementation of certain taxes under the Affordable Care Act have been signed into law. The Tax Cuts and Jobs Act includes a provision repealing, effective January 1, 2019, the tax-based shared responsibility payment imposed by the Affordable Care Act on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the "individual mandate". Additionally, on January 22, 2018, President Trump signed a continuing resolution on appropriations for fiscal year 2018 that delayed the implementation of certain

Affordable Care Act-mandated fees, including the so-called "Cadillac" tax on certain high cost employer-sponsored insurance plans, the annual fee imposed on certain health insurance providers based on market share, and the medical device excise tax on non-exempt medical devices. Further, the Bipartisan Budget Act of 2018 (BBA) among other things, amends the Affordable Care Act, effective January 1, 2019, to increase from 50 percent to 70 percent the point-of-sale discount that is owed by pharmaceutical manufacturers who participate in Medicare Part D and to close the coverage gap in most Medicare drug plans, commonly referred to as the "donut hole". Congress could consider additional legislation to repeal or repeal and replace certain elements of the Affordable Care Act.

In addition, other legislative changes have been proposed and adopted since the Affordable Care Act was enacted. On August 2, 2011, President Obama signed into law the Budget Control Act of 2011, which, among other things, created the Joint Select Committee on Deficit Reduction to recommend to Congress proposals in spending reductions. The Joint Select Committee did not achieve a targeted deficit reduction of at least \$1.2 trillion for the years 2013 through 2021, triggering the legislation's automatic reduction to several government programs. This includes reductions to Medicare payments to providers of 2% per fiscal year, which went into effect on April 1, 2013 and, due to subsequent legislation, including the BBA, will remain in effect through 2027 unless additional Congressional action is taken. On January 2, 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, reduced Medicare payments to several providers, including hospitals, imaging centers and cancer treatment centers and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

Further, there has been heightened governmental scrutiny recently over the manner in which manufacturers set prices for their marketed products, which have resulted in several Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, reduce the cost of products under Medicare, and reform government program reimbursement methodologies for products. At the federal level, the Trump administration's budget proposal for fiscal year 2019 contains further price control measures that could be enacted during the 2019 budget process or in other future legislation, including, for example, measures to permit Medicare Part D plans to negotiate the price of certain products under Medicare Part B, to allow some states to negotiate product prices under Medicaid, and to eliminate cost sharing for generics for low-income patients. While any proposed measures will require authorization through additional legislation to become effective, Congress and the Trump administration have each indicated that it will continue to seek new legislative and/or administrative measures to control pharmaceutical costs. At the state level, legislatures are increasingly passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. We expect that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for our products or additional pricing pressure.

Even if we are able to commercialize any product candidates, our product candidates may be subject to unfavorable pricing regulations, third-party coverage and reimbursement policies or healthcare reform initiatives.

Our ability to commercialize any product candidates successfully will depend, in part, on the extent to which coverage and adequate reimbursement for our product candidates will be available from government payor programs at the federal and state levels, including Medicare and Medicaid, private health insurers, managed care plans and other third-party payors. Government authorities and other third-party payors, such as private health insurers and health maintenance organizations, decide which medical products they will pay for and establish reimbursement levels. Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for products. Coverage and reimbursement may not be available for any product that we commercialize and, even if these are available, the level of reimbursement may not be satisfactory. Inadequate reimbursement levels may adversely affect the demand for, or the price of, any product candidate for which we obtain marketing approval. Obtaining and maintaining adequate reimbursement for our drugs may be difficult. We may be required to conduct expensive pharmacoeconomic studies to justify coverage and reimbursement or the level of

reimbursement compared to other therapies. If coverage and adequate reimbursement are not available or reimbursement is available only to limited levels, we may not be able to successfully commercialize any product candidates for which marketing approval is obtained.

In addition, net prices for products may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of products from countries where they may be sold at lower prices than in the United States. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement policies. However, no uniform policy requirement for coverage and reimbursement for drug products exists among third-party payors in the United States. Therefore, coverage and reimbursement can differ significantly from payor to payor. As a result, the coverage determination process is often a time-consuming and costly process that will require us to provide scientific and clinical support for the use of our products to each payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained at all. Further, there may be significant delays in obtaining coverage and reimbursement for newly approved products, and coverage may be more limited than the indications for which the product is approved by the FDA or similar regulatory authorities outside the United States. Moreover, eligibility for coverage and reimbursement does not imply that a product will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution expenses. Interim reimbursement levels for new products, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Our inability to promptly obtain coverage and adequate reimbursement rates from both government-funded and private payors for any approved products that we develop could significantly harm our operating results, our ability to raise capital needed to commercialize products and our overall financial condition.

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

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

## **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, Alexion 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;
- 2. 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. Such an arrangement may require us to incur substantial costs in excess of our available resources;
- 3. collaborators may not perform their obligations as expected;
- 4. 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;
- 5. 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;
- 6. 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;
- 8. 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;
- 9. 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;
- 10. collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability;
- 11. collaborators may learn about our technology and use this knowledge to compete with us in the future;
- 12. results of collaborators' preclinical or clinical studies could produce results that harm or impair other products using our XmAb technology platform;
- 13. there may be conflicts between different collaborators that could negatively affect those partnerships and potentially others; and

14. 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, Fuji and Catalent to produce XmAb5871 and third parties for fill and testing services. We rely on KBI to produce our bispecific development candidates, XmAb14045, XmAb13676, XmAb18087, XmAb20717, XmAb22841 and XmAb23104. 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 Catalent, KBI or Fuji and are currently completely dependent on each of Catalent, KBI and Fuji for the production of XmAb5871, XmAb14045, XmAb13676, XmAb18087, XmAb20717, XmAb22841 and XmAb23104 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, KBI or Fuji 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, XmAb14045, XmAb13676, XmAb18087, XmAb20717, XmAb22841 and XmAb23104 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, XmAb20717, XmAb22841 and XmAb23104, we have not entered into a commercial supply agreement with Catalent, KBI or FUJI. Further, KBI has not demonstrated that it will be capable of manufacturing XmAb14045, XmAb13676, XmAb18087, XmAb20717, XmAb22841 and XmAb23104 on a large commercial scale. 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 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, XmAb22841, XmAb23104 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. The value of many of our partnered licensing arrangements is based on the underlying intellectual property and related patents. If we are unable to obtain, maintain and enforce intellectual property protection covering our products or underlying technologies, 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, 2017, we held over 500 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:

- 1. we may fail to seek patent protection for inventions that are important to our success;
- 2. our pending patent applications may not result in issued patents;
- 3. 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;

- 5. 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;
- 6. 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;
- 7. the claims of our issued patents or patent applications when issued may not cover our product candidates;
- 8. 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;
- 9. 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;
- 10. 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;
- 11. there may be dominating patents relevant to our product candidates of which we are not aware;
- 12. 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;
- 13. 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;
- 14. 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
- 15. 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. We also license certain rights to the underlying cell lines for all our product candidates from third parties. 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, XmAb13676, XmAb18087, XmAb20717, XmAb23104 and XmAb22814 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.

In 2016 we began to increase the number of our employees and expand the scope of our operations with a goal of advancing multiple clinical candidates into development. The increase in employees, especially in clinical development, places a significant strain on our management, operations and financial resources, and we may have difficulty managing this future potential growth. As we continue to grow our operations and advance our clinical programs into later stages of development, it will require us to recruit and retain employees with additional knowledge and skill sets and no assurance can be provided that we will be able to attract employees with the necessary skill set 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:

- 1. decreased demand for our products due to negative public perception;
- 2. injury to our reputation;
- 3. withdrawal of clinical trial participants or difficulties in recruiting new trial participants;
- 4. initiation of investigations by regulators;
- 5. costs to defend or settle the related litigation;
- 6. a diversion of management's time and resources;
- 7. substantial monetary awards to trial participants or patients;
- 8. product recalls, withdrawals or labeling, marketing or promotional restrictions;
- 9. loss of revenues from product sales; and
- 10. 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:

- 1. adverse results or delays in clinical trials by us or our partners;
- 2. inability to obtain additional funding;
- 3. any delay in filing a BLA for any of our product candidates or by our partner's candidates and any adverse development or perceived adverse development with respect to the FDA's review of that BLA;
- delays or cancellations of clinical programs by any of our partners, particularly those in later stages of development;
- 5. failure to successfully develop and commercialize our product candidates;
- 6. changes in laws or regulations applicable to our products;
- 7. inability to obtain adequate product supply for our product candidates, or the inability to do so at acceptable prices;
- 8. adverse regulatory decisions;
- 9. introduction of new products or technologies by our competitors;
- 10. failure to meet or exceed product development or financial projections we provide to the public;
- 11. the perception of the pharmaceutical and biotechnology industry by the public, legislatures, regulators and the investment community;
- 12. announcements of significant acquisitions, strategic partnerships, joint ventures or capital commitments by us or our competitors;
- 13. disputes or other developments relating to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;
- 14. additions or departures of key scientific or management personnel;
- 15. significant lawsuits, including patent or stockholder litigation;
- 16. changes in the market valuations of similar companies;

- 17. sales of our common stock by us or our stockholders in the future; and
- 18. 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, 2017 our executive officers, directors, 5% stockholders and their affiliates beneficially owned, as a group, approximately 60.0% of our voting stock. Further John S. Stafford III, a former director of the Company, beneficially owns approximately 16.0% of our voting stock and his family members beneficially own approximately an additional 5.0% 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, XmAb13676 and XmAb18087 but have not completed any late stage clinical trials for these or any other product candidate. We plan to begin a large randomized, placebo controlled, 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, 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, 2017, we had options to purchase 5,093,442 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 8,526,465 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.

## U.S. federal income tax reform could adversely affect us.

In December 2017, U.S. federal tax legislation, commonly referred to as the Tax Cuts and Jobs Act (TCJA), was signed into law, significantly reforming the Internal Revenue Code of 1986, as amended (IRC). The TCJA, among other things, includes changes to U.S. federal tax rates, imposes significant additional limitations on the deductibility of interest, allows for the expensing of capital expenditures, puts into effect the migration from a "worldwide" system of taxation to a territorial system and modifies or repeals many business deductions and credits. The overall impact of this tax reform is uncertain, and our business and financial condition could be adversely affected.

New legislation or regulation which could affect our tax burden could be enacted by any governmental authority. We cannot predict the timing or extent of such tax-related developments which could have a negative impact on our financial results. Additionally, we use our best judgment in attempting to quantify and reserve for these tax obligations. However, a challenge by a taxing authority, our ability to utilize tax benefits such as carryforwards or tax credits, or a deviation from other tax-related assumptions may cause actual financial results to deviate from previous estimates.

# 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 became 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 1B. 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 48,000 square feet of laboratory and office space in Monrovia, California. The original lease was for 24,000 square feet under a lease that expires June 2020. In July 2017, we entered into an amended lease for an additional 24,000 square feet of space in the same building. The amended lease is for a 64-month term with an option to renew for an additional five years at then market rates. The lease terms for the original space were not amended. We also lease approximately 5,700 square feet of office space in San Diego, California. In June 2017, we entered into a new lease for 23,500 of additional space in San Diego. The new lease has a 61-month term beginning from August 2017 and includes an option to renew for an additional five years. 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. The plaintiffs and the Company agreed to separate the litigation into two separate claims; Count I relating to the claim of Breach of Fiduciary Duty by the current and former directors of the Company and, Count II relating to the Invalidity of Director and Stockholder consents.

On December 14, 2015, the Court entered an Order and Partial Final Judgement in connection with Count II and approved 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 was 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 of \$2.375 million to the class certified by the Delaware Court of Chancery. The settlement 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.

On April 4, 2017, the Delaware Court of Chancery approved the Settlement between the parties. On May 1, 2017, the Company's insurance carriers fully funded the settlement amount.

We recognized legal costs related to the litigation as incurred and offset any insurance proceeds when approved and issued. At December 31, 2016, we 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. This amount was paid by the insurance carrier on our behalf in May 2017.

## 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. On February 16, 2018, the closing price for our common stock as reported on the NASDAQ Global Market was \$25.40. 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	
Year Ended December 31, 2017				
Fourth Quarter	\$	24.97	18.97	
Third Quarter		24.50	19.20	
Second Quarter		26.23	18.55	
First Quarter		28.64	21.09	
Year Ended December 31, 2016				
Fourth Quarter	\$	29.38	18.45	
Third Quarter		26.50	17.65	
Second Quarter		19.76	10.95	
First Quarter		14.51	9.89	

#### Holders of Record

As of February 16, 2018, we had 47,009,966 shares of common stock outstanding held by approximately 209 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**

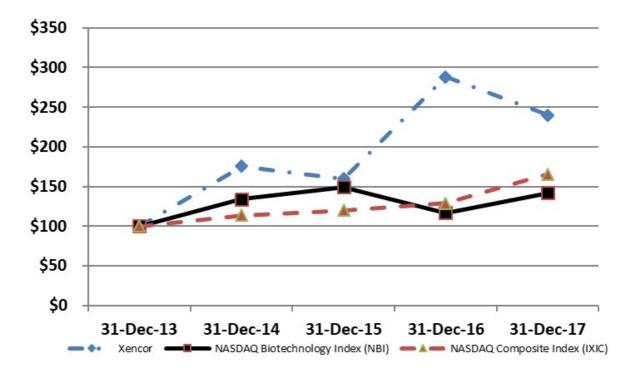
We have never declared or paid any cash dividends on our common stock. We currently intend to retain all available funds and any future earnings to support our operations and finance the growth and development of our business. We do not intend to pay cash dividends on our common stock for the foreseeable 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 31, 2013 through December 31, 2017 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 31, 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, 2017.

## 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,									
		2017		2016		2015		2014		2013
Statement of Operations Data:										
Revenues	\$	35,711	\$	87,520	\$	27,762	\$	9,520	\$	10,172
Operating expenses:										
Research and development		71,772		51,872		34,140		18,516		17,000
General and administrative		17,501		13,108		11,960		7,461		3,692
Total operating expenses		89,273		64,980		46,100		25,977		20,692
Income (loss) from operations		(53,562)		22,540		(18,338)		(16,457)		(10,520)
Other income (expenses)										
Interest income		4,194		2,091		744		33		14
Interest expense		(13)		(21)		(13)		(9)		(1,213)
Other income (expense)		(7)		6		15		11		16
Loss on settlement of convertible promissory										
notes						_				(48,556)
Total other income (expenses), net		4,174		2,076		746		35		(49,739)
Net income (loss) before income tax		(49,388)		24,616		(17,592)		(16,422)		(60,259)
Income tax expense (benefit)		(463)		991		_		_		
Net deemed contribution on exchange and sale of preferred stock		_		_		_		_		144,765
Net income (loss) attributable to common		-,						,		
stockholders	\$	(48,925)	\$	23,625	\$	(17,592)	\$	(16,422)	\$	84,506
Other comprehensive income (loss)										
Net unrealized loss on marketable securities										
available-for-sale, net of tax		(367)		(925)		(516)				_
Comprehensive income (loss)	\$	(49,292)	\$	22,700	\$	(18,108)	\$	(16,422)	\$	(60,259)
Net income (loss) per share attributable to common stockholders (1):										
Basic	\$	(1.05)	\$	0.57	\$	(0.45)	\$	(0.52)	\$	34.18
Diluted	\$	(1.05)	\$	0.56	\$	(0.45)	\$	(0.52)	\$	(3.85)
Weighted average shares of common stock used in										`
computing net income (loss) per share attributable										
to common stockholders:										
Basic	4	6,817,756	4	41,267,329	3	9,015,131	3	1,390,631		2,472,581
Diluted	4	6,817,756	4	42,388,867	3	9,015,131	3	1,390,631	1	5,645,789

<sup>(1)</sup> 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.

	(in thousands)									
		2017 2016		2015		2014			2013	
Balance Sheet Data:										
Cash, cash equivalents and marketable										
securities	\$	363,328	\$	403,476	\$	193,321	\$	54,649	\$	77,975
Working capital		129,535		35,367		54,246		51,553		70,615
Patents, licenses, and other intangible assets,										
net		11,148		10,362		9,971		9,116		8,814
Total assets		390,102		428,563		206,910		67,823		87,315
Deferred revenue		94,436		103,447		33,829		4,591		9,746
Total stockholders' equity	\$	282,046	\$	313,954	\$	162,432	\$	59,290	\$	73,533

## 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. Our protein engineering capabilities and the modular nature of our technology allows us to quickly identify and create multiple drug candidates for potential development. We have applied our XmAb technology to:

- 1. develop a pipeline of drug candidates that we wholly-own and are developing ourselves,
- 2. develop our two leading bispecific candidates that we are co-developing with Novartis pursuant to a license and collaboration agreement,

- 3. 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,
- 4. 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. In 2017 we received \$31 million in milestones from our partners. There are currently thirteen antibody product candidates in clinical trials that have been engineered with XmAb technology, including eight candidates being advanced by licensees and development partners.

Our XmAb technology has created a suite of wholly-owned compounds: three XmAb compounds that are currently in clinical trials, and three XmAb bispecific compounds for which we plan to file IND's in 2018 and begin clinical trials in 2018 and/or 2019. XmAb5871 uses our XmAb Immune Inhibitor Fc Domain and targets B cells an important component of the immune system. We have completed a Phase 2 trial for XmAb5871 in IgG4- RD and have completed enrollment for a Phase 2 trial in SLE. We have also completed an additional Phase 1 trial for a subcutaneous formulation of XmAb5871. In November 2017 we presented final data from the IgG4-RD Phase 2 trial at the American College of Rheumatology (ACR) annual meeting and we plan on initiating a pivotal Phase 3 trial with XmAb5871 treating IgG4-RD in 2018. We also plan to present top line data from the XmAb5871 Phase 2 trial treating Lupus in late fourth quarter 2018.

XmAb7195 uses our Immune Inhibitor Fc Domain and is being developed for the treatment of severe asthma and allergic diseases. In May 2016, we reported complete data from the Phase 1a trial with XmAb7195 treating subjects with high baseline IgE levels. In 2017 we announced data from a Phase 1b trial for XmAb7195 with a subcutaneous formulation. The data from the trial showed that subcutaneous administration of XmAb7195 was well tolerated and effective at reducing free and total IgE levels in subjects in the study. The results support subcutaneous delivery for future development. We are seeking a development partner for XmAb7195.

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. These include our first bispecific that targets solid tumors. XmAb18087 targets the Somatostatin Receptor 2 (SSTR2) and the cytotoxic T-cell binding domain CD3 for the treatment of neuroendocrine tumors and gastrointestinal stromal tumors. We filed an IND for XmAb18087 in September 2017 and dosed our first patient in a Phase 1 clinical trial in February 2018. We also expect to file three IND's in 2018 for our first three checkpoint inhibitor candidates: XmAb20717 which targets PD1 and CTLA4, XmAb22841 which targets CTLA4 and LAG3 and XmAb23104 which targets PD1 and ICOS. We have additional bispecific candidates in preclinical stage of development.

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 3 development, which we licensed to Morphosys, and a CD38 x CD3 bispecific candidate which included XmAb13551 and antibody components used to assemble AMG424, which we licensed to Amgen. In 2017 MorphoSys advanced MOR208 into a Phase 3 clinical trial and Amgen filed an IND for CD38 x CD3. There are also currently eight other programs where we have licensed our technology to partners for use in development programs with their own molecules. Four of these programs are in

clinical development, the most advanced is Alexion which achieved a Phase 3 clinical development milestone in 2016 for ALXN1210.

We have over 500 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 (U.S.). We will codevelop both candidates with Novartis and share development costs. 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 to obtain an exclusive license to develop and commercialize any future XmAb5871 product.

In 2017, we completed a Phase 2 open-label pilot study of XmAb5871 for IgG4-RD. We announced data from the trial in November at the annual ACR meeting. The main part of the trial enrolled 15 patients who received treatment for up to 24 weeks. The recently reported IgG4-RD Responder Index was 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 plasma cells which are frequently IgG4-positive. 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.

In May 2017, we received Orphan Drug designation from the FDA for XmAb5871 for the treatment of IgG4-Related Disease. In January 2018, we received Orphan Medicinal Product designation from the European Commission.

In July 2017 we met with the Division of Pulmonary, Allergy and Respiratory Products (DPARP) of the FDA in a Type B End of Phase 2 meeting to discuss the optimal pathway to advance XmAb5871 into Phase 3 development in IgG4-RD. The meeting resulted in guidance on endpoint definition and a path forward for Phase 3 development in IgG4-RD, which the FDA recognizes as a new disease entity with no regulatory precedence for an approval pathway. Based on the Phase 2 results and these preliminary discussions with DPARP, a randomized, placebo-controlled, double-blinded Phase 3 trial of approximately 200-250 patients evaluating the addition of XmAb5871 to standard of care therapy is planned to initiate in the second half of 2018. We are also seeking scientific advice from the European Medicines Agency in 2018.

In October 2016, we completed a Phase 1 bioequivalence trial for XmAb5871 using a subcutaneous formulation. XmAb5871 was safe and well-tolerated as a subcutaneous injection in this trial. Pharmacokinetics and bioavailability data from the trial support an every-other-week dosing schedule. Our plan is to conduct further clinical studies with XmAb5871 in a subcutaneous formulation.

We have also initiated a Phase 2 randomized, double blinded, placebo-controlled study of XmAb5871in 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. In December 2017 we completed enrollment for the trial of 104 subjects, 1:1 randomized to XmAb5871 or placebo, to receive treatment for up to 30 weeks. We expect to announce top-line data for the trial in late fourth quarter 2018. 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. In 2017 we completed a multi-dose Phase 1 clinical trial of a subcutaneous formulation of XmAb7195 in healthy volunteers and in atopic subjects. Data from this trail was announced in 2017 and we are seeking a partner for further development of this drug candidate.

*MOR208*. MorphoSys initiated a Phase 3 clinical trial with MOR208 in June 2017, treating patients with NHL In conjunction with the initiation of this trial, we received a \$12.5 million milestone payment. MorphoSys has announced that they have received BreakthroughTherapy designation of MOR208 from the FDA for treating diffused large B-cell lymphoma in combination with lenalidomide.

*Licensing Partnerships.* We currently have six 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 ALXN1210 and we received a \$5 million milestone payment. In March 2017, CSL/Janssen achieved a Phase 3 milestone for CSL362 (JNJ-5602 2473) and we received a \$3.5 million milestone payment. In November 2017, Amgen filed an IND for AMG424 (CD38 x CD3) and we received a \$10 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, our CD38 x CD3 bispecific compound (now AMG 424). 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 and we received a \$150 million upfront payment.

*Bispecific program.* We continue to advance our pipeline with bispecific Fc antibodies that incorporate our XmAb bispecific 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 three bispecific drug candidates, XmAb14045, XmAb13676 and, XmAb18087. We have also initiated development and plan on filing IND's for our next three bispecific candidates, XmAb20717, XmAb22841 and XmAb23104 in 2018.

## **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, 2017, we have generated \$225.6 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, 2017, 2016 and 2015 (in millions):

	 Year Ended December 31,						
	2017		2016		2015		
Amgen	\$ 16.2	\$	18.7	\$	13.8		
Alexion	1.0		6.0		8.5		
CSL	3.5		_		2.5		
MorphoSys	12.5		_		_		
Novo Nordisk	_		2.7		2.9		
Novartis	2.3		59.7		_		
Other	0.2		0.4		0.1		
Total	\$ 35.7	\$	87.5	\$	27.8		

#### 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 \$368.6 million in research and development expenses from inception through December 31, 2017.

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, XmAb22841, XmAb23104 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, 2017, 2016 and 2015 (in millions):

	Year Ended							
	December 31,							
		2017		2016		2015		
Product programs:								
Bispecific programs	\$	42.0	\$	23.7	\$	18.1		
XmAb5871 programs		20.3		17.3		7.9		
XmAb7195 program		3.4		7 <b>.</b> 5		6.0		
Other, research and early stage programs		6.1		3.4		2.1		
Total research and development expenses	\$	71.8	\$	51.9	\$	34.1		

#### **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, 2017, 2016 and 2015, other income (expense), net consists primarily of interest income from our investments during the year.

#### 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 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 vendor specific objective evidence (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 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 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, 2017 and 2016 was \$11.1 million and \$10.4 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 \$396,000, \$356,000 and \$296,000 for the years ended December 31, 2017, 2016 and 2015, 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.

On December 22, 2017, the "Tax Cuts and Jobs Act" (TCJA) was enacted into law, which beginning in 2018, made several changes to U.S. corporate income tax provisions. We have identified two changes in the TCJA which will have a material effect on our tax provision and future tax obligations. The TCJA reduced the U.S. corporate rate from a maximum rate of 35% to 21% effective January 1, 2018. The effect of this change is to reduce the potential future tax benefits from our deferred tax assets by \$23.9 million that we have as of December 31, 2017. We have deferred income taxes as of December 31, 2017 from deferred revenue and net operating loss carryforwards and the reduction in the U.S. rate will reduce the future value of these assets.

The second material change in our tax provision from the TCJA is elimination of the U.S. corporate alternative minimum tax (AMT) system and allowance for a tax refund for AMT credit carryovers as of December 31, 2017. We recorded total AMT credit carryovers of \$1.5 million as of December 31, 2017; this amount was recorded as an income tax receivable as of December 31, 2017.

We recorded net deferred tax assets of \$67.3 million as of December 31, 2017, which was 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 deferred revenue, federal and state tax net operating loss (NOL) carryforwards and research and development tax credit carryforwards. As of December 31, 2017, we had cumulative net operating loss carryforwards for federal and state income tax purposes of approximately \$104.8 million and \$50.9 million, respectively, and available tax credit carryforwards of approximately \$10.0 million for federal income tax purposes and \$6.6 million for state income tax purposes, which can be carried forward to offset future taxable income, if any.

Our federal net operating loss carryforwards expire starting in 2026, state net operating losses expire starting in 2031 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, 2017 we recorded a net tax benefit of \$0.5 million and for the year ended December 31, 2016 we recorded a tax expense \$1.0 million, related to federal and state AMTs.

## 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 for employee awards.

# **Results of Operations**

## Comparison of the Year Ended December 31, 2017 and 2016

The following table summarizes our results of operations for the years ended December 31, 2017 and 2016 (in millions):

	Year ended December 31,							
	 2017		2016		Change			
Revenues:								
Research collaboration	\$ 6.2	\$	21.7	\$	(15.5)			
Milestone	26.0		5.0		21.0			
Licensing	3.5		60.8		(57.3)			
Total revenues	35.7		87.5		(51.8)			
Operating expenses:								
Research and development	71.8		51.9		19.9			
General and administrative	17.5		13.1		4.4			
Total operating expenses	89.3		65.0		24.3			
Other income, net	4.2		2.1		2.1			
Income tax expense (benefit)	(0.5)		1.0		(1.5)			
Net income (loss)	\$ (48.9)	\$	23.6	\$	(72.5)			

#### Revenues

Research collaboration revenues decreased by \$15.5 million in 2017 over 2016 amounts primarily due to revenue recognized under our 2015 collaboration agreement with Amgen in 2016.

Milestone and contingent payments increased by \$21.0 million in 2017 over 2016 amounts primarily due to receiving contractual milestones in 2017 from Amgen and MorphoSys offset by contractual milestones received from Alexion in 2016.

Licensing revenue decreased by \$57.3 million in 2017 over 2016 amounts primarily due to revenue earned under our Novartis agreement in 2016.

# Research and Development Expenses

The following table summarizes our research and development expenses for the years ended December 31, 2017 and 2016 (in millions):

	Year Ended							
	December 31,							
		2017	2016			Change		
Product programs:								
Bispecific programs	\$	42.0	\$	23.7	\$	18.3		
XmAb5871 programs		20.3		17.3		3.0		
XmAb7195 program		3.4		7.5		(4.1)		
Other, research and early stage programs		6.1		3.4		2.7		
Total research and development expense	\$	71.8	\$	51.9	\$	19.9		

Research and development expenses increased by \$19.9 million in 2017 over 2016 amounts as we continue to develop a pipeline of bispecific candidates. These include current clinical candidates XmAb14045, XmAb13676, and XmAb18087 and the development activities for the next three bispecific candidates, XmAb20717, XmAb22841 and XmAb23104. Increased spending on our XmAb5871 and early discovery research programs was partially offset by reduced spending on our XmAb7195 program.

# General and Administrative Expenses

General and administrative expenses increased by \$4.4 million in 2017 over 2016 amounts primarily due to an increase in facility costs, staffing and stock-based compensation costs.

# Other Income (Expense), Net

Other income, net increased by \$2.1 million in 2017 over 2016 amounts reflecting additional interest income earned on our investments in marketable securities.

## 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			
Revenues:								
Research collaboration	\$ 21.7	\$	16.6	\$	5.1			
Licensing	60.8		5.2		55.6			
Milestone	5.0		6.0		(1.0)			
Total revenues	87.5		27.8		59.7			
Operating expenses:								
Research and development	51.9		34.1		17.8			
General and administrative	13.1		12.0		1.1			
Total operating expenses	 65.0		46.1		18.9			
Other income, net	2.1		0.7		1.4			
Income tax expense	1.0		_		1.0			
Net income (loss)	\$ 23.6	\$	(17.6)	\$	41.2			

#### 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.

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

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

# 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	
Product programs:				
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	
Total research and development expense	\$ 51.9	\$ 34.1	\$ 17.8	

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 years 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.

## **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 as well as our pipeline of bispecific development candidates, XmAb104045, XmAb13676, XmAb18087, XmAb20717, XmAb22841 and XmAb23104 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.

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

At December 31, 2017, we had \$363.3 million of cash, cash equivalents and marketable securities compared to \$403.5 million at December 31, 2016. 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 preclinical 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,					
		2017		2016		2015
Net cash provided by (used in):			-			
Operating activities	\$	(33,683)	\$	94,617	\$	26,666
Investing activities		31,950		(213,653)		(185,106)
Financing activities		3,733		120,974		116,381
Net increase (decrease) in cash and cash equivalents	\$	2,000	\$	1,938	\$	(42,059)

#### **Operating Activities**

Net cash used in operating activities for the year ended December 31, 2017 reflects operating expenses primarily for advancing our bispecific candidates and phase 2 clinical trials for XmAb5871as well as higher stock-based compensation costs in excess of milestone and licensing revenues during the year.

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.

## **Investing Activities**

Investing activities consist primarily of proceeds from maturities of marketable securities offset by purchases of marketable securities available-for-sale, acquisition of intangible assets and purchases of property and equipment. In 2017 we used \$39.2 million in marketable securities, net of \$76.5 million of purchases. In 2016, we invested \$210.6 million in marketable securities net of \$105.5 million of sales and maturities. In 2015, we invested \$181.4 million in marketable securities, net of \$34.4 million of sales and maturities. We acquired \$2.0 million, \$1.5 million and \$1.7 million of intangible assets in the years ended December 31, 2017, 2016 and 2015, respectively. We purchased \$5.3 million, \$1.5 million and \$1.9 million of capital equipment for the years ended December 31, 2017, 2016 and 2015 respectively. The increase in capital expenditure in 2017 compared to 2016 and 2015 is primarily due to equipment used in manufacturing drugs for XmAb5871 and our bispecific candidates.

## Financing Activities

Net cash provided by financing activities during the year ended December 31, 2017 consists primarily of 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, 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.

## **Contractual Obligations and Commitments**

The following table summarizes our contractual obligations at December 31, 2017 (in thousands):

	 Payments due by period								
			Less					N	<b>I</b> ore
			than		1 - 3		3 - 5	t	han
	Total		1 year		Years		Years	5	years
Operating lease obligation relating to facilities (1)	\$ 11,046	\$	2,546	\$	7,094	\$	1,406	\$	

(1) Consists of operating leases on our corporate headquarters in Monrovia and on our San Diego offices encompassing 48,000 square feet and 24,000 square feet that expire in September 2022 and August 2022 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. We have also entered into agreements with third party vendors which will require us to make future payments upon the delivery of goods and services in future periods.

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 \$3.8 million in additional contingent payments which include \$800,000 of clinical milestones and \$3.0 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 2017 or 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. 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. We terminated this agreement in December 2017 and have no further obligatios under the agreement.

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) in connection with the license and 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%. There were no milestone payments made in 2017. 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 Selexis 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%. There

were no milestone payments in 2017. During 2016, we made a CHF 100,000 milestone payment in connection with an IND filing.

In December 2017, we entered into worldwide exclusive commercial license agreements with Selexis to develop and commercialize products produced from the Selexis cell line that was manufactured for each of our bispecific drug candidates: XmAb18087, XmAb20717, XmAb22841 and XmAb23104. The terms for each agreement is identical and for each licensed cell line we may be required to make up to CHF 1.4 million in total development, regulatory and sales milestones which include CHF 425,000 in development milestones, CHF 340,000 in regulatory milestones and, CHF 680,000 in sales milestones. In addition, we may be obligated to pay royalties upon commercial sales of approved products of less than 1%. In 2017, we made a CHF 85,000 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%. In 2017 we transferred the manufacturing process for XmAb5871 to a third-party manufacturer. We did not make any milestone payments under this Agreement in 2017.

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 2017.

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**

See Note 1 - Recent Accounting Pronouncements in the accompanying financial statements for information regarding recent accounting pronouncements.

# Item 7A. 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

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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, 2017, 2016 and 2015:

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#### Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders Xencor, Inc.

## **Opinion on the Financial Statements**

We have audited the accompanying balance sheets of Xencor, Inc. (the Company) as of December 31, 2017 and 2016, the related statements of comprehensive income (loss), stockholders' equity and cash flows for each of the three years in the period ended December 31, 2017, and the related notes to the financial statements. In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2017, 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 27, 2018, expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

## **Basis for Opinion**

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

We have served as the Company's auditor since 2015.

/s/ RSM US LLP

Los Angeles, California February 27, 2018

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

To the Board of Directors and Stockholders Xencor, Inc.

# **Opinion on Internal Control Over Financial Reporting**

We have audited Xencor, Inc.'s (the Company) internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, 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) (PCAOB), the balance sheets of the Company as of December 31, 2017 and 2016, the related statements of comprehensive income (loss), stockholders' equity and cash flows for each of the three years in the period ended December 31, 2017, of the Company and our report, dated February 27, 2018, expressed an unqualified opinion.

#### **Basis for Opinion**

The Company'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 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 are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. 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.

## **Definition and Limitations of Internal Control Over Financial Reporting**

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 (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) 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 (3) 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.

/s/ RSM US LLP

Los Angeles, California February 27, 2018

# **Balance Sheets**

# (in thousands, except share and per share data)

	Decemb	er 31	,
	2017		2016
Assets	 		
Current assets			
Cash and cash equivalents	\$ 16,528	\$	14,528
Marketable securities	207,603		115,608
Accounts receivable	1,142		8,616
Prepaid expenses and other current assets	 5,606		2,901
Total current assets	230,879		141,653
Property and equipment, net	7,088		3,105
Patents, licenses, and other intangible assets, net	11,148		10,362
Marketable securities - long term	139,198		273,340
Income tax receivable	1,524		_
Other assets	265		103
Total assets	\$ 390,102	\$	428,563
Liabilities and stockholders' equity			
Current liabilities			
Accounts payable	\$ 6,869	\$	3,880
Accrued expenses	5,480		6,692
Current portion of deferred rent	26		128
Current portion of deferred revenue	88,813		95,521
Income tax payable	157		65
Total current liabilities	101,345		106,286
Deferred rent, less current portion	1,088		397
Deferred revenue, less current portion	 5,623		7,926
Total liabilities	 108,056		114,609
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, 2017 and 2016	_		_
Common stock, \$0.01 par value: 200,000,000 authorized shares; 47,002,488 issued and outstanding shares at			
December 31, 2017 and 46,567,978 issued and outstanding at December 31, 2016	470		466
Additional paid-in capital	570,670		552,889
Accumulated other comprehensive loss	(1,808)		(1,441)
Accumulated deficit	 (287,286)		(237,960)
Total stockholders' equity	 282,046		313,954
Total liabilities and stockholders' equity	\$ 390,102	\$	428,563

# **Statements of Comprehensive Income (Loss)**

# (in thousands, except share and per share data)

Operating expenses71,77251,87234Research and development71,77251,87234	
Collaborations, licenses and milestones \$ 35,711 \$ 87,520 \$ 27.  Operating expenses Research and development 71,772 51,872 34	5
Operating expenses71,77251,87234Research and development71,77251,87234	
Research and development 71,772 51,872 34	7,762
•	
Conoral and administrative 17 501 12 100 11	4,140
General and administrative17,30113,1001	1,960
<b>Total operating expenses</b> 89,273 64,980 46	6,100
<b>Income (loss) from operations</b> (53,562) 22,540 (18	8,338)
Other income (expense)	
Interest income 4,194 2,091	744
Interest expense (13) (21)	(13)
Other income (7) 6	15
<b>Total other income, net</b> 4,174 2,076	746
Income (loss) before income tax (49,388) 24,616 (17)	7,592)
Income tax expense (benefit) (463) 991	_
Net income (loss) (48,925) 23,625 (17	7,592)
Other comprehensive income (loss)	
Net unrealized loss on marketable securities available-for-sale (367) (925)	(516)
Comprehensive income (loss) \$ (49,292) \$ 22,700 \$ (18	8,108)
<u></u>	
Net income (loss) per share attributable to common stockholders:	
Basic \$ (1.05) \$ 0.57 \$	(0.45)
Diluted \$ (1.05) \$ 0.56 \$	(0.45)
Weighted average shares used to compute net income (loss) per share attributable to common stockholders:	
Basic 46,817,756 41,267,329 39,015	5,131
Diluted 46,817,756 42,388,867 39,015	5,131

# Statements of Stockholders' Equity

# (in thousands, except share data)

				Accumulated		
			Additional	Other		Total
	Common	Stock	Paid	Comprehensive	Accumulated	Stockholders'
Stockholders' Equity	Shares	Amount	in-Capital	Loss	Deficit	Equity
Balance, December 31, 2014	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 and vesting of stock awards	379,268	4	550	_	_	554
Issuance of common stock under the Employee Stock Purchase Plan	112,499	1	622	_	_	623
Net loss	_	_		(516)	(17,592)	(18,108)
Stock-based compensation			4,869			4,869
Balance, December 31, 2015	40,551,039	405	424,128	(516)	(261,585)	
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 Comprehensive income (loss)	45,123	1	544	(925)	23,625	545 22,700
Stock-based compensation	_		7,848	(923)	23,023	7,848
Stock-based compensation			7,040			7,040
Balance, December 31, 2016	46,567,978	466	552,889	(1,441)	(237,960)	313,954
Adoption of ASU 2016-09			401		(401)	
Balance December 31, 2016 as restated	46,567,978	466	553,290	(1,441)	(238,361)	313,954
Issuance of common stock upon exercise of stock awards	363,603	4	2,793	_	_	2,797
Issuance of common stock under the Employee Stock Purchase Plan	70,907	_	936	_	_	936
Comprehensive loss	_	_	_	(367)	(48,925)	(49,292)
Stock-based compensation			13,651			13,651
Balance, December 31, 2017	47,002,488	\$ 470	\$ 570,670	\$ (1,808)	\$ (287,286)	\$ 282,046

# **Statements of Cash Flows**

# (in thousands)

	Year	er 31,		
	2017	2016	2015	
Cash flows from operating activities				
Net income (loss)	\$ (48,925)	\$ 23,625	\$ (17,592)	
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating				
activities:				
Depreciation and amortization	2,030	1,466	1,113	
Amortization of premium on marketable securities	2,845	2,037	1,096	
Stock-based compensation	13,651	7,848	4,869	
Abandonment of capitalized intangible assets	396	356	296	
Loss (gain) on disposal of assets	83	_	(9)	
Gain on sale of marketable securities available-for-sale	_	(5)	(5)	
Changes in operating assets and liabilities:				
Accounts receivable	7,474	(8,572)	2,922	
Interest receivable	(293)	(530)	(898)	
Prepaid expenses and other current assets	(2,705)	(1,700)	(1,068)	
Income tax receivable	(1,524)	_	_	
Other assets	(161)	(40)	(3)	
Accounts payable	2,989	(2,520)	4,710	
Accrued expenses	(1,212)	3,058	1,425	
Deferred rent	589	(89)	572	
Income tax payable	91	65	_	
Deferred revenue	(9,011)	69,618	29,238	
Net cash provided by (used in) operating activities	(33,683)	94,617	26,666	
Cash flows from investing activities				
Proceeds from sale and maturities of marketable securities available-for-sale	115,757	105,505	34,358	
Proceeds from sale of property and equipment		_	9	
Purchase of marketable securities	(76,529)	(316,149)	(215,798)	
Purchase of intangible assets	(1,967)	(1,502)	(1,745)	
Purchase of property and equipment	(5,311)	(1,507)	(1,930)	
Net cash provided by (used in) investing activities	31,950	(213,653)	(185,106)	
Cash flows from financing activities	01,550	(=15,000)	(100,100)	
Proceeds from issuance of common stock upon exercise of stock awards	2,797	1,160	554	
Proceeds from issuance of common stock from Employee Stock Purchase Plan	936	545	623	
Proceeds from issuance of common stock		126,546	122,906	
Common stock issuance costs		(7,277)	(7,702)	
Net cash provided by financing activities	3,733	120,974	116,381	
Net increase (decrease) in cash and cash equivalents	2,000	1,938		
	,		(42,059)	
Cash and cash equivalents, beginning of year	14,528	12,590	54,649	
Cash and cash equivalents, end of year	\$ 16,528	\$ 14,528	\$ 12,590	
Supplemental disclosures of cash flow information				
Cash paid for:				
Interest	\$ 13	\$ 21	\$ 13	
Taxes	\$ 969	\$ 936	\$ 1	
Supplemental Schedule of Noncash Investing Activities				
Net unrealized loss on marketable securities available-for-sale	\$ 367	\$ 925	\$ 516	

## **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, 2017, 2016, and 2015 and for the years then ended have been prepared in accordance with accounting principles generally accepted in the United States.

#### 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**

### Pronouncements adopted in 2017

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 adopted the new standard on January 1, 2017 and established an accounting policy election to account for forfeitures when they occur. We applied the modified retrospective approach which resulted in a cumulative-effect adjustment of an increase of \$0.4 million to accumulated deficit and additional paid-in capital. The adoption will result in periodic adjustments in the recognition of stock compensation expense associated with forfeitures in the period in which they occur. The remaining aspects of adopting the new standard did not have a material impact on our financial statement position or results from operations.

## Pronouncements not yet effective

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers*, as a new Topic, Accounting Standards Codification Topic 606 (ASC 606). The new guidance for revenue recognition will be adopted in

# **Notes to Financial Statements (Continued)**

the first quarter of 2018 using the full retrospective method. ASC 606 requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers and replaces most of the existing revenue recognition standards in U.S. GAAP. A five-step model will be used to achieve the core principle: (1) identify the customer contract, (2) identify the contract's performance obligations, (3) determine the transaction price, (4) allocate the transaction price to the performance obligations and (5) recognize revenue when or as a performance obligation is satisfied.

The Company's assessment of the new standard's impact is substantially complete. Under the new guidance, the timing of revenue recognition from licensing of our intellectual property that are functional and are distinct performance obligations will change from being recognized over the term of access to the license or technology to being recognized at a point in time. The other material change from adoption of ASC 606 relates to the timing of revenue under certain deliverables in our Novartis and Amgen collaborations. ASC 606 provides that revenue recognition for performance obligations related to delivery of certain goods or services occurs when control over the good or service is transferred to the customer. As a result, under ASC 606 we will recognize revenue related to certain deliverables in the Amgen and Novartis collaboration in an earlier period than under current U.S. GAAP standards. Upon adoption the Company will restate its revenues and earnings for the 2016 and 2017 periods. We estimate that the restated revenue and earnings will be \$21.5 million higher in 2016 and \$10.4 million higher in 2017 than originally reported because of adopting ASC 606. The increase in revenue and earnings from restatement under ASC 606 is primarily related to revenue recognized under our Amgen and Novartis arrangements.

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. The ASU eliminates the available-for-sale classification for equity investments that recognized changes in the fair value as a component of other comprehensive income. The new standard will be effective for periods beginning after December 15, 2017. Although we intend to adopt the standard on the effective date we do not carry any equity securities in our investment portfolio.

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 January 2018 the FASB issued an exposure draft of the proposed ASU, Lease (Topic 842): Targeted Improvements, which provides an alternative transition method of adoption, permitting the recognition of cumulative-effect adjustment to retained earnings on the date of adoption. We intend to adopt the standard on the effective date, but have not yet selected a transition method. We are currently evaluating our leases which includes a review of our lease expenses, which are primarily operating lease arrangements for our facilities in Monrovia and San Diego.

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.

# **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 will adopt the new standard in the first quarter of 2018 and we do not expect the adoption to have a material impact on our statement of cash flows.

In March 2017, the FASB issued ASU No. 2017-08, *Receivables – Nonrefundable Fees and Other Costs (Subtopic 310-20): Premium Amortization on Purchased Callable Debt Securities*, which amends the guidance on the amortization period of premiums on certain purchased callable debt securities by shortening the amortization period of premiums to the earliest call date. The amendment affects all entities that hold investments in callable debt securities that have an amortized cost basis in excess of the amount that is repayable by the issuer at the earliest call date. The amendment is effective for fiscal years after December 31, 2018 with early adoption permitted. The Company will review the requirements of the standard but does not anticipate it will have a significant impact on our financial statements.

In May 2017, the FASB issued ASU No. 2017-09, *Compensation – Stock Compensation (Topic 718): Scope of Modification Accounting.* The standard applies when a company changes the terms of a stock compensation award previously granted to an employee where modification accounting applies. According to the standard, modification accounting is not required if (1) the fair value of the modified award (or the award's calculated value or intrinsic value as appropriate) is the same as the value immediately prior to its modifications, (2) the vesting conditions of the modified award are the same as the vesting conditions of the award immediately prior to its modifications; and, (3) the award's classification as an equity or liability is the same after the modification as it was immediately prior to its modification. The Company will adopt the new standard in the first quarter of 2018 but does not anticipate that the standard will have a significant impact on its financial statements.

In February 2018, the FASB issued ASU No. 2018-02. *Income Statement – Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income*, an amendment which permits companies to reclassify the income tax effects of the 2017 Tax Cust and Jobs Act (TCJA) on items within accumulated other comprehensive income to retained earnings. The standard also requires new disclosures about these stranded tax effects and is effective for fiscal years beginning after December 15, 2018 and interim periods within those fiscal years. Early adoption is permitted and can be applied either in the period of adoption or retrospectively to each period (or periods) in which the effect of the change in the U.S. federal corporate income tax rate in the TCJA is recognized. The Company is currently evaluating the impact the guidance will have on its 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, 2016.

## 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

# **Notes to Financial Statements (Continued)**

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 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 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

# **Notes to Financial Statements (Continued)**

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 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.

# **Notes to Financial Statements (Continued)**

## **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.).

The Company and Novartis will co-develop XmAb14045 and XmAb13676 worldwide and share development costs. 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 U.S.

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.

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 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.

# **Notes to Financial Statements (Continued)**

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.

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
- 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

# **Notes to Financial Statements (Continued)**

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 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 Global Discovery Programs were delivered in 2016. In 2017, we delivered bispecific antibodies under a Global Discovery Program.

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, 2017 and 2016, we recognized \$2.3 million and \$59.7 million of revenue respectively. As of December 31, 2017 there is a receivable of \$1.1 million and \$88.0 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.

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

# **Notes to Financial Statements (Continued)**

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.

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 recognized as collaboration revenue the amount of consideration for delivery of three Discovery Programs. The Company completed delivery of bispecific antibody candidates for all five Discovery Programs by the September 15, 2016 one-year anniversary date of the 2015 Agreement. Amgen elected to substitute one of the originally identified antibody candidates in the first quarter of 2016.

There were no additional Discovery Programs delivered during 2017. In 2017 Amgen exercised its option to substitute one of the originally identified candidates and its option to substitute a third candidate lapsed effective September 15, 2017.

# **Notes to Financial Statements (Continued)**

In the fourth quarter of 2017, Amgen notified the Company of its IND filing for a CD38 bispecific drug candidate (AMG 424) for which we earned a \$10 million milestone.

During the years ended December 31, 2017, 2016 and 2015, we recognized \$16.2 million, \$18.75 million and \$13.75 million in revenue, respectively, under this arrangement. As of December 31, 2017 there was \$6.25 million in deferred revenue related to the arrangement.

## 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, IIb, 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 zero, \$2.7 million and \$2.9 million for the years ended December 31, 2017, 2016 and 2015, respectively. As of December 31, 2017 we have no deferred revenue related to the agreement.

#### MorphoSys Ag

In June 2010, we entered into a Collaboration and License Agreement with MorpohSys 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.

In June 2017, MorphoSys initiated a Phase III clinical trial under the arrangement for which we received a milestone payment of \$12.5 million. We recognized the payment as revenue in the period that the milestone event occurred.

We recognized \$12.5 million of revenue for the year end December 31, 2017. There were no revenues recognized under this arrangement for the years ended December 31, 2016 and 2015. As of December 31, 2017, 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.

# **Notes to Financial Statements (Continued)**

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 plus additional maintenance fees of \$2 million if the term is extended. 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 ALXN1210. In the fourth quarter of 2015, Alexion exercised its option to take an exclusive commercial license and achieved a further clinical development milestone for ALXN1210. In December 2016, Alexion achieved a Phase 3 clinical development milestone for ALXN1210.

The total revenue recognized under this arrangement was \$1.0 million, \$6.0 million and \$8.5 million for the years ended December 31, 2017, 2016 and 2015, respectively. As of December 31, 2017 there was \$83,000 of deferred revenue under this agreement.

## **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 2017, 2016 or 2015. There is no deferred revenue related to this agreement at December 31, 2017.

## 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 2013 CSL sublicensed CSL362 (now called JNJ-56022473) to Janssen Biotech Inc. (Janssen Biotech). In March 2017, CSL, through its sublicensee, Janssen Biotech, initiated a Phase 3 clinical trial for CSL362 for which we received a \$3.5 million milestone payment.

Total revenue recognized for the years ended December 31, 2017, 2016 and 2015 was \$3.5 million, zero and \$2.5 million, respectively. As of December 31, 2017 we have no deferred revenue related to this agreement.

# **Notes to Financial Statements (Continued)**

# 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, 2017, 2016 and 2015 total revenue recognized was \$0.1 million. In February 2018, Merck provided notice that it is terminating the agreement. As of December 31, 2017, we had deferred revenue of \$50,000 related to this agreement.

### **Potential Milestones**

As of December 31, 2017, 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:

	Potential Milestones (in millions)							
								Total
Partner	Developm	ent-based	R	egulatory-based		Sales-based	N	Milestones
Alexion (1)	\$	_	\$	28.0	\$	30.0	\$	58.0
Amgen		222.5		345.0		1,080.0		1,647.5
BI (1)		9.0		6.0		12.0		27.0
CSL Janssen 2009 (1)		_		4.0		5.0		9.0
Janssen (1)		6.0		_		4.0		10.0
MorphoSys (1)		49.5		187.0		50.0		286.5
Novartis		540.0		920.0		950.0		2,410.0
Total	\$	827.0	\$	1,490.0	\$	2,131.0	\$	4,448.0

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

# **Notes to Financial Statements (Continued)**

## Revenue earned

The \$35.7 million, \$87.5 million and \$27.8 million of revenue recorded for the years ended December 31, 2017, 2016 and 2015, respectively, was earned principally from the following licensees (in millions):

	Year Ended					
	December 31,					
		2017		2016		2015
Amgen	\$	16.2	\$	18.7	\$	13.8
Alexion		1.0		6.0		8.5
MorphoSys		12.5		_		_
Novo Nordisk		_		2.7		2.9
Novartis		2.3		59.7		_
CSL		3.5		_		2.5
Other		0.2		0.4		0.1
Total	\$	35.7	\$	87.5	\$	27.8

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, 2017, 2016 and 2015 is as follows (in millions):

		Year Ended December 31,			
	2017	2016	2015		
U.S. Revenue	\$ 19.7	\$ 84.8	\$ 22.4		
Non-U.S. Revenue	16.0	2.7	5.4		
Total	\$ 35.7	\$ 87.5	\$ 27.8		

## **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 \$94.4 million and \$103.4 million at December 31, 2017 and 2016, 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.

# **Notes to Financial Statements (Continued)**

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 \$1.7 million and \$1.4 million at December 31, 2017 and 2016, 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 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, 2017 and 2016 approximated \$16.0 million and \$14.0 million, respectively.

We have payables with two service providers that represent 40% of our total payables and three service providers that represented 28% of our total payables at December 31, 2017 and 2016, respectively. We rely on three 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, 2017 or 2016.

# 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.

# **Notes to Financial Statements (Continued)**

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.

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):

	December 31, 2017					
		Total air Value		Level 1		Level 2
Money Market Funds in Cash and Cash Equivalents	\$	5,175	\$	5,175	\$	_
Corporate Securities	1	123,270		_		123,270
Government Securities	2	223,530		_		223,530
	\$ 3	351,975	\$	5,175	\$	346,800
		_				
	_		ecem	ber 31, 201	16	
		<u>D</u> Total nir Value		lber 31, 201	16	Level 2
		Total			16	Level 2
Money Market Funds in Cash and Cash Equivalents	Fa	Total			16 - \$	Level 2
Money Market Funds in Cash and Cash Equivalents Corporate Securities	Fa	Total ir Value		Level 1	\$	Level 2  — 181,483
J I		Total nir Value		Level 1	\$	_
Corporate Securities	\$ 1	Total hir Value 12,137 181,483		Level 1	\$	— 181,483

# **Notes to Financial Statements (Continued)**

# **Property and Equipment**

Property and equipment are recorded at cost and depreciated using the straight-line method over the estimated useful lives of the assets. 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 2017, 2016 and 2015, we abandoned previously capitalized patent and licensing related charges of \$396,000 \$356,000 and \$296,000, respectively.

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

	Decem	ber 31,
	2017	2016
Patents, definite life	\$ 8,915	\$ 7,570
Patents, pending issuance	4,360	4,134
Licenses and other amortizable intangible assets	2,011	2,011
Nonamortizable intangible assets (trademarks)	399	399
Total gross carrying amount	15,685	14,114
Accumulated amortization—patents	(3,413)	(2,792)
Accumulated amortization—licenses and other	(1,124)	(960)
Total intangible assets, net	\$ 11,148	\$ 10,362

Amortization expense for patents, licenses, and other intangible assets was \$784,000, \$755,000 and \$594,000 for the years ended December 31, 2017, 2016 and 2015, respectively.

# **Notes to Financial Statements (Continued)**

Future amortization expense for patent, licenses, and other intangible assets recorded as of December 31, 2017, and for which amortization has commenced, is as follows:

	Year ended December 31 (in thousand	,
2018	\$	838
2019		827
2020		780
2021		704
2022		676
Thereafter	2,	364
Total	\$ 6,	189

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, 2017, the Company has \$4.4 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, 2017, 2016 or 2015.

#### 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, 2017 or 2016.

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

# **Notes to Financial Statements (Continued)**

The Tax Cuts and Jobs Act (tax reform) was enacted on December 22, 2017 and has several key provisions impacting accounting for and reporting of income taxes. The most significant provision reduces the U.S. corporate statutory tax rate from 35% to 21% and eliminate the Alternative Minimum Tax (AMT) system beginning on January 1, 2018. Although most provisions of the tax reform are not effective until 2018, we are required to record the effect of a change in tax law in the period of enactment (2017).

# 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 account for forfeitures when they occur. We recorded stock-based compensation and expense for stock-based awards to employees, directors and consultants of approximately \$13.7 million, \$7.8 million and \$4.9 million for the years ended December 31, 2017, 2016 and 2015 respectively. Included in the 2017 and 2016 balances for total compensation expense is \$498,000 and \$378,000, respectively, relating to our ESPP.

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 for 2017 and 2015, and stock purchases under the Employee Stock Purchase Plan were not 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,				
	2017	2015			
	(in thousands)				
Options to purchase common stock	1,291	_	1,281		
Employee stock purchase plan shares			75		
Total	1,291		1,356		

# **Notes to Financial Statements (Continued)**

	Year Ended December 31,					
		2017		2016		2015
			(in t	housands, excep	ot	
		sh	are .	and per share d	ata)	
Basic						
Numerator:						
Net income (loss) attributable to common stockholders for basic net						
income (loss) per share	\$	(48,925)	\$	23,625	\$	(17,592)
Denominator:						
Weighted-average common shares outstanding	4	6,817,756		41,267,329		39,015,131
Basic net income (loss) per common share	\$	(1.05)	\$	0.57	\$	(0.45)
Diluted						
Numerator:						
Net income (loss) attributable to common stockholders for diluted net						
income (loss) per share	\$	(48,925)	\$	23,625	\$	(17,592)
Denominator:						
Weighted average number of common shares outstanding used in						
computing basic net income (loss) per common share	4	6,817,756		41,267,329		39,015,131
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	4	6,817,756		42,388,867		39,015,131
Diluted net income (loss) per common share	\$	(1.05)	\$	0.56	\$	(0.45)

# **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, 2017 and 2016, 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, 2017.

# **Notes to Financial Statements (Continued)**

# 3. Marketable Securities

The Company's marketable securities held as of December 31, 2017 and 2016 are summarized below:

	_	December 31, 2017							
			ortized	U	Gross nrealized	_	Gross realized		
	_	(	Cost		Gains		Losses	F	air Value
(in thousands)	_			-					_
Money Market Funds	9	\$	5,175	\$	_	\$	_	\$	5,175
Corporate Securities			123,860		_		(590)		123,270
Government Securities			224,739		_		(1,209)		223,530
	\$	\$	353,774	\$	_	\$	(1,799)	\$	351,975
	_								
Reported as									
Cash and cash equivalents								\$	5,175
Marketable securities									346,800
Total investments								\$	351,975
					Decembe	r 31, 2	016		
	_				Gross		Gross		
		Am	ortized	U	nrealized	Uı	ırealized		
		(	Cost		Gains		Losses	F	air 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

	 _
Reported as	
Cash and cash equivalents	\$ 12,137
Marketable securities	388,948
Total investments	\$ 401,085

402,517

50

(1,482)

401,085

The maturities of the Company's marketable securities as of December 31, 2017 are as follows:

(in thousands)	 Amortized Cost	 Estimated Fair Value
Mature in one year or less	\$ 208,200	\$ 207,603
Mature after one year through five years	140,399	139,197
	\$ 348,599	\$ 346,800

# **Notes to Financial Statements (Continued)**

The unrealized losses on available-for-sale investments and their related fair values as of December 31, 2017 and 2016 are as follows:

	 December 31, 2017						
	Less than 12 months				12 months	or greater	
	 Unrealized						Unrealized
	Fair value		losses		Fair value		losses
(in thousands)							
Corporate Securities	\$ 79,290	\$	(137)	\$	43,980	\$	(453)
Government Securities	128,313		(461)		95,217		(748)
	\$ 207,603	\$	(598)	\$	139,197	\$	(1,201)
	\$ 207,603	\$	(598)	\$	139,197	\$	

	 December 31, 2016							
	Less than 12 months				12 months or greater			
	 Unrealized						Unrealized	
	Fair value		losses		Fair value	_	losses	
(in thousands)			_	-		_	_	
Corporate Securities	\$ 82,215	\$	(133)	\$	88,990	\$	(784)	
Government Securities	17,573		(16)		149,694		(549)	
	\$ 99,788	\$	(149)	\$	238,684	\$	(1,333)	

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.

### 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 sell any shares of common stock under the Agreement and to date, we have not sold any shares under the Distribution Agreement.

# **Notes to Financial Statements (Continued)**

# 5. Property and Equipment

Property and equipment consist of the following:

	December 31,			
	2017	2016		
	(In the	usands)		
Computers, software and equipment	\$ 10,874	\$ 6,735		
Furniture and fixtures	152	125		
Leasehold and tenant improvements	4,010	3,790		
	15,036	10,650		
Less accumulated depreciation and amortization	(7,948)	(7,545)		
	\$ 7,088	\$ 3,105		

Depreciation and amortization expense related to property and equipment in 2017, 2016 and 2015 was \$1.2 million, \$712,000 and \$519,000, 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 is a benefit of \$0.5 million and a charge of \$1.0 million for the years ended December 31, 2017 and 2016 respectively. Current tax expense for each year represents federal and state alternative minimum tax. For the year ended December 31, 2015 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,				
	2017	2016	2015		
Federal statutory income tax	\$ (16,917	7) \$ 7,718	\$ (6,157)		
State and local income taxes	(2,436	5) 1,451	_		
Research and development credit	(5,554	1) (2,544)	708		
Stock based compensation	2,709	733	651		
Effect of the 2017 Tax Cut and Jobs Act	23,859	) —	_		
Other	262	2 8	14		
Net change in valuation allowance	(2,386	6) (6,366)	4,784		
Income tax provision (benefit)	\$ (463	\$ 1,000	\$ —		

# **Notes to Financial Statements (Continued)**

The tax effect of temporary differences that give rise to a significant portion of the deferred tax assets and liabilities at December 31, 2017 and 2016 is presented below (in thousands):

	2017		2016
Deferred income tax assets	,		,
Net operating loss carryforwards	\$ 25,564	\$	54,860
Research credits	16,642		11,561
Depreciation	437		668
Unrealized loss on securities	504		573
Accrued compensation	748		719
Deferred revenue	26,442		5,236
State taxes	(2)		97
Gross deferred income tax assets	70,335		73,714
Valuation allowance	(67,284)		(69,670)
Net deferred income tax assets	3,051		4,044
Deferred income tax liabilities			
Patent costs	(2,873)		(3,725)
Licensing costs	(142)		(261)
Capitalized legal costs	(36)		(58)
Gross deferred income tax liabilities	(3,051)		(4,044)
Net deferred income tax asset	\$ _	\$	_

The Tax Cuts and Jobs Act (TCJA) was enacted in December 2017 and made substantial changes in the US tax system. One of the changes was elimination of the AMT tax system for corporations and allowance of an income tax refund for AMT tax credit carryforwards as of December 31, 2017. We have reported an income tax receivable of \$1.5 million as of December 31, 2017 to reflect the U.S. AMT credit carryforwards we have available. 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 at December 31, 2017. 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. As a result of the reduction in the U.S. statutory rate from 35% to 21% beginning in 2018, our total deferred assets at December 31, 2017 were reduced by \$23.9 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 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, 2017, we had cumulative net operating loss carryforwards for federal and state income tax purposes of \$104.8 million and \$50.9 million respectively, and available tax credit carryforwards of approximately \$10.0 million for federal income tax purposes and \$6.6 million for state income tax purposes, which can be carried forward to offset future taxable income, if any.

Our federal net operating loss carryforwards expire starting in 2026, state net operating losses expire starting in 2032, 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.

# **Notes to Financial Statements (Continued)**

#### 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, 2017, the total number of shares of common stock available for issuance under the 2013 Plan was 8,526,465. 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, 2017, the total number of shares of common stock available for issuance under the 2013 Plan was automatically increased by 1,862,719 shares, which number is included in the number of shares available for issuance above. As of December 31, 2017 a total of 4,945,350 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 in 2017, 2016 or 2015. As of December 31, 2017 and 2016, we have issued a total of 292,393 and 221,486 shares of common stock, respectively, under the ESPP.

Information with respect to stock options outstanding is as follows:

		December 31,					
	- 2	2017		2016		2015	
Exercisable options	2,5	58,941	1,	,743,765	1,	600,351	
Weighted average exercise price per share of exercisable options	\$	11.06	\$	8.87	\$	3.99	
Weighted average grant date fair value per share of options granted during the							
year	\$	16.92	\$	10.30	\$	10.66	
Options available for future grants	3,3	3,394,651		2,943,216		2,917,182	
Weighted average remaining contractual life		6.58		7.82		6.98	

## **Notes to Financial Statements (Continued)**

The following table summarizes stock option activity for the years ended December 31, 2017 and 2016:

	Number of Shares	E	eighted- Average Exercise Price r Share) <sup>(1)</sup>	Weighted- Average Remaining Contractual Term (in years)	Intr	ggregate insic Value housands) <sup>(2)</sup>
Balances at December 31, 2015	3,370,901	\$	8.50	6.98		
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
Options granted	1,511,100		22.61			
Options forfeited	(96,856)					
Options expired	(3,000)					
Options exercised(3)	(363,603)					
Balances at December 31, 2017	5,093,442	\$	15.32		\$	
As of December 31, 2017						
Options vested and expected to vest	5,093,442	\$	15.32	7.62	\$	35,495
Exercisable	2,558,941	\$	11.06	6.58	\$	28,017

- (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, 2017 and 2016.
- (3) The total intrinsic value of stock options exercised was \$5.7 million, \$11.2 million and \$5.4 million for the years ended December 31, 2017, 2016 and 2015 respectively.

The stock options outstanding and exercisable by exercise price at December 31, 2017 are as follows:

	Stock Options Outstanding				Stock Option	ns Exerc	isable
		Weighted-					
		Average					
		Remaining		Weighted-		1	Veighted-
Range of		Contractual		Average			Average
Exercise	Number of	Term	E	xercise Price	Number of	Ex	ercise Price
Prices	Shares	(in years)		Per Share	Shares	I	Per Share
\$0.59 - \$4.25	622,046	4.82	\$	3.17	622,046	\$	3.17
\$9.26 - \$13.89	1,781,232	7.26	\$	11.87	1,205,142	\$	11.64
\$14.10 - \$21.15	968,314	7.40	\$	15.8	634,199	\$	15.68
\$21.28 - \$26.76	1,721,850	9.13	\$	23.0	97,554	\$	24.13
	5,093,442	7.62	\$	15.32	2,558,941	\$	11.06

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.

## **Notes to Financial Statements (Continued)**

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, 2017, 2016 and 2015:

				Options		
		2017		2016		2015
Common stock fair value per						
share	\$	19.61 - 25.67	\$ 1	1.50 - 26.76	\$	11.82 - 22.35
Expected volatility	7	7.42% - 96.73%	75.77	7% - 90.83%	69	.17% - 86.46%
Risk-free interest rate		.96% - 2.37%	1.0	3% - 2.18%		1.44% - 1.84%
Expected dividend yield		_		_		_
Expected term (in years)		5.23 - 6.08		5.23 - 6.08		5.23 - 6.08
				ESPP		
		2017		2016		2015
Expected term (years)	· ·	0.5 - 2.0	)	0.5 - 2.0		0.5 - 2.0
Expected volatility		67.8% - 79.8%	6	7.8% - 79.8%		67.8% - 82.9%
Risk-free interest rate		.47% - 1.8%	) )	.47%93%		.07%93%
Expected dividend yield		_	-	_		_

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

		ear Ended ecember 31,	
(In thousands)	 2017	2016	2015
General and administrative	\$ 5,617	\$ 3,592	\$ 2,218
Research and development	8,034	4,256	2,650
	\$ 13,651	\$ 7,848	\$ 4,869

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, 2017, 2016 and 2015 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, 2017 and 2016, the unamortized compensation expense related to unvested stock options was \$30.7 million and \$18.1 million, respectively. The remaining unamortized compensation expense will be recognized over the next 2.76 years. At December 31, 2017 and 2016, the unamortized compensation expense was \$1.1 million and \$481,000 respectively under our ESPP. The remaining unamortized expense will be recognized over the next 23.3 months.

## **Notes to Financial Statements (Continued)**

#### 8. Commitments and Contingencies

#### **Operating leases**

The Company leases office and laboratory space in Monrovia, CA through June 2020. In July 2017, the Company entered into an amended lease agreement for additional space in the same building. The amended lease has a 64-month term with an option to renew for an additional five years. The lease terms for the original space were not amended.

The Company also leases office space in San Diego, CA through June 2020. In June 2017, the Company entered into a new lease agreement for an additional office space. The new lease has a 61-month term beginning from the date of occupancy and includes an option to renew for an additional five years. At December 31, 2017 the future minimum lease payments under the operating leases were as follows:

	Op	perating
Years ending December 31,	I	Leases
2018	\$	2,546
2019		2,726
2020		2,388
2021		1,980
2022		1,406
Thereafter		_

Rent expense for the years ended December 31, 2017, 2016 and 2015 was \$1.7 million, \$638,000 and \$558,000 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. The plaintiffs and the Company agreed to separate the litigation into two separate claims; Count I relating to the claim of breach of Fiduciary Duty by the current and former directors of the Company and, Count II relating to the Invalidity of Directors and Stockholder consents.

On December 14, 2015, the Court entered an Order and Partial Final Judgment in connection with Count II and approved 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 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 was reached without any party admitting wrongdoing. Under the terms of the settlement, no payment shall be

## **Notes to Financial Statements (Continued)**

made to the plaintiffs by the Company or any of the defendants in the lawsuit other than payments covered by the Company's insurance

On April 4, 2017, the Delaware Court of Chancery approved the settlement between the parties. On May 1, 2017, the Company's insurance carriers fully funded the settlement account.

We recognized legal costs related to the litigation as incurred and offset any insurance proceeds when approved and issued. For the year ended December 31, 2017 no amount of loss related to the settlement has been accrued. At December 31, 2016, we reported the outstanding settlement amount of \$2.355 million as a payable and reflected a receivable of the same amount for the insurance coverage. This amount was paid by the insurance carrier on our behalf in May 2017.

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. We have also entered into agreements with third party vendors which will require us to make future payments upon the delivery of goods and services in future periods.

#### 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, 2017 and 2016.

## 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, 2017, 2016 or 2015.

## 10. Condensed Quarterly Financial Data (unaudited)

The following table contains selected unaudited financial data for each quarter of 2017 and 2016. 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.

# **Notes to Financial Statements (Continued)**

# Quarterly Financial Data (in thousands, except per share data):

	2017 Quarter Ended			
	March 31,	June 30,	September 30,	December 31,
Total revenue	\$ 4,340	\$ 13,340	\$ 7,090	\$ 10,941
Loss from operations	(15,519)	(7,670)	(16,490)	(13,882)
Net loss	(14,635)	(6,885)	(15,562)	(11,843)
Basic net loss per common share	(0.31)	(0.15)	(0.33)	(0.25)
Diluted net loss per common share	\$ (0.31)	\$ (0.15)	\$ (0.33)	\$ (0.25)

	2016 Quarter Ended			
	March 31,	June 30,	September 30,	December 31,
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)	47,156	(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)

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

Not applicable.

#### **Item 9A. 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, 2017. 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, 2017 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, 2017. 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, 2017, our internal control over financial reporting was effective.

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

During the third quarter 2017, the Company implemented a new Enterprise Resource Planning (ERP) system to support the Company's growth. The implementation was designed in part to enhance the overall system of internal controls over financial reporting through further automation of various business processes. Except for the new ERP system, there has been no change in our internal control over financial reporting during the year ended December 31, 2017, 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, 2017 and has issued an audit report on the effectiveness of the Company's internal control over financial reporting as of December 31, 2017, which is included in Item 8 of this Annual Report on From 10-K.

#### Item 9B. Other Information

Not applicable.

#### PART III

#### Item 10. 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 <a href="http://www.xencor.com">http://www.xencor.com</a> 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 2018 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, 2017, 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 11. 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 12. 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 13. 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 14. 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 15. Exhibits, Financial Statement Schedules

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

	Page
Report of Independent Registered Public Accounting Firm (RSM US LLP)	78
Balance Sheets	81
Statements of Comprehensive Income (Loss)	82
Statements of Stockholders' Equity	83
Statements of Cash Flows	84
Notes to Financial Statements	85

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*.

Exhibit Number	Description
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.
10.4*	Xencor, Inc. 2013 Employee Stock Purchase Plan.
10.5*	Xencor, Inc. Non-Employee Director Compensation Policy (incorporated by reference to Exhibit 10.1 to the Company's Form 10-Q filed with the SEC on May 10, 2017).

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	<u>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).</u>
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 4, 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).
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).
10.36	Office Lease, dated June 21, 2017, by and among the Company and PRII High Bluffs LLC and Collins Corporate Center Partners, LLC (incorporated by reference to Exhibit 99.1 to the Company's Form 8-K filed with the SEC on June 26, 2017).
10.37	Second Amendment to Lease, dated July 5, 2017, by and between the Company and 111 Lemon Investors LLC (incorporated by reference to Exhibit 99.1 to the Company's Form 8-K filed with the SEC on July 10, 2017).
23.1	Consent of Independent Registered Public Accounting Firm (RSM US 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**	<u>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.</u>
101.INS 101.SCH 101.CAL 101.DEF 101.LAB 101.PRE	XBRL Instance Document.  XBRL Taxonomy Extension Schema Document.  XBRL Taxonomy Extension Schema Document.  XBRL Taxonomy Extension Definition Linkbase Document.  XBRL Taxonomy Extension Label Linkbase Document.  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.

#### Item 16. Form 10-K Summary

None.

## **SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Company has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: February 27, 2018

By: /s/ Bassil I. Dahiyat, Ph.D.

Bassil I. Dahiyat, Ph.D.

President & Chief Executive Officer

#### POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Bassil I. Dahiyat, Ph.D. and John J. Kuch, and each of them, his true and lawful attorneys-in-fact, each with full power of substitution, for him in any and all capacities, to sign any amendments to this Annual Report on Form 10-K and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact or their substitute or substitutes may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Company and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ BASSIL I. DAHIYAT, PH.D. Bassil I. Dahiyat, Ph.D.	Director, President & Chief Executive Officer (Principal Executive Officer)	February 27, 2018
/s/ JOHN J. KUCH John J. Kuch	Vice President, Finance (Principal Financial and Accounting Officer)	February 27, 2018
/s/ A. BRUCE MONTGOMERY, M.D. * A. Bruce Montgomery, M.D.	Director	February 27, 2018
/s/ KURT GUSTAFSON*  Kurt Gustafson	Director	February 27, 2018
/s/ YUJIRO S. HATA * Yujiro S. Hata	Director	February 27, 2018
/s/ KEVIN C. GORMAN, PH.D.*  Kevin C. Gorman, Ph.D.	Director	February 27, 2018
/s/ RICHARD RANIERI* Richard Ranieri	Director	February 27, 2018
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#### XENCOR, INC.

#### 2013 EQUITY INCENTIVE PLAN

ADOPTED BY THE BOARD OF DIRECTORS: NOVEMBER 1, 2013 APPROVED BY THE STOCKHOLDERS: NOVEMBER 5, 2013 IPO DATE: DECEMBER 2, 2013

### 1. GENERAL.

- **(a) Successor to and Continuation of Prior Plan.** The Plan is intended as the successor to and continuation of the Xencor, Inc. 2010 Equity Incentive Plan, as amended (the "*Prior Plan*"). From and after 12:01 a.m. Pacific time on the IPO Date, no additional stock awards will be granted under the Prior Plan. All Awards granted on or after 12:01 a.m. Pacific Time on the IPO Date will be granted under this Plan. All stock awards granted under the Prior Plan will remain subject to the terms of the Prior Plan.
- (i) Any shares the the remain available for future grants under the Prior Plan as of 12:01 a.m. Pacific Time on the IPO Date (the "*Prior Plan's Available Reserve*") will cease to be available under the Prior Plan at such time. Instead, that number of shares of Common Stock equal to the Prior Plan's Available Reserve will be added to the Share Reserve (as further described in Section 3(a) below) and will be immediately available for grants and issuance pursuant to Stock Awards hereunder, up to the maximum number set forth in Section 3(a) below.
- (ii) In addition, from and after 12:01 a.m. Pacific time on the IPO Date, any shares subject, at such time, to outstanding stock awards granted under the Prior Plan that (i) expire or terminate for any reason prior to exercise or settlement; (ii) are forfeited because of the failure to meet a contingency or condition required to vest such shares or otherwise return to the Company; or (iii) are reacquired, withheld (or not issued) to satisfy a tax withholding obligation in connection with an award or to satisfy the purchase price or exercise price of a stock award (such shares the "*Returning Shares*") will immediately be added to the Share Reserve (as further described in Section 3(a) below) as and when such shares become Returning Shares, up to the maximum number set forth in Section 3(a) below.
  - **(b) Eligible Award Recipients.** Employees, Directors and Consultants are eligible to receive Awards.
- **(c)** Available Awards. The Plan provides for the grant of the following Awards: (i) Incentive Stock Options, (ii) Nonstatutory Stock Options, (iii) Stock Appreciation Rights (iv) Restricted Stock Awards, (v) Restricted Stock Unit Awards, (vi) Performance Stock Awards, (vii) Performance Cash Awards, and (viii) Other Stock Awards.
- **(d) Purpose.** The Plan, through the grant of Awards, is intended to help the Company secure and retain the services of eligible award recipients, provide incentives for such persons to

exert maximum efforts for the success of the Company and any Affiliate, and provide a means by which the eligible recipients may benefit from increases in value of the Common Stock.

#### 2. ADMINISTRATION.

- **(a) Administration by Board.** The Board will administer the Plan. The Board may delegate administration of the Plan to a Committee or Committees, as provided in Section 2(c).
- **(b) Powers of Board.** The Board will have the power, subject to, and within the limitations of, the express provisions of the Plan:
- (i) To determine: (A) who will be granted Awards; (B) when and how each Award will be granted; (C) what type of Award will be granted; (D) the provisions of each Award (which need not be identical), including when a person will be permitted to exercise or otherwise receive cash or Common Stock under the Award; (E) the number of shares of Common Stock subject to, or the cash value of, an Award; and (F) the Fair Market Value applicable to a Stock Award.
- **(ii)** To construe and interpret the Plan and Awards granted under it, and to establish, amend and revoke rules and regulations for administration of the Plan and Awards. The Board, in the exercise of these powers, may correct any defect, omission or inconsistency in the Plan or in any Award Agreement or in the written terms of a Performance Cash Award, in a manner and to the extent it will deem necessary or expedient to make the Plan or Award fully effective.
  - (iii) To settle all controversies regarding the Plan and Awards granted under it.
- **(iv)** To accelerate, in whole or in part, the time at which an Award may be exercised or vest (or the time at which cash or shares of Common Stock may be issued in settlement thereof).
- **(v)** To suspend or terminate the Plan at any time. Except as otherwise provided in the Plan or an Award Agreement, suspension or termination of the Plan will not materially impair a Participant's rights under the Participant's then-outstanding Award without the Participant's written consent, except as provided in subsection (viii) below.
- (vi) To amend the Plan in any respect the Board deems necessary or advisable, including, without limitation, by adopting amendments relating to Incentive Stock Options and certain nonqualified deferred compensation under Section 409A of the Code and/or bringing the Plan or Awards granted under the Plan into compliance with the requirements for Incentive Stock Options or ensuring that they are exempt from, or compliant with, the requirements for nonqualified deferred compensation under Section 409A of the Code, subject to the limitations, if any, of applicable law. If required by applicable law or listing requirements, and except as provided in Section 9(a) relating to Capitalization Adjustments, the Company will seek stockholder approval of any amendment of the Plan that (A) materially increases the number of shares of Common Stock available for issuance under the Plan, (B) materially expands the class of individuals eligible to receive Awards under the Plan, (C) materially increases the benefits accruing to Participants under the Plan, (D) materially reduces the price at which shares of Common Stock may be issued or purchased under the Plan, (E) materially extends the term of the

Plan, or (F) materially expands the types of Awards available for issuance under the Plan. Except as otherwise provided in the Plan or an Award Agreement, no amendment of the Plan will materially impair a Participant's rights under an outstanding Award without the Participant's written consent.

- **(vii)** To submit any amendment to the Plan for stockholder approval, including, but not limited to, amendments to the Plan intended to satisfy the requirements of (A) Section 162(m) of the Code regarding the exclusion of performance-based compensation from the limit on corporate deductibility of compensation paid to Covered Employees, (B) Section 422 of the Code regarding "incentive stock options" or (C) Rule 16b-3.
- (viii) To approve forms of Award Agreements for use under the Plan and to amend the terms of any one or more Awards, including, but not limited to, amendments to provide terms more favorable to the Participant than previously provided in the Award Agreement, subject to any specified limits in the Plan that are not subject to Board discretion; provided, however, that a Participant's rights under any Award will not be impaired by any such amendment unless (A) the Company requests the consent of the affected Participant, and (B) such Participant consents in writing. Notwithstanding the foregoing, (1) a Participant's rights will not be deemed to have been impaired by any such amendment if the Board, in its sole discretion, determines that the amendment, taken as a whole, does not materially impair the Participant's rights, and (2) subject to the limitations of applicable law, if any, the Board may amend the terms of any one or more Awards without the affected Participant's consent (A) to maintain the qualified status of the Award as an Incentive Stock Option under Section 422 of the Code; (B) to change the terms of an Incentive Stock Option, if such change results in impairment of the Award solely because it impairs the qualified status of the Award as an Incentive Stock Option under Section 422 of the Code; (C) to clarify the manner of exemption from, or to bring the Award into compliance with, Section 409A of the Code; or (D) to comply with other applicable laws or listing requirements.
- **(ix)** Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company and that are not in conflict with the provisions of the Plan or Awards.
- **(x)** To adopt such procedures and sub-plans as are necessary or appropriate to permit participation in the Plan by Employees, Directors or Consultants who are foreign nationals or employed outside the United States (provided that Board approval will not be necessary for immaterial modifications to the Plan or any Award Agreement that are required for compliance with the laws of the relevant foreign jurisdiction).
- (xi) To effect, with the consent of any adversely affected Participant, (A) the reduction of the exercise, purchase or strike price of any outstanding Stock Award; (B) the cancellation of any outstanding Stock Award and the grant in substitution therefor of a new (1) Option or SAR, (2) Restricted Stock Award, (3) Restricted Stock Unit Award, (4) Other Stock Award, (5) cash and/or (6) other valuable consideration determined by the Board, in its sole discretion, with any such substituted award (x) covering the same or a different number of shares of Common Stock as the cancelled Stock Award and (y) granted under the Plan or another equity or compensatory plan of the Company; or (C) any other action that is treated as a repricing under generally accepted accounting principles.

## (c) Delegation to Committee.

- (i) General. The Board may delegate some or all of the administration of the Plan to a Committee or Committees. If administration of the Plan is delegated to a Committee, the Committee will have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the Committee, including the power to delegate to a subcommittee of the Committee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board will thereafter be to the Committee or subcommittee, as applicable). Any delegation of administrative powers will be reflected in resolutions, not inconsistent with the provisions of the Plan, adopted from time to time by the Board or Committee (as applicable). The Board may retain the authority to concurrently administer the Plan with the Committee and may, at any time, revest in the Board some or all of the powers previously delegated.
- **(ii) Section 162(m) and Rule 16b-3 Compliance.** The Committee may consist solely of two or more Outside Directors, in accordance with Section 162(m) of the Code, or solely of two or more Non-Employee Directors, in accordance with Rule 16b-3.
- **(d) Delegation to an Officer.** The Board may delegate to one (1) or more Officers the authority to do one or both of the following (i) designate Employees who are not Officers to be recipients of Options and SARs (and, to the extent permitted by applicable law, other Stock Awards) and, to the extent permitted by applicable law, the terms of such Awards, and (ii) determine the number of shares of Common Stock to be subject to such Stock Awards granted to such Employees; *provided*, *however*, that the Board resolutions regarding such delegation will specify the total number of shares of Common Stock that may be subject to the Stock Awards granted by such Officer and that such Officer may not grant a Stock Award to himself or herself. Any such Stock Awards will be granted on the form of Stock Award Agreement most recently approved for use by the Committee or the Board, unless otherwise provided in the resolutions approving the delegation authority. The Board may not delegate authority to an Officer who is acting solely in the capacity of an Officer (and not also as a Director) to determine the Fair Market Value pursuant to Section 13(w)(iii) below.
- **(e) Effect of Board's Decision.** All determinations, interpretations and constructions made by the Board in good faith will not be subject to review by any person and will be final, binding and conclusive on all persons.

## 3. SHARES SUBJECT TO THE PLAN.

**(a) Share Reserve.** Subject to Section 9(a) relating to Capitalization Adjustments, and the following sentence regarding the annual increase, the aggregate number of shares of Common Stock that may be issued pursuant to Stock Awards will not exceed 4,194,133 shares (the "*Share Reserve*"), which number is the sum of (i) 1,509,677 new shares, *plus* (ii) the number of shares subject to the Prior Plan's Available Reserve, *plus* (iii) the number of shares that are Returning Shares, as such shares become available from time to time.

In addition, the Share Reserve will automatically increase on January 1<sup>st</sup> of each year, for a period of not more than ten years from the date the Plan is approved by the stockholders of the

Company, commencing on January 1<sup>st</sup> of the year following the year in which the IPO Date occurs and ending on (and including) January 1, 2023, in an amount equal to 4% of the total number of shares of Capital Stock outstanding on December 31<sup>st</sup> of the preceding calendar year. Notwithstanding the foregoing, the Board may act prior to January 1<sup>st</sup> of a given year to provide that there will be no January 1<sup>st</sup> increase in the Share Reserve for such year or that the increase in the Share Reserve for such year will be a lesser number of shares of Common Stock than would otherwise occur pursuant to the preceding sentence. For clarity, the Share Reserve in this Section 3(a) is a limitation on the number of shares of Common Stock that may be issued pursuant to the Plan. Accordingly, this Section 3(a) does not limit the granting of Stock Awards except as provided in Section 7(a). Shares may be issued in connection with a merger or acquisition as permitted by NASDAQ Listing Rule 5635(c) or, if applicable, NYSE Listed Company Manual Section 303A.08, AMEX Company Guide Section 711 or other applicable rule, and such issuance will not reduce the number of shares available for issuance under the Plan.

- **(b) Reversion of Shares to the Share Reserve.** If a Stock Award or any portion thereof (i) expires or otherwise terminates without all of the shares covered by such Stock Award having been issued or (ii) is settled in cash (*i.e.*, the Participant receives cash rather than stock), such expiration, termination or settlement will not reduce (or otherwise offset) the number of shares of Common Stock that may be available for issuance under the Plan. If any shares of Common Stock issued pursuant to a Stock Award are forfeited back to or repurchased by the Company because of the failure to meet a contingency or condition required to vest such shares in the Participant, then the shares that are forfeited or repurchased will revert to and again become available for issuance under the Plan. Any shares reacquired by the Company in satisfaction of tax withholding obligations on a Stock Award or as consideration for the exercise or purchase price of a Stock Award will again become available for issuance under the Plan.
- **(c) Incentive Stock Option Limit.** Subject to the provisions of Section 9(a) relating to Capitalization Adjustments, the aggregate maximum number of shares of Common Stock that may be issued pursuant to the exercise of Incentive Stock Options will be 8,388,266 shares of Common Stock.
- **(d) Section 162(m) Limitations**. Subject to the provisions of Section 9(a) relating to Capitalization Adjustments, at such time as the Company may be subject to the applicable provisions of Section 162(m) of the Code, the following limitations shall apply.
- (i) A maximum of 2,000,000 shares of Common Stock subject to Options, SARs and Other Stock Awards whose value is determined by reference to an increase over an exercise or strike price of at least 100% of the Fair Market Value on the date the Stock Award is granted may be granted to any one Participant during any one calendar year. Notwithstanding the foregoing, if any additional Options, SARs or Other Stock Awards whose value is determined by reference to an increase over an exercise or strike price of at least 100% of the Fair Market Value on the date the Stock Award are granted to any Participant during any calendar year, compensation attributable to the exercise of such additional Stock Awards will not satisfy the requirements to be considered "qualified performance-based compensation" under Section 162(m) of the Code unless such additional Stock Award is approved by the Company's stockholders.

- **(ii)** A maximum of 2,000,000 shares of Common Stock subject to Performance Stock Awards may be granted to any one Participant during any one calendar year (whether the grant, vesting or exercise is contingent upon the attainment during the Performance Period of the Performance Goals).
- **(iii)** A maximum of \$3,000,000 may be granted as a Performance Cash Award to any one Participant during any one calendar year.
- **(e) Source of Shares.** The stock issuable under the Plan will be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the open market or otherwise.

# 4. ELIGIBILITY.

- **(a) Eligibility for Specific Stock Awards.** Incentive Stock Options may be granted only to employees of the Company or a "parent corporation" or "subsidiary corporation" thereof (as such terms are defined in Sections 424(e) and 424(f) of the Code). Stock Awards other than Incentive Stock Options may be granted to Employees, Directors and Consultants; *provided, however*, that Stock Awards may not be granted to Employees, Directors and Consultants who are providing Continuous Service only to any "parent" of the Company, as such term is defined in Rule 405 of the Securities Act, unless (i) the stock underlying such Stock Awards is treated as "service recipient stock" under Section 409A of the Code (for example, because the Stock Awards are granted pursuant to a corporate transaction such as a spin off transaction), (ii) the Company, in consultation with its legal counsel, has determined that such Stock Awards are otherwise exempt from Section 409A of the Code, or (iii) the Company, in consultation with its legal counsel, has determined that such Stock Awards comply with the distribution requirements of Section 409A of the Code.
- **(b) Ten Percent Stockholders.** A Ten Percent Stockholder will not be granted an Incentive Stock Option unless the exercise price of such Option is at least 110% of the Fair Market Value on the date of grant and the Option is not exercisable after the expiration of five years from the date of grant.

## 5. PROVISIONS RELATING TO OPTIONS AND STOCK APPRECIATION RIGHTS.

Each Option or SAR will be in such form and will contain such terms and conditions as the Board deems appropriate. All Options will be separately designated Incentive Stock Options or Nonstatutory Stock Options at the time of grant, and, if certificates are issued, a separate certificate or certificates will be issued for shares of Common Stock purchased on exercise of each type of Option. If an Option is not specifically designated as an Incentive Stock Option, or if an Option is designated as an Incentive Stock Option but some portion or all of the Option fails to qualify as an Incentive Stock Option under the applicable rules, then the Option (or portion thereof) will be a Nonstatutory Stock Option. The provisions of separate Options or SARs need not be identical; *provided, however*, that each Award Agreement will conform to (through incorporation of provisions hereof by reference in the applicable Award Agreement or otherwise) the substance of each of the following provisions:

- **(a) Term.** Subject to the provisions of Section 4(b) regarding Ten Percent Stockholders, no Option or SAR will be exercisable after the expiration of ten years from the date of its grant or such shorter period specified in the Award Agreement.
- **(b) Exercise Price.** Subject to the provisions of Section 4(b) regarding Ten Percent Stockholders, the exercise or strike price of each Option or SAR will be not less than 100% of the Fair Market Value of the Common Stock subject to the Option or SAR on the date the Award is granted. Notwithstanding the foregoing, an Option or SAR may be granted with an exercise or strike price lower than 100% of the Fair Market Value of the Common Stock subject to the Award if such Award is granted pursuant to an assumption of or substitution for another option or stock appreciation right pursuant to a Corporate Transaction and in a manner consistent with the provisions of Section 409A and, if applicable, Section 424(a) of the Code. Each SAR will be denominated in shares of Common Stock equivalents.
- **(c) Purchase Price for Options.** The purchase price of Common Stock acquired pursuant to the exercise of an Option may be paid, to the extent permitted by applicable law and as determined by the Board in its sole discretion, by any combination of the methods of payment set forth below. The Board will have the authority to grant Options that do not permit all of the following methods of payment (or otherwise restrict the ability to use certain methods) and to grant Options that require the consent of the Company to use a particular method of payment. The permitted methods of payment are as follows:
  - (i) by cash, check, bank draft or money order payable to the Company;
- (ii) pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of the stock subject to the Option, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the aggregate exercise price to the Company from the sales proceeds;
  - (iii) by delivery to the Company (either by actual delivery or attestation) of shares of Common Stock;
- (iv) if an Option is a Nonstatutory Stock Option, by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Common Stock issuable upon exercise by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price; *provided*, *however*, that the Company will accept a cash or other payment from the Participant to the extent of any remaining balance of the aggregate exercise price not satisfied by such reduction in the number of whole shares to be issued. Shares of Common Stock will no longer be subject to an Option and will not be exercisable thereafter to the extent that (A) shares issuable upon exercise are used to pay the exercise price pursuant to the "net exercise," (B) shares are delivered to the Participant as a result of such exercise, and (C) shares are withheld to satisfy tax withholding obligations; or
- **(v)** in any other form of legal consideration that may be acceptable to the Board and specified in the applicable Award Agreement.
- **(d) Exercise and Payment of a SAR.** To exercise any outstanding SAR, the Participant must provide written notice of exercise to the Company in compliance with the

provisions of the Stock Appreciation Right Agreement evidencing such SAR. The appreciation distribution payable on the exercise of a SAR will be not greater than an amount equal to the excess of (A) the aggregate Fair Market Value (on the date of the exercise of the SAR) of a number of shares of Common Stock equal to the number of Common Stock equivalents in which the Participant is vested under such SAR, and with respect to which the Participant is exercising the SAR on such date, over (B) the aggregate strike price of the number of Common Stock equivalents with respect to which the Participant is exercising the SAR on such date. The appreciation distribution may be paid in Common Stock, in cash, in any combination of the two or in any other form of consideration, as determined by the Board and contained in the Award Agreement evidencing such SAR.

- **(e) Transferability of Options and SARs.** The Board may, in its sole discretion, impose such limitations on the transferability of Options and SARs as the Board will determine. In the absence of such a determination by the Board to the contrary, the following restrictions on the transferability of Options and SARs will apply:
- **(i) Restrictions on Transfer.** An Option or SAR will not be transferable except by will or by the laws of descent and distribution (or pursuant to subsections (ii) and (iii) below), and will be exercisable during the lifetime of the Participant only by the Participant. The Board may permit transfer of the Option or SAR in a manner that is not prohibited by applicable tax and securities laws. Except as explicitly provided in the Plan, neither an Option nor a SAR may be transferred for consideration.
- **(ii) Domestic Relations Orders.** Subject to the approval of the Board or a duly authorized Officer, an Option or SAR may be transferred pursuant to the terms of a domestic relations order, official marital settlement agreement or other divorce or separation instrument as permitted by Treasury Regulations Section 1.421-1(b)(2). If an Option is an Incentive Stock Option, such Option may be deemed to be a Nonstatutory Stock Option as a result of such transfer.
- **(iii) Beneficiary Designation.** Subject to the approval of the Board or a duly authorized Officer, a Participant may, by delivering written notice to the Company, in a form approved by the Company (or the designated broker), designate a third party who, on the death of the Participant, will thereafter be entitled to exercise the Option or SAR and receive the Common Stock or other consideration resulting from such exercise. In the absence of such a designation, upon the death of the Participant, the executor or administrator of the Participant's estate will be entitled to exercise the Option or SAR and receive the Common Stock or other consideration resulting from such exercise. However, the Company may prohibit designation of a beneficiary at any time, including due to any conclusion by the Company that such designation would be inconsistent with the provisions of applicable laws.
- **(f) Vesting Generally.** The total number of shares of Common Stock subject to an Option or SAR may vest and become exercisable in periodic installments that may or may not be equal. The Option or SAR may be subject to such other terms and conditions on the time or times when it may or may not be exercised (which may be based on the satisfaction of Performance Goals or other criteria) as the Board may deem appropriate. The vesting provisions of individual Options or SARs may vary. The provisions of this Section 5(f) are subject to any Option or SAR

provisions governing the minimum number of shares of Common Stock as to which an Option or SAR may be exercised.

- **(g) Termination of Continuous Service.** Except as otherwise provided in the applicable Award Agreement or other agreement between the Participant and the Company, if a Participant's Continuous Service terminates (other than for Cause and other than upon the Participant's death or Disability), the Participant may exercise his or her Option or SAR (to the extent that the Participant was entitled to exercise such Award as of the date of termination of Continuous Service) within the period of time ending on the earlier of (i) the date three months following the termination of the Participant's Continuous Service (or such longer or shorter period specified in the applicable Award Agreement), and (ii) the expiration of the term of the Option or SAR as set forth in the Award Agreement. If, after termination of Continuous Service, the Participant does not exercise his or her Option or SAR (as applicable) within the applicable time frame, the Option or SAR will terminate.
- (h) Extension of Termination Date. If the exercise of an Option or SAR following the termination of the Participant's Continuous Service (other than for Cause and other than upon the Participant's death or Disability) would be prohibited at any time solely because the issuance of shares of Common Stock would violate the registration requirements under the Securities Act, then the Option or SAR will terminate on the earlier of (i) the expiration of a total period of time (that need not be consecutive) equal to the applicable post termination exercise period after the termination of the Participant's Continuous Service during which the exercise of the Option or SAR would not be in violation of such registration requirements, and (ii) the expiration of the term of the Option or SAR as set forth in the applicable Award Agreement. In addition, unless otherwise provided in a Participant's Award Agreement, if the sale of any Common Stock received on exercise of an Option or SAR following the termination of the Participant's Continuous Service (other than for Cause) would violate the Company's insider trading policy, then the Option or SAR will terminate on the earlier of (i) the expiration of a period of months (that need not be consecutive) equal to the applicable post-termination exercise period after the termination of the Participant's Continuous Service during which the sale of the Common Stock received upon exercise of the Option or SAR would not be in violation of the Company's insider trading policy, or (ii) the expiration of the term of the Option or SAR as set forth in the applicable Award Agreement.
- **(i) Disability of Participant.** Except as otherwise provided in the applicable Award Agreement or other agreement between the Participant and the Company, if a Participant's Continuous Service terminates as a result of the Participant's Disability, the Participant may exercise his or her Option or SAR (to the extent that the Participant was entitled to exercise such Option or SAR as of the date of termination of Continuous Service), but only within such period of time ending on the earlier of (i) the date 12 months following such termination of Continuous Service (or such longer or shorter period specified in the Award Agreement), and (ii) the expiration of the term of the Option or SAR as set forth in the Award Agreement. If, after termination of Continuous Service, the Participant does not exercise his or her Option or SAR within the applicable time frame, the Option or SAR (as applicable) will terminate.
- **(j) Death of Participant.** Except as otherwise provided in the applicable Award Agreement or other agreement between the Participant and the Company, if (i) a Participant's

Continuous Service terminates as a result of the Participant's death, or (ii) the Participant dies within the period (if any) specified in the Award Agreement for exercisability after the termination of the Participant's Continuous Service for a reason other than death, then the Option or SAR may be exercised (to the extent the Participant was entitled to exercise such Option or SAR as of the date of death) by the Participant's estate, by a person who acquired the right to exercise the Option or SAR by bequest or inheritance or by a person designated to exercise the Option or SAR upon the Participant's death, but only within the period ending on the earlier of (i) the date 18 months following the date of death (or such longer or shorter period specified in the Award Agreement), and (ii) the expiration of the term of such Option or SAR as set forth in the Award Agreement. If, after the Participant's death, the Option or SAR is not exercised within the applicable time frame, the Option or SAR (as applicable) will terminate.

- **(k) Termination for Cause.** Except as explicitly provided otherwise in a Participant's Award Agreement or other individual written agreement between the Company or any Affiliate and the Participant, if a Participant's Continuous Service is terminated for Cause, the Option or SAR will terminate immediately upon such Participant's termination of Continuous Service, and the Participant will be prohibited from exercising his or her Option or SAR from and after the date of such termination of Continuous Service.
- (I) Non-Exempt Employees. If an Option or SAR is granted to an Employee who is a non-exempt employee for purposes of the Fair Labor Standards Act of 1938, as amended, the Option or SAR will not be first exercisable for any shares of Common Stock until at least six months following the date of grant of the Option or SAR (although the Award may vest prior to such date). Consistent with the provisions of the Worker Economic Opportunity Act, (i) if such non-exempt Employee dies or suffers a Disability, (ii) upon a Corporate Transaction in which such Option or SAR is not assumed, continued, or substituted, (iii) upon a Change in Control, or (iv) upon the Participant's retirement (as such term may be defined in the Participant's Award Agreement in another agreement between the Participant and the Company, or, if no such definition, in accordance with the Company's then current employment policies and guidelines), the vested portion of any Options and SARs may be exercised earlier than six months following the date of grant. The foregoing provision is intended to operate so that any income derived by a non-exempt employee in connection with the exercise or vesting of an Option or SAR will be exempt from his or her regular rate of pay. To the extent permitted and/or required for compliance with the Worker Economic Opportunity Act to ensure that any income derived by a non-exempt employee in connection with the exercise, vesting or issuance of any shares under any other Stock Award will be exempt from the employee's regular rate of pay, the provisions of this Section 5(l) will apply to all Stock Awards and are hereby incorporated by reference into such Stock Award Agreements.

# 6. PROVISIONS OF STOCK AWARDS OTHER THAN OPTIONS AND SARS.

**(a) Restricted Stock Awards.** Each Restricted Stock Award Agreement will be in such form and will contain such terms and conditions as the Board will deem appropriate. To the extent consistent with the Company's bylaws, at the Board's election, shares of Common Stock may be (x) held in book entry form subject to the Company's instructions until any restrictions relating to the Restricted Stock Award lapse; or (y) evidenced by a certificate, which certificate will be held in such form and manner as determined by the Board. The terms and conditions of

Restricted Stock Award Agreements may change from time to time, and the terms and conditions of separate Restricted Stock Award Agreements need not be identical. Each Restricted Stock Award Agreement will conform to (through incorporation of the provisions hereof by reference in the agreement or otherwise) the substance of each of the following provisions:

- **(i)** Consideration. A Restricted Stock Award may be awarded in consideration for (A) cash, check, bank draft or money order payable to the Company, (B) past services to the Company or an Affiliate, or (C) any other form of legal consideration that may be acceptable to the Board, in its sole discretion, and permissible under applicable law.
- **(ii) Vesting.** Shares of Common Stock awarded under the Restricted Stock Award Agreement may be subject to forfeiture to the Company in accordance with a vesting schedule to be determined by the Board.
- **(iii) Termination of Participant's Continuous Service.** If a Participant's Continuous Service terminates, the Company may receive through a forfeiture condition or a repurchase right any or all of the shares of Common Stock held by the Participant that have not vested as of the date of termination of Continuous Service under the terms of the Restricted Stock Award Agreement.
- **(iv) Transferability.** Rights to acquire shares of Common Stock under the Restricted Stock Award Agreement will be transferable by the Participant only upon such terms and conditions as are set forth in the Restricted Stock Award Agreement, as the Board will determine in its sole discretion, so long as Common Stock awarded under the Restricted Stock Award Agreement remains subject to the terms of the Restricted Stock Award Agreement.
- **(v) Dividends.** A Restricted Stock Award Agreement may provide that any dividends paid on Restricted Stock will be subject to the same vesting and forfeiture restrictions as apply to the shares subject to the Restricted Stock Award to which they relate.
- **(b) Restricted Stock Unit Awards.** Each Restricted Stock Unit Award Agreement will be in such form and will contain such terms and conditions as the Board will deem appropriate. The terms and conditions of Restricted Stock Unit Award Agreements may change from time to time, and the terms and conditions of separate Restricted Stock Unit Award Agreements need not be identical. Each Restricted Stock Unit Award Agreement will conform to (through incorporation of the provisions hereof by reference in the Agreement or otherwise) the substance of each of the following provisions:
- **(i) Consideration.** At the time of grant of a Restricted Stock Unit Award, the Board will determine the consideration, if any, to be paid by the Participant upon delivery of each share of Common Stock subject to the Restricted Stock Unit Award. The consideration to be paid (if any) by the Participant for each share of Common Stock subject to a Restricted Stock Unit Award may be paid in any form of legal consideration that may be acceptable to the Board, in its sole discretion, and permissible under applicable law.
- **(ii) Vesting.** At the time of the grant of a Restricted Stock Unit Award, the Board may impose such restrictions on or conditions to the vesting of the Restricted Stock Unit Award as it, in its sole discretion, deems appropriate.

- **(iii) Payment.** A Restricted Stock Unit Award may be settled by the delivery of shares of Common Stock, their cash equivalent, any combination thereof or in any other form of consideration, as determined by the Board and contained in the Restricted Stock Unit Award Agreement.
- **(iv)** Additional Restrictions. At the time of the grant of a Restricted Stock Unit Award, the Board, as it deems appropriate, may impose such restrictions or conditions that delay the delivery of the shares of Common Stock (or their cash equivalent) subject to a Restricted Stock Unit Award to a time after the vesting of such Restricted Stock Unit Award.
- **(v) Dividend Equivalents.** Dividend equivalents may be credited in respect of shares of Common Stock covered by a Restricted Stock Unit Award, as determined by the Board and contained in the Restricted Stock Unit Award Agreement. At the sole discretion of the Board, such dividend equivalents may be converted into additional shares of Common Stock covered by the Restricted Stock Unit Award in such manner as determined by the Board. Any additional shares covered by the Restricted Stock Unit Award credited by reason of such dividend equivalents will be subject to all of the same terms and conditions of the underlying Restricted Stock Unit Award Agreement to which they relate.
- **(vi) Termination of Participant's Continuous Service.** Except as otherwise provided in the applicable Restricted Stock Unit Award Agreement, such portion of the Restricted Stock Unit Award that has not vested will be forfeited upon the Participant's termination of Continuous Service.

# (c) Performance Awards.

- (i) Performance Stock Awards. A Performance Stock Award is a Stock Award (covering a number of shares not in excess of that set forth in Section 3(d) above) that is payable (including that may be granted, may vest or may be exercised) contingent upon the attainment during a Performance Period of certain Performance Goals. A Performance Stock Award may, but need not, require the Participant's completion of a specified period of Continuous Service. The length of any Performance Period, the Performance Goals to be achieved during the Performance Period, and the measure of whether and to what degree such Performance Goals have been attained will be conclusively determined by the Committee (or, if not required for compliance with Section 162(m) of the Code, the Board), in its sole discretion. In addition, to the extent permitted by applicable law and the applicable Award Agreement, the Board may determine that cash may be used in payment of Performance Stock Awards.
- (ii) Performance Cash Awards. A Performance Cash Award is a cash award (for a dollar value not in excess of that set forth in Section 3(d) above) that is payable contingent upon the attainment during a Performance Period of certain Performance Goals. A Performance Cash Award may also require the completion of a specified period of Continuous Service. At the time of grant of a Performance Cash Award, the length of any Performance Period, the Performance Goals to be achieved during the Performance Period, and the measure of whether and to what degree such Performance Goals have been attained will be conclusively determined by the Committee (or, if not required for compliance with Section 162(m) of the Code, the Board), in its sole discretion. The Board may specify the form of payment of Performance Cash Awards, which

may be cash or other property, or may provide for a Participant to have the option for his or her Performance Cash Award, or such portion thereof as the Board may specify, to be paid in whole or in part in cash or other property.

- **(iii) Board Discretion.** The Board retains the discretion to reduce or eliminate the compensation or economic benefit due upon attainment of Performance Goals and to define the manner of calculating the Performance Criteria it selects to use for a Performance Period. Partial achievement of the specified criteria may result in the payment or vesting corresponding to the degree of achievement as specified in the Stock Award Agreement or the written terms of a Performance Cash Award.
- **(iv)** Section 162(m) Compliance. Unless otherwise permitted in compliance with the requirements of Section 162(m) of the Code with respect to an Award intended to qualify as "performance-based compensation" thereunder, the Committee will establish the Performance Goals applicable to, and the formula for calculating the amount payable under, the Award no later than the earlier of (a) the date 90 days after the commencement of the applicable Performance Period, and (b) the date on which 25% of the Performance Period has elapsed, and in any event at a time when the achievement of the applicable Performance Goals remains substantially uncertain. Prior to the payment of any compensation under an Award intended to qualify as "performance-based compensation" under Section 162(m) of the Code, the Committee will certify the extent to which any Performance Goals and any other material terms under such Award have been satisfied (other than in cases where such Performance Goals relate solely to the increase in the value of the Common Stock). Notwithstanding satisfaction of, or completion of any Performance Goals, the number of shares of Common Stock, Options, cash or other benefits granted, issued, retainable and/or vested under an Award on account of satisfaction of such Performance Goals may be reduced by the Committee on the basis of such further considerations as the Committee, in its sole discretion, will determine.
- **(d) Other Stock Awards**. Other forms of Stock Awards valued in whole or in part by reference to, or otherwise based on, Common Stock, including the appreciation in value thereof (e.g., options or stock rights with an exercise price or strike price less than 100% of the Fair Market Value of the Common Stock at the time of grant) may be granted either alone or in addition to Stock Awards provided for under Section 5 and the preceding provisions of this Section 6. Subject to the provisions of the Plan, the Board will have sole and complete authority to determine the persons to whom and the time or times at which such Other Stock Awards will be granted, the number of shares of Common Stock (or the cash equivalent thereof) to be granted pursuant to such Other Stock Awards and all other terms and conditions of such Other Stock Awards.

### 7. COVENANTS OF THE COMPANY.

- **(a) Availability of Shares.** The Company will keep available at all times the number of shares of Common Stock reasonably required to satisfy then-outstanding Awards.
- **(b) Securities Law Compliance.** The Company will seek to obtain from each regulatory commission or agency having jurisdiction over the Plan such authority as may be required to grant Stock Awards and to issue and sell shares of Common Stock upon exercise of the Stock Awards; *provided*, *however*, that this undertaking will not require the Company to

register under the Securities Act the Plan, any Stock Award or any Common Stock issued or issuable pursuant to any such Stock Award. If, after reasonable efforts and at a reasonable cost, the Company is unable to obtain from any such regulatory commission or agency the authority that counsel for the Company deems necessary for the lawful issuance and sale of Common Stock under the Plan, the Company will be relieved from any liability for failure to issue and sell Common Stock upon exercise of such Stock Awards unless and until such authority is obtained. A Participant will not be eligible for the grant of an Award or the subsequent issuance of cash or Common Stock pursuant to the Award if such grant or issuance would be in violation of any applicable securities law.

**(c) No Obligation to Notify or Minimize Taxes.** The Company will have no duty or obligation to any Participant to advise such holder as to the time or manner of exercising such Stock Award. Furthermore, the Company will have no duty or obligation to warn or otherwise advise such holder of a pending termination or expiration of an Award or a possible period in which the Award may not be exercised. The Company has no duty or obligation to minimize the tax consequences of an Award to the holder of such Award.

# 8. MISCELLANEOUS.

- **(a) Use of Proceeds from Sales of Common Stock.** Proceeds from the sale of shares of Common Stock pursuant to Awards will constitute general funds of the Company.
- **(b)** Corporate Action Constituting Grant of Awards. Corporate action constituting a grant by the Company of an Award to any Participant will be deemed completed as of the date of such corporate action, unless otherwise determined by the Board, regardless of when the instrument, certificate, or letter evidencing the Award is communicated to, or actually received or accepted by, the Participant. In the event that the corporate records (e.g., Board consents, resolutions or minutes) documenting the corporate action constituting the grant contain terms (e.g., exercise price, vesting schedule or number of shares) that are inconsistent with those in the Award Agreement or related grant documents as a result of a clerical error in the papering of the Award Agreement or related grant documents, the corporate records will control and the Participant will have no legally binding right to the incorrect term in the Award Agreement or related grant documents.
- **(c) Stockholder Rights.** No Participant will be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Common Stock subject to an Award unless and until (i) such Participant has satisfied all requirements for exercise of, or the issuance of shares of Common Stock under, the Award pursuant to its terms, and (ii) the issuance of the Common Stock subject to such Award has been entered into the books and records of the Company.
- (d) No Employment or Other Service Rights. Nothing in the Plan, any Award Agreement or any other instrument executed thereunder or in connection with any Award granted pursuant thereto will confer upon any Participant any right to continue to serve the Company or an Affiliate in the capacity in effect at the time the Award was granted or will affect the right of the Company or an Affiliate to terminate (i) the employment of an Employee with or without notice and with or without cause, (ii) the service of a Consultant pursuant to the terms of such

Consultant's agreement with the Company or an Affiliate, or (iii) the service of a Director pursuant to the bylaws of the Company or an Affiliate, and any applicable provisions of the corporate law of the state in which the Company or the Affiliate is incorporated, as the case may be.

- **(e) Change in Time Commitment.** In the event a Participant's regular level of time commitment in the performance of his or her services for the Company and any Affiliates is reduced (for example, and without limitation, if the Participant is an Employee of the Company and the Employee has a change in status from a full-time Employee to a part-time Employee or takes an extended leave of absence) after the date of grant of any Award to the Participant, the Board has the right in its sole discretion to (x) make a corresponding reduction in the number of shares or cash amount subject to any portion of such Award that is scheduled to vest or become payable after the date of such change in time commitment, and (y) in lieu of or in combination with such a reduction, extend the vesting or payment schedule applicable to such Award. In the event of any such reduction, the Participant will have no right with respect to any portion of the Award that is so reduced or extended.
- **(f) Incentive Stock Option Limitations.** To the extent that the aggregate Fair Market Value (determined at the time of grant) of Common Stock with respect to which Incentive Stock Options are exercisable for the first time by any Optionholder during any calendar year (under all plans of the Company and any Affiliates) exceeds \$100,000 (or such other limit established in the Code) or otherwise does not comply with the rules governing Incentive Stock Options, the Options or portions thereof that exceed such limit (according to the order in which they were granted) or otherwise do not comply with such rules will be treated as Nonstatutory Stock Options, notwithstanding any contrary provision of the applicable Option Agreement(s).
- Investment Assurances. The Company may require a Participant, as a condition of exercising or (g) acquiring Common Stock under any Award, (i) to give written assurances satisfactory to the Company as to the Participant's knowledge and experience in financial and business matters and/or to employ a purchaser representative reasonably satisfactory to the Company who is knowledgeable and experienced in financial and business matters and that such Participant is capable of evaluating, alone or together with the purchaser representative, the merits and risks of exercising the Award; and (ii) to give written assurances satisfactory to the Company stating that the Participant is acquiring Common Stock subject to the Award for the Participant's own account and not with any present intention of selling or otherwise distributing the Common Stock. The foregoing requirements, and any assurances given pursuant to such requirements, will be inoperative if (A) the issuance of the shares upon the exercise or acquisition of Common Stock under the Award has been registered under a then currently effective registration statement under the Securities Act, or (B) as to any particular requirement, a determination is made by counsel for the Company that such requirement need not be met in the circumstances under the then applicable securities laws. The Company may, upon advice of counsel to the Company, place legends on stock certificates issued under the Plan as such counsel deems necessary or appropriate in order to comply with applicable securities laws, including, but not limited to, legends restricting the transfer of the Common Stock.
- **(h) Withholding Obligations.** Unless prohibited by the terms of an Award Agreement, the Company may, in its sole discretion, satisfy any federal, state or local tax withholding obligation relating to an Award by any of the following means or by a combination

of such means: (i) causing the Participant to tender a cash payment; (ii) withholding shares of Common Stock from the shares of Common Stock issued or otherwise issuable to the Participant in connection with the Award; *provided*, *however*, that no shares of Common Stock are withheld with a value exceeding the minimum amount of tax required to be withheld by law (or such lesser amount as may be necessary to avoid classification of the Stock Award as a liability for financial accounting purposes); (iii) withholding cash from an Award settled in cash; (iv) withholding payment from any amounts otherwise payable to the Participant; or (v) by such other method as may be set forth in the Award Agreement.

- **(i) Electronic Delivery.** Any reference herein to a "written" agreement or document will include any agreement or document delivered electronically, filed publicly at <a href="https://www.sec.gov">www.sec.gov</a> (or any successor website thereto) or posted on the Company's intranet (or other shared electronic medium controlled by the Company to which the Participant has access).
- (j) Deferrals. To the extent permitted by applicable law, the Board, in its sole discretion, may determine that the delivery of Common Stock or the payment of cash, upon the exercise, vesting or settlement of all or a portion of any Award may be deferred and may establish programs and procedures for deferral elections to be made by Participants. Deferrals by Participants will be made in accordance with Section 409A of the Code. Consistent with Section 409A of the Code, the Board may provide for distributions while a Participant is still an employee or otherwise providing services to the Company. The Board is authorized to make deferrals of Awards and determine when, and in what annual percentages, Participants may receive payments, including lump sum payments, following the Participant's termination of Continuous Service, and implement such other terms and conditions consistent with the provisions of the Plan and in accordance with applicable law.
- **Compliance with Section 409A of the Code.** Unless otherwise expressly provided for in an Award Agreement, the Plan and Award Agreements will be interpreted to the greatest extent possible in a manner that makes the Plan and the Awards granted hereunder exempt from Section 409A of the Code, and, to the extent not so exempt, in compliance with Section 409A of the Code. If the Board determines that any Award granted hereunder is not exempt from and is therefore subject to Section 409A of the Code, the Award Agreement evidencing such Award will incorporate the terms and conditions necessary to avoid the consequences specified in Section 409A(a)(1) of the Code, and to the extent an Award Agreement is silent on terms necessary for compliance, such terms are hereby incorporated by reference into the Award Agreement. Notwithstanding anything to the contrary in this Plan (and unless the Award Agreement specifically provides otherwise), if the shares of Common Stock are publicly traded, and if a Participant holding an Award that constitutes "deferred compensation" under Section 409A of the Code is a "specified employee" for purposes of Section 409A of the Code, no distribution or payment of any amount that is due because of a "separation from service" (as defined in Section 409A of the Code without regard to alternative definitions thereunder) will be issued or paid before the date that is six months following the date of such Participant's "separation from service" (as defined in Section 409A of the Code without regard to alternative definitions thereunder) or, if earlier, the date of the Participant's death, unless such distribution or payment can be made in a manner that complies with Section 409A of the Code, and any amounts so deferred will be paid in a lump sum on the day after such six month period elapses, with the balance paid thereafter on the original schedule.

(I) Clawback/Recovery. All Awards granted under the Plan will be subject to recoupment in accordance with any clawback policy that the Company is required to adopt pursuant to the listing standards of any national securities exchange or association on which the Company's securities are listed or as is otherwise required by the Dodd-Frank Wall Street Reform and Consumer Protection Act or other applicable law. In addition, the Board may impose such other clawback, recovery or recoupment provisions in an Award Agreement as the Board determines necessary or appropriate, including but not limited to a reacquisition right in respect of previously acquired shares of Common Stock or other cash or property upon the occurrence of an event constituting Cause. No recovery of compensation under such a clawback policy will be an event giving rise to a right to resign for "good reason" or "constructive termination" (or similar term) under any agreement with the Company.

# 9. ADJUSTMENTS UPON CHANGES IN COMMON STOCK; OTHER CORPORATE EVENTS.

- (a) Capitalization Adjustments. In the event of a Capitalization Adjustment, the Board will appropriately and proportionately adjust: (i) the class(es) and maximum number of securities subject to the Plan pursuant to Section 3(a), (ii) the class(es) and maximum number of securities that may be issued pursuant to the exercise of Incentive Stock Options pursuant to Section 3(c), (iii) the class(es) and maximum number of securities that may be awarded to any person pursuant to Sections 3(d), and (iv) the class(es) and number of securities and price per share of stock subject to outstanding Stock Awards. The Board will make such adjustments, and its determination will be final, binding and conclusive.
- **(b) Dissolution or Liquidation.** Except as otherwise provided in the Stock Award Agreement, in the event of a dissolution or liquidation of the Company, all outstanding Stock Awards (other than Stock Awards consisting of vested and outstanding shares of Common Stock not subject to a forfeiture condition or the Company's right of repurchase) will terminate immediately prior to the completion of such dissolution or liquidation, and the shares of Common Stock subject to the Company's repurchase rights or subject to a forfeiture condition may be repurchased or reacquired by the Company notwithstanding the fact that the holder of such Stock Award is providing Continuous Service; *provided*, *however*, that the Board may, in its sole discretion, cause some or all Stock Awards to become fully vested, exercisable and/or no longer subject to repurchase or forfeiture (to the extent such Stock Awards have not previously expired or terminated) before the dissolution or liquidation is completed but contingent on its completion.
- **(c) Corporate Transaction.** The following provisions will apply to Stock Awards in the event of a Corporate Transaction unless otherwise provided in the instrument evidencing the Stock Award or any other written agreement between the Company or any Affiliate and the Participant or unless otherwise expressly provided by the Board at the time of grant of a Stock Award. In the event of a Corporate Transaction, then, notwithstanding any other provision of the Plan, the Board will take one or more of the following actions with respect to Stock Awards, contingent upon the closing or completion of the Corporate Transaction:
- (i) arrange for the surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company) to assume or continue the Stock Award or to substitute a similar stock award for the Stock Award (including, but not limited to, an award to

acquire the same consideration paid to the stockholders of the Company pursuant to the Corporate Transaction);

- (ii) arrange for the assignment of any reacquisition or repurchase rights held by the Company in respect of Common Stock issued pursuant to the Stock Award to the surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company);
- (iii) accelerate the vesting, in whole or in part, of the Stock Award (and, if applicable, the time at which the Stock Award may be exercised) to a date prior to the effective time of such Corporate Transaction as the Board determines (or, if the Board does not determine such a date, to the date that is five days prior to the effective date of the Corporate Transaction), with such Stock Award terminating if not exercised (if applicable) at or prior to the effective time of the Corporate Transaction;
- **(iv)** arrange for the lapse, in whole or in part, of any reacquisition or repurchase rights held by the Company with respect to the Stock Award;
- **(v)** cancel or arrange for the cancellation of the Stock Award, to the extent not vested or not exercised prior to the effective time of the Corporate Transaction, in exchange for such cash consideration, if any, as the Board, in its sole discretion, may consider appropriate; and
- (vi) make a payment, in such form as may be determined by the Board equal to the excess, if any, of (A) the value of the property the Participant would have received upon the exercise of the Stock Award immediately prior to the effective time of the Corporate Transaction, over (B) any exercise price payable by such holder in connection with such exercise.

The Board need not take the same action or actions with respect to all Stock Awards or portions thereof or with respect to all Participants. The Board may take different actions with respect to the vested and unvested portions of a Stock Award.

**(d) Change in Control.** A Stock Award may be subject to additional acceleration of vesting and exercisability upon or after a Change in Control as may be provided in the Stock Award Agreement for such Stock Award or as may be provided in any other written agreement between the Company or any Affiliate and the Participant, but in the absence of such provision, no such acceleration will occur.

# 10. PLAN TERM; EARLIER TERMINATION OR SUSPENSION OF THE PLAN.

The Board may suspend or terminate the Plan at any time. No Incentive Stock Options may be granted after the tenth anniversary of the earlier of (i) the date the Plan is adopted by the Board (the "*Adoption Date*"), or (ii) the date the Plan is approved by the stockholders of the Company. No Awards may be granted under the Plan while the Plan is suspended or after it is terminated.

# 11. EXISTENCE OF THE PLAN; TIMING OF FIRST GRANT OR EXERCISE.

The Plan will come into existence on the Adoption Date; *provided*, *however*, that no Award may be granted prior to the IPO Date. In addition, no Stock Award will be exercised (or, in the

case of a Restricted Stock Award, Restricted Stock Unit Award, Performance Stock Award, or Other Stock Award, no Stock Award will be granted) and no Performance Cash Award will be settled unless and until the Plan has been approved by the stockholders of the Company, which approval will be within 12 months after the date the Plan is adopted by the Board.

# 12. CHOICE OF LAW.

The law of the State of California will govern all questions concerning the construction, validity and interpretation of this Plan, without regard to that state's conflict of laws rules.

- **13. DEFINITIONS.** As used in the Plan, the following definitions will apply to the capitalized terms indicated below:
- **(a)** "*Affiliate*" means, at the time of determination, any "parent" or "subsidiary" of the Company as such terms are defined in Rule 405 of the Securities Act. The Board will have the authority to determine the time or times at which "parent" or "subsidiary" status is determined within the foregoing definition.
  - **(b)** "*Award*" means a Stock Award or a Performance Cash Award.
- **(c)** "*Award Agreement*" means a written agreement between the Company and a Participant evidencing the terms and conditions of an Award.
  - **(d)** "*Board*" means the Board of Directors of the Company.
- **(e)** "*Capital Stock*" means each and every class of common stock of the Company, regardless of the number of votes per share.
- (f) "Capitalization Adjustment" means any change that is made in, or other events that occur with respect to, the Common Stock subject to the Plan or subject to any Stock Award after the Adoption Date without the receipt of consideration by the Company through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, stock split, reverse stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or any similar equity restructuring transaction, as that term is used in Statement of Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any successor thereto). Notwithstanding the foregoing, the conversion of any convertible securities of the Company will not be treated as a Capitalization Adjustment.
- (g) "Cause" will have the meaning ascribed to such term in any written agreement between the Participant and the Company defining such term and, in the absence of such agreement, such term means, with respect to a Participant, the occurrence of any of the following events: (i) such Participant's failure to satisfactorily perform his or her duties to the Company; (ii) such Participant's commission of an act of misconduct or dishonesty that injures or is potentially injurious to the business, reputation or business relationships of the Company; (iii) such Participant's conviction of, or pleading guilty or nolo contendere to, a felony; (iv) such Participant's commission of any act of fraud against the Company or such Participant's use or misappropriation for his or her personal use or benefit of any funds or properties of the Company;

- (v) such Participant's refusal or failure to follow lawful directions of the Company after written notice thereof; or (vi) such Participant's engaging or in any manner participating in any activity which is directly competitive with or injurious or potentially injurious to the Company or which violates any material provisions of such Participant's Proprietary Information and Inventions Agreement or similar agreement with the Company after written notice thereof. The determination that a termination is for Cause shall be made by the Company, in its sole, good faith and exclusive judgment and discretion. Any determination by the Company that the Continuous Service of a Participant was terminated with or without Cause for the purposes of outstanding Awards held by such Participant shall have no effect upon any determination of the rights or obligations of the Company or such Participant for any other purpose.
- **(h)** "*Change in Control*" means the occurrence, in a single transaction or in a series of related transactions, of any one or more of the following events:
- any Exchange Act Person becomes the Owner, directly or indirectly, of securities of the Company representing more than 50% of the combined voting power of the Company's then outstanding securities other than by virtue of a merger, consolidation or similar transaction. Notwithstanding the foregoing, a Change in Control will not be deemed to occur (A) on account of the acquisition of securities of the Company directly from the Company. (B) on account of the acquisition of securities of the Company by an investor, any affiliate thereof or any other Exchange Act Person that acquires the Company's securities in a transaction or series of related transactions the primary purpose of which is to obtain financing for the Company through the issuance of equity securities, (C) on account of the acquisition of securities of the Company by any individual who is, on the IPO Date, either an executive officer or a Director (either, an "IPO Investor") and/or any entity in which an IPO Investor has a direct or indirect interest (whether in the form of voting rights or participation in profits or capital contributions) of more than 50% (collectively, the "IPO Entities") or on account of the IPO Entities continuing to hold shares that come to represent more than 50% of the combined voting power of the Company's then outstanding securities as a result of the conversion of any class of the Company's securities into another class of the Company's securities having a different number of votes per share pursuant to the conversion provisions set forth in the Company's Amended and Restated Certificate of Incorporation; or (D) solely because the level of Ownership held by any Exchange Act Person (the "Subject Person") exceeds the designated percentage threshold of the outstanding voting securities as a result of a repurchase or other acquisition of voting securities by the Company reducing the number of shares outstanding, provided that if a Change in Control would occur (but for the operation of this sentence) as a result of the acquisition of voting securities by the Company, and after such share acquisition, the Subject Person becomes the Owner of any additional voting securities that, assuming the repurchase or other acquisition had not occurred, increases the percentage of the then outstanding voting securities Owned by the Subject Person over the designated percentage threshold, then a Change in Control will be deemed to occur;
- (ii) there is consummated a merger, consolidation or similar transaction involving (directly or indirectly) the Company and, immediately after the consummation of such merger, consolidation or similar transaction, the stockholders of the Company immediately prior thereto do not Own, directly or indirectly, either (A) outstanding voting securities representing more than 50% of the combined outstanding voting power of the surviving Entity in such merger, consolidation or similar transaction or (B) more than 50% of the combined outstanding voting

power of the parent of the surviving Entity in such merger, consolidation or similar transaction, in each case in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such transaction; *provided*, *however*, that a merger, consolidation or similar transaction will not constitute a Change in Control under this prong of the definition if the outstanding voting securities representing more than 50% of the combined voting power of the surviving Entity or its parent are owned by the IPO Entities;

- (iii) there is consummated a sale, lease, exclusive license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries, other than a sale, lease, license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries to an Entity, more than 50% of the combined voting power of the voting securities of which are Owned by stockholders of the Company in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such sale, lease, license or other disposition; *provided*, *however*, that a sale, lease, exclusive license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries will not constitute a Change in Control under this prong of the definition if the outstanding voting securities representing more than 50% of the combined voting power of the acquiring Entity or its parent are owned by the IPO Entities; or
- **(iv)** the stockholders of the Company approve or the Board approves a plan of complete dissolution or liquidation of the Company, or a complete dissolution or liquidation of the Company will otherwise occur, except for a liquidation into a parent corporation.

Notwithstanding the foregoing definition or any other provision of the Plan, the term Change in Control will not include a sale of assets, merger or other transaction effected exclusively for the purpose of changing the domicile of the Company and the definition of Change in Control (or any analogous term) in an individual written agreement between the Company or any Affiliate and the Participant will supersede the foregoing definition with respect to Awards subject to such agreement; *provided*, *however*, that if no definition of Change in Control or any analogous term is set forth in such an individual written agreement, the foregoing definition will apply.

- **(i)** "*Code*" means the Internal Revenue Code of 1986, as amended, including any applicable regulations and guidance thereunder.
- **(j)** "*Committee*" means a committee of one or more Directors to whom authority has been delegated by the Board in accordance with Section 2(c).
- **(k)** "Common Stock" means, as of the IPO Date, the common stock of the Company, having one vote per share.
  - (l) "*Company*" means Xencor, Inc., a Delaware corporation.
- **(m)** "*Consultant*" means any person, including an advisor, who is (i) engaged by the Company or an Affiliate to render consulting or advisory services and is compensated for such services, or (ii) serving as a member of the board of directors of an Affiliate and is compensated for such services. However, service solely as a Director, or payment of a fee for such service, will not cause a Director to be considered a "Consultant" for purposes of the Plan. Notwithstanding the foregoing, a person is treated as a Consultant under this Plan only if a Form S-8 Registration

Statement under the Securities Act is available to register either the offer or the sale of the Company's securities to such person.

- (n) "Continuous Service" means that the Participant's service with the Company or an Affiliate, whether as an Employee, Director or Consultant, is not interrupted or terminated. A change in the capacity in which the Participant renders service to the Company or an Affiliate as an Employee, Consultant or Director or a change in the entity for which the Participant renders such service, provided that there is no interruption or termination of the Participant's service with the Company or an Affiliate, will not terminate a Participant's Continuous Service; provided, however, that if the Entity for which a Participant is rendering services ceases to qualify as an Affiliate, as determined by the Board, in its sole discretion, such Participant's Continuous Service will be considered to have terminated on the date such Entity ceases to qualify as an Affiliate. To the extent permitted by law, the Board or the chief executive officer of the Company, in that party's sole discretion, may determine whether Continuous Service will be considered interrupted in the case of (i) any leave of absence approved by the Board or chief executive officer, including sick leave, military leave or any other personal leave, or (ii) transfers between the Company, an Affiliate, or their successors. Notwithstanding the foregoing, a leave of absence will be treated as Continuous Service for purposes of vesting in an Award only to such extent as may be provided in the Company's leave of absence policy, in the written terms of any leave of absence agreement or policy applicable to the Participant, or as otherwise required by law.
- **(o)** "*Corporate Transaction*" means the consummation, in a single transaction or in a series of related transactions, of any one or more of the following events:
- (i) a sale or other disposition of all or substantially all, as determined by the Board, in its sole discretion, of the consolidated assets of the Company and its Subsidiaries;
  - (ii) a sale or other disposition of at least 90% of the outstanding securities of the Company;
- (iii) a merger, consolidation or similar transaction following which the Company is not the surviving corporation; or
- **(iv)** a merger, consolidation or similar transaction following which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger, consolidation or similar transaction are converted or exchanged by virtue of the merger, consolidation or similar transaction into other property, whether in the form of securities, cash or otherwise.
  - **(p)** "*Covered Employee*" will have the meaning provided in Section 162(m)(3) of the Code.
  - **(q)** "*Director*" means a member of the Board.
- **(r)** "*Disability*" means, with respect to a Participant, the inability of such Participant to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment that can be expected to result in death or that has lasted or can be expected to last for a continuous period of not less than 12 months, as provided in Sections 22(e)(3) and

409A(a)(2)(c)(i) of the Code, and will be determined by the Board on the basis of such medical evidence as the Board deems warranted under the circumstances.

- **(s)** "*Employee*" means any person employed by the Company or an Affiliate. However, service solely as a Director, or payment of a fee for such services, will not cause a Director to be considered an "Employee" for purposes of the Plan.
  - **(t)** "*Entity*" means a corporation, partnership, limited liability company or other entity.
- **(u)** "*Exchange Act*" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.
- **(v)** "Exchange Act Person" means any natural person, Entity or "group" (within the meaning of Section 13(d) or 14(d) of the Exchange Act), except that "Exchange Act Person" will not include (i) the Company or any Subsidiary of the Company, (ii) any employee benefit plan of the Company or any Subsidiary of the Company or any Subsidiary of the Company, (iii) an underwriter temporarily holding securities pursuant to a registered public offering of such securities, (iv) an Entity Owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their Ownership of stock of the Company; or (v) any natural person, Entity or "group" (within the meaning of Section 13(d) or 14(d) of the Exchange Act) that, as of the IPO Date, is the Owner, directly or indirectly, of securities of the Company representing more than 50% of the combined voting power of the Company's then outstanding securities.
  - (w) "Fair Market Value" means, as of any date, the value of the Common Stock determined as follows:
- (i) If the Common Stock is listed on any established stock exchange or traded on any established market, the Fair Market Value of a share of Common Stock will be, unless otherwise determined by the Board, the closing sales price for such stock as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) on the date of determination, as reported in a source the Board deems reliable.
- **(ii)** Unless otherwise provided by the Board, if there is no closing sales price for the Common Stock on the date of determination, then the Fair Market Value will be the closing selling price on the last preceding date for which such quotation exists.
- **(iii)** In the absence of such markets for the Common Stock, the Fair Market Value will be determined by the Board in good faith and in a manner that complies with Sections 409A and 422 of the Code.
- (x) "*Incentive Stock Option*" means an option granted pursuant to Section 5 of the Plan that is intended to be, and qualifies as, an "incentive stock option" within the meaning of Section 422 of the Code.
- **(y)** "*IPO Date*" means the date of the underwriting agreement between the Company and the underwriter(s) managing the initial public offering of the Common Stock, pursuant to which the Common Stock is priced for the initial public offering.

- (z) "Non-Employee Director" means a Director who either (i) is not a current employee or officer of the Company or an Affiliate, does not receive compensation, either directly or indirectly, from the Company or an Affiliate for services rendered as a consultant or in any capacity other than as a Director (except for an amount as to which disclosure would not be required under Item 404(a) of Regulation S-K promulgated pursuant to the Securities Act ("Regulation S-K")), does not possess an interest in any other transaction for which disclosure would be required under Item 404(a) of Regulation S-K, and is not engaged in a business relationship for which disclosure would be required pursuant to Item 404(b) of Regulation S-K; or (ii) is otherwise considered a "non-employee director" for purposes of Rule 16b-3.
- **(aa)** "*Nonstatutory Stock Option*" means any Option granted pursuant to Section 5 of the Plan that does not qualify as an Incentive Stock Option.
- **(bb)** "*Officer*" means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act.
- **(cc)** "*Option*" means an Incentive Stock Option or a Nonstatutory Stock Option to purchase shares of Common Stock granted pursuant to the Plan.
- **(dd)** "*Option Agreement*" means a written agreement between the Company and an Optionholder evidencing the terms and conditions of an Option grant. Each Option Agreement will be subject to the terms and conditions of the Plan.
- **(ee)** "*Optionholder*" means a person to whom an Option is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Option.
- **(ff)** "*Other Stock Award*" means an award based in whole or in part by reference to the Common Stock which is granted pursuant to the terms and conditions of Section 6(d).
- **(gg)** "*Other Stock Award Agreement*" means a written agreement between the Company and a holder of an Other Stock Award evidencing the terms and conditions of an Other Stock Award grant. Each Other Stock Award Agreement will be subject to the terms and conditions of the Plan.
- **(hh)** "*Outside Director*" means a Director who either (i) is not a current employee of the Company or an "affiliated corporation" (within the meaning of Treasury Regulations promulgated under Section 162(m) of the Code), is not a former employee of the Company or an "affiliated corporation" who receives compensation for prior services (other than benefits under a tax-qualified retirement plan) during the taxable year, has not been an officer of the Company or an "affiliated corporation," and does not receive remuneration from the Company or an "affiliated corporation," either directly or indirectly, in any capacity other than as a Director, or (ii) is otherwise considered an "outside director" for purposes of Section 162(m) of the Code.
- **(ii)** "Own," "Owned," "Owner," "Ownership" means a person or Entity will be deemed to "Own," to have "Owned," to be the "Owner" of, or to have acquired "Ownership" of securities if such person or Entity, directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise, has or shares voting power, which includes the power to vote or to direct the voting, with respect to such securities.

- **(jj)** "*Participant*" means a person to whom an Award is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Stock Award.
- **(kk)** "*Performance Cash Award*" means an award of cash granted pursuant to the terms and conditions of Section 6(c)(ii).
- (11)"Performance Criteria" means the one or more criteria that the Board will select for purposes of establishing the Performance Goals for a Performance Period. The Performance Criteria that will be used to establish such Performance Goals may be based on any one of, or combination of, the following as determined by the Board: (i) earnings (including earnings per share and net earnings); (ii) earnings before interest, taxes and depreciation; (iii) earnings before interest, taxes, depreciation and amortization; (iv) earnings before interest, taxes, depreciation, amortization and legal settlements; (v) earnings before interest, taxes, depreciation, amortization, legal settlements and other income (expense); (vi) earnings before interest, taxes, depreciation, amortization, legal settlements, other income (expense) and stock-based compensation; (vii) earnings before interest, taxes, depreciation, amortization, legal settlements, other income (expense), stock-based compensation and changes in deferred revenue; (viii) total stockholder return; (ix) return on equity or average stockholder's equity; (x) return on assets, investment, or capital employed; (xi) stock price; (xii) margin (including gross margin); (xiii) income (before or after taxes); (xiv) operating income: (xv) operating income after taxes; (xvi) pre-tax profit; (xvii) operating cash flow; (xviii) sales or revenue targets; (xix) increases in revenue or product revenue; (xx) expenses and cost reduction goals; (xxi) improvement in or attainment of working capital levels; (xxii) economic value added (or an equivalent metric); (xxiii) market share; (xxiv) cash flow; (xxv) cash flow per share; (xxvi) share price performance; (xxvii) debt reduction; (xxviii) implementation or completion of projects or processes; (xxix) user satisfaction; (xxx) stockholders' equity; (xxxi) capital expenditures; (xxxii) debt levels; (xxxiii) operating profit or net operating profit; (xxxiv) workforce diversity; (xxxv) growth of net income or operating income; (xxxvi) billings; (xxxvii) bookings; (xxxviii) the number of users, including but not limited to unique users; (xxxix) employee retention; (xl) initiation of phases of clinical trials and/or studies by specific dates; (xli) patient enrollment rates; (xlii) budget management; (xliii) submission to, or approval by, a regulatory body (including, but not limited to the U.S. Food and Drug Administration) of an applicable filing or a product candidate; (xliv) implementation or completion of projects or processes (including, without limitation, clinical trial initiation, clinical trial enrollment, clinical trial results, new and supplemental indications for existing products, regulatory filing submissions, regulatory filing acceptances, regulatory or advisory committee interactions, regulatory approvals, and product supply); (xlv) regulatory milestones; (xlvi) progress of internal research or clinical programs; (xlvii) progress of partnered programs; (xlviii) implementation or completion of projects and processes; (xlix) partner satisfaction; (1) timely completion of clinical trials; (li) submission of INDs and NDAs and other regulatory achievements; (lii) research progress, including the development of programs; (liii) strategic partnerships or transactions (including in-licensing and out-licensing of intellectual property; and (liv) and to the extent that an Award is not intended to comply with Section 162(m) of the Code, other measures of performance selected by the Board.

**(mm)** "*Performance Goals*" means, for a Performance Period, the one or more goals established by the Board for the Performance Period based upon the Performance Criteria. Performance Goals may be based on a Companywide basis, with respect to one or more business

units, divisions, Affiliates, or business segments, and in either absolute terms or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise by the Board (i) in the Award Agreement at the time the Award is granted or (ii) in such other document setting forth the Performance Goals at the time the Performance Goals are established, the Board will appropriately make adjustments in the method of calculating the attainment of Performance Goals for a Performance Period as follows: (1) to exclude restructuring and/or other nonrecurring charges; (2) to exclude exchange rate effects; (3) to exclude the effects of changes to generally accepted accounting principles; (4) to exclude the effects of any statutory adjustments to corporate tax rates; (5) to exclude the effects of any "extraordinary items" as determined under generally accepted accounting principles; (6) to exclude the dilutive effects of acquisitions or joint ventures; (7) to assume that any business divested by the Company achieved performance objectives at targeted levels during the balance of a Performance Period following such divestiture; (8) to exclude the effect of any change in the outstanding shares of common stock of the Company by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (9) to exclude the effects of stock based compensation and the award of bonuses under the Company's bonus plans; (10) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under generally accepted accounting principles; (11) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles; (12) to exclude the effect of any other unusual, non-recurring gain or loss or other extraordinary item; and (13) to exclude the effects of the timing of acceptance for review and/or approval of submissions to the Food and Drug Administration or any other regulatory body. In addition, the Board retains the discretion to reduce or eliminate the compensation or economic benefit due upon attainment of Performance Goals and to define the manner of calculating the Performance Criteria it selects to use for such Performance Period. Partial achievement of the specified criteria may result in the payment or vesting corresponding to the degree of achievement as specified in the Stock Award Agreement or the written terms of a Performance Cash Award.

- **(nn)** "*Performance Period*" means the period of time selected by the Board over which the attainment of one or more Performance Goals will be measured for the purpose of determining a Participant's right to and the payment of a Stock Award or a Performance Cash Award. Performance Periods may be of varying and overlapping duration, at the sole discretion of the Board.
- (oo) "Performance Stock Award" means a Stock Award granted under the terms and conditions of Section 6(c)(i).
  - **(pp)** "*Plan*" means this Xencor, Inc. 2013 Equity Incentive Plan.
- **(qq)** "*Restricted Stock Award*" means an award of shares of Common Stock which is granted pursuant to the terms and conditions of Section 6(a).
- **(rr)** "*Restricted Stock Award Agreement*" means a written agreement between the Company and a holder of a Restricted Stock Award evidencing the terms and conditions of a

Restricted Stock Award grant. Each Restricted Stock Award Agreement will be subject to the terms and conditions of the Plan.

- **(ss)** "*Restricted Stock Unit Award*" means a right to receive shares of Common Stock which is granted pursuant to the terms and conditions of Section 6(b).
- **(tt)** "*Restricted Stock Unit Award Agreement*" means a written agreement between the Company and a holder of a Restricted Stock Unit Award evidencing the terms and conditions of a Restricted Stock Unit Award grant. Each Restricted Stock Unit Award Agreement will be subject to the terms and conditions of the Plan.
- **(uu)** "*Rule 16b-3*" means Rule 16b-3 promulgated under the Exchange Act or any successor to Rule 16b-3, as in effect from time to time.
  - (vv) "Securities Act" means the Securities Act of 1933, as amended.
- **(ww)** "*Stock Appreciation Right*" or "*SAR*" means a right to receive the appreciation on Common Stock that is granted pursuant to the terms and conditions of Section 5.
- **(xx)** "*Stock Appreciation Right Agreement*" means a written agreement between the Company and a holder of a Stock Appreciation Right evidencing the terms and conditions of a Stock Appreciation Right Agreement will be subject to the terms and conditions of the Plan.
- **(yy)** "*Stock Award*" means any right to receive Common Stock granted under the Plan, including an Incentive Stock Option, a Nonstatutory Stock Option, a Restricted Stock Award, a Restricted Stock Unit Award, a Stock Appreciation Right, a Performance Stock Award or any Other Stock Award.
- **(zz)** "*Stock Award Agreement*" means a written agreement between the Company and a Participant evidencing the terms and conditions of a Stock Award grant. Each Stock Award Agreement will be subject to the terms and conditions of the Plan.
- **(aaa)** "Subsidiary" means, with respect to the Company, (i) any corporation of which more than 50% of the outstanding capital stock having ordinary voting power to elect a majority of the board of directors of such corporation (irrespective of whether, at the time, stock of any other class or classes of such corporation will have or might have voting power by reason of the happening of any contingency) is at the time, directly or indirectly, Owned by the Company, and (ii) any partnership, limited liability company or other entity in which the Company has a direct or indirect interest (whether in the form of voting or participation in profits or capital contribution) of more than 50%.
- **(bbb)** "*Ten Percent Stockholder*" means a person who Owns (or is deemed to Own pursuant to Section 424(d) of the Code) stock possessing more than 10% of the total combined voting power of all classes of stock of the Company or any Affiliate.

#### XENCOR, INC. 2013 EQUITY INCENTIVE PLAN

## OPTION AGREEMENT (INCENTIVE STOCK OPTION OR NONSTATUTORY STOCK OPTION)

Pursuant to your Stock Option Grant Notice ("*Grant Notice*") and this Option Agreement, Xencor, Inc. (the "*Company*") has granted you an option under its 2013 Equity Incentive Plan (the "*Plan*") to purchase the number of shares of the Company's Common Stock indicated in your Grant Notice at the exercise price indicated in your Grant Notice. The option is granted to you effective as of the date of grant set forth in the Grant Notice (the "*Date of Grant*"). If there is any conflict between the terms in this Option Agreement and the Plan, the terms of the Plan will control. Capitalized terms not explicitly defined in this Option Agreement or in the Grant Notice but defined in the Plan will have the same definitions as in the Plan.

The details of your option, in addition to those set forth in the Grant Notice and the Plan, are as follows:

- **1. VESTING.** Subject to the provisions contained herein, your option will vest as provided in your Grant Notice. Vesting will cease upon the termination of your Continuous Service.
- **2. NUMBER OF SHARES AND EXERCISE PRICE.** The number of shares of Common Stock subject to your option and your exercise price per share in your Grant Notice will be adjusted for Capitalization Adjustments.
- 3. **EXERCISE RESTRICTION FOR NON-EXEMPT EMPLOYEES.** If you are an Employee eligible for overtime compensation under the Fair Labor Standards Act of 1938, as amended (that is, a "*Non-Exempt Employee*"), and except as otherwise provided in the Plan, you may not exercise your option until you have completed at least six (6) months of Continuous Service measured from the Date of Grant, even if you have already been an employee for more than six (6) months. Consistent with the provisions of the Worker Economic Opportunity Act, you may exercise your option as to any vested portion prior to such six (6) month anniversary in the case of (i) your death or disability, (ii) a Corporate Transaction in which your option is not assumed, continued or substituted, (iii) a Change in Control or (iv) your termination of Continuous Service on your "retirement" (as defined in the Company's benefit plans).
- **4. EXERCISE PRIOR TO VESTING ("EARLY EXERCISE").** If permitted in your Grant Notice (*i.e.*, the "Exercise Schedule" indicates "Early Exercise Permitted") and subject to the provisions of your option, you may elect at any time that is both (i) during the period of your Continuous Service and (ii) during the term of your option, to exercise all or part of your option, including the unvested portion of your option; *provided*, *however*, that:
- **a.** a partial exercise of your option will be deemed to cover first vested shares of Common Stock and then the earliest vesting installment of unvested shares of Common Stock;

- **b.** any shares of Common Stock so purchased from installments that have not vested as of the date of exercise will be subject to the purchase option in favor of the Company as described in the Company's form of Early Exercise Stock Purchase Agreement;
- **c.** you will enter into the Company's form of Early Exercise Stock Purchase Agreement with a vesting schedule that will result in the same vesting as if no early exercise had occurred; and
- **d.** if your option is an Incentive Stock Option, then, to the extent that the aggregate Fair Market Value (determined at the Date of Grant) of the shares of Common Stock with respect to which your option plus all other Incentive Stock Options you hold are exercisable for the first time by you during any calendar year (under all plans of the Company and its Affiliates) exceeds one hundred thousand dollars (\$100,000), your option(s) or portions thereof that exceed such limit (according to the order in which they were granted) will be treated as Nonstatutory Stock Options.
- **5. METHOD OF PAYMENT.** You must pay the full amount of the exercise price for the shares you wish to exercise. You may pay the exercise price in cash or by check, bank draft or money order payable to the Company or in any other manner **permitted by your Grant Notice**, which may include one or more of the following:
- **a.** Provided that at the time of exercise the Common Stock is publicly traded, pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of Common Stock, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the aggregate exercise price to the Company from the sales proceeds. This manner of payment is also known as a "broker-assisted exercise", "same day sale", or "sell to cover".
- **b.** Provided that at the time of exercise the Common Stock is publicly traded, by delivery to the Company (either by actual delivery or attestation) of already-owned shares of Common Stock that are owned free and clear of any liens, claims, encumbrances or security interests, and that are valued at Fair Market Value on the date of exercise. "Delivery" for these purposes, in the sole discretion of the Company at the time you exercise your option, will include delivery to the Company of your attestation of ownership of such shares of Common Stock in a form approved by the Company. You may not exercise your option by delivery to the Company of Common Stock if doing so would violate the provisions of any law, regulation or agreement restricting the redemption of the Company's stock.
- **c.** If this option is a Nonstatutory Stock Option, subject to the consent of the Company at the time of exercise, by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Common Stock issued upon exercise of your option by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price. You must pay any remaining balance of the aggregate exercise price not satisfied by the "net exercise" in cash or other permitted form of payment. Shares of Common Stock will no longer be outstanding under your option and will not be exercisable thereafter if those shares (i) are used to pay the exercise price pursuant to the "net exercise," (ii) are delivered to you as a result of such exercise, and (iii) are withheld to satisfy your tax withholding obligations.

- **6. WHOLE SHARES.** You may exercise your option only for whole shares of Common Stock.
- **7. SECURITIES LAW COMPLIANCE.** In no event may you exercise your option unless the shares of Common Stock issuable upon exercise are then registered under the Securities Act or, if not registered, the Company has determined that your exercise and the issuance of the shares would be exempt from the registration requirements of the Securities Act. The exercise of your option also must comply with all other applicable laws and regulations governing your option, and you may not exercise your option if the Company determines that such exercise would not be in material compliance with such laws and regulations (including any restrictions on exercise required for compliance with Treas. Reg. 1.401(k)-1(d)(3), if applicable).
- **8. TERM.** You may not exercise your option before the Date of Grant or after the expiration of the option's term. The term of your option expires, subject to the provisions of Section 5(h) of the Plan, upon the earliest of the following:
  - **a.** immediately upon the termination of your Continuous Service for Cause;
- b. three (3) months after the termination of your Continuous Service for any reason other than Cause, your Disability or your death (except as otherwise provided in Section 8(d) below); provided, however, that if during any part of such three (3) month period your option is not exercisable solely because of the condition set forth in the section above relating to "Securities Law Compliance," your option will not expire until the earlier of the Expiration Date or until it has been exercisable for an aggregate period of three (3) months after the termination of your Continuous Service; provided further, if during any part of such three (3) month period, the sale of any Common Stock received upon exercise of your option would violate the Company's insider trading policy, then your option will not expire until the earlier of the Expiration Date or until it has been exercisable for an aggregate period of three (3) months after the termination of your Continuous Service during which the sale of the Common Stock received upon exercise of your option would not be in violation of the Company's insider trading policy. Notwithstanding the foregoing, if (i) you are a Non-Exempt Employee, (ii) your Continuous Service terminates within six (6) months after the Date of Grant, and (iii) you have vested in a portion of your option at the time of your termination of Continuous Service, your option will not expire until the earlier of (x) the later of (A) the date that is seven (7) months after the Date of Grant, and (B) the date that is three (3) months after the termination of your Continuous Service, and (y) the Expiration Date;
- **c.** twelve (12) months after the termination of your Continuous Service due to your Disability (except as otherwise provided in Section 8(d)) below;
- **d.** eighteen (18) months after your death if you die either during your Continuous Service or within three (3) months after your Continuous Service terminates for any reason other than Cause;
  - **e.** the Expiration Date indicated in your Grant Notice; or
  - **f.** the day before the tenth (10th) anniversary of the Date of Grant.

If your option is an Incentive Stock Option, note that to obtain the federal income tax advantages associated with an Incentive Stock Option, the Code requires that at all times beginning on the Date of Grant and ending on the day three (3) months before the date of your option's exercise, you must be an employee of the Company or an Affiliate, except in the event of your death or Disability. The Company has provided for extended exercisability of your option under certain circumstances for your benefit but cannot guarantee that your option will necessarily be treated as an Incentive Stock Option if you continue to provide services to the Company or an Affiliate as a Consultant or Director after your employment terminates or if you otherwise exercise your option more than three (3) months after the date your employment with the Company or an Affiliate terminates.

#### 9. EXERCISE.

- a. You may exercise the vested portion of your option (and the unvested portion of your option if your Grant Notice so permits) during its term by (i) delivering a Notice of Exercise (in a form designated by the Company) or completing such other documents and/or procedures designated by the Company for exercise and (ii) paying the exercise price and any applicable withholding taxes to the Company's Secretary, stock plan administrator, or such other person as the Company may designate, together with such additional documents as the Company may then require.
- **b.** By exercising your option you agree that, as a condition to any exercise of your option, the Company may require you to enter into an arrangement providing for the payment by you to the Company of any tax withholding obligation of the Company arising by reason of (i) the exercise of your option, (ii) the lapse of any substantial risk of forfeiture to which the shares of Common Stock are subject at the time of exercise, or (iii) the disposition of shares of Common Stock acquired upon such exercise.
- **c.** If your option is an Incentive Stock Option, by exercising your option you agree that you will notify the Company in writing within fifteen (15) days after the date of any disposition of any of the shares of the Common Stock issued upon exercise of your option that occurs within two (2) years after the Date of Grant or within one (1) year after such shares of Common Stock are transferred upon exercise of your option.
- **d.** By accepting your option you agree that you will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale, any shares of Common Stock or other securities of the Company held by you, for a period of one hundred eighty (180) days following the effective date of a registration statement of the Company filed under the Securities Act or such longer period as the underwriters or the Company will request to facilitate compliance with FINRA Rule 2711 or NYSE Member Rule 472 or any successor or similar rules—or regulation (the "*Lock-Up Period*"); *provided, however*, that nothing contained in this section will prevent the exercise of a repurchase option, if any, in favor of the Company during the Lock-Up Period. You further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. In order to enforce the foregoing covenant, the Company may impose stoptransfer instructions with respect to your shares of Common Stock until the end of such period.

You also agree that any transferee of any shares of Common Stock (or other securities) of the Company held by you will be bound by this Section 9(d). The underwriters of the Company's stock are intended third party beneficiaries of this Section 9(d) and will have the right, power and authority to enforce the provisions hereof as though they were a party hereto.

- **10. TRANSFERABILITY.** Except as otherwise provided in this Section 10, your option is not transferable, except by will or by the laws of descent and distribution, and is exercisable during your life only by you.
- **a. Certain Trusts.** Upon receiving written permission from the Board or its duly authorized designee, you may transfer your option to a trust if you are considered to be the sole beneficial owner (determined under Section 671 of the Code and applicable state law) while the option is held in the trust. You and the trustee must enter into transfer and other agreements required by the Company.
- **b. Domestic Relations Orders.** Upon receiving written permission from the Board or its duly authorized designee, and provided that you and the designated transferee enter into transfer and other agreements required by the Company, you may transfer your option pursuant to the terms of a domestic relations order, official marital settlement agreement or other divorce or separation instrument as permitted by Treasury Regulation 1.421-1(b) (2) that contains the information required by the Company to effectuate the transfer. You are encouraged to discuss the proposed terms of any division of this option with the Company prior to finalizing the domestic relations order or marital settlement agreement to help ensure the required information is contained within the domestic relations order or marital settlement agreement. If this option is an Incentive Stock Option, this option may be deemed to be a Nonstatutory Stock Option as a result of such transfer.
- **c. Beneficiary Designation.** Upon receiving written permission from the Board or its duly authorized designee, you may, by delivering written notice to the Company, in a form approved by the Company and any broker designated by the Company to handle option exercises, designate a third party who, on your death, will thereafter be entitled to exercise this option and receive the Common Stock or other consideration resulting from such exercise. In the absence of such a designation, your executor or administrator of your estate will be entitled to exercise this option and receive, on behalf of your estate, the Common Stock or other consideration resulting from such exercise.
- 11. OPTION NOT A SERVICE CONTRACT. Your option is not an employment or service contract, and nothing in your option will be deemed to create in any way whatsoever any obligation on your part to continue in the employ of the Company or an Affiliate, or of the Company or an Affiliate to continue your employment. In addition, nothing in your option will obligate the Company or an Affiliate, their respective stockholders, boards of directors, officers or employees to continue any relationship that you might have as a Director or Consultant for the Company or an Affiliate.

#### 12. WITHHOLDING OBLIGATIONS.

- a. At the time you exercise your option, in whole or in part, and at any time thereafter as requested by the Company, you hereby authorize withholding from payroll and any other amounts payable to you, and otherwise agree to make adequate provision for (including by means of a "same day sale" pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board to the extent permitted by the Company), any sums required to satisfy the federal, state, local and foreign tax withholding obligations of the Company or an Affiliate, if any, which arise in connection with the exercise of your option.
- b. If this option is a Nonstatutory Stock Option, then upon your request and subject to approval by the Company, and compliance with any applicable legal conditions or restrictions, the Company may withhold from fully vested shares of Common Stock otherwise issuable to you upon the exercise of your option a number of whole shares of Common Stock having a Fair Market Value, determined by the Company as of the date of exercise, not in excess of the minimum amount of tax required to be withheld by law (or such lower amount as may be necessary to avoid classification of your option as a liability for financial accounting purposes). If the date of determination of any tax withholding obligation is deferred to a date later than the date of exercise of your option, share withholding pursuant to the preceding sentence shall not be permitted unless you make a proper and timely election under Section 83(b) of the Code, covering the aggregate number of shares of Common Stock acquired upon such exercise with respect to which such determination is otherwise deferred, to accelerate the determination of such tax withholding obligation to the date of exercise of your option. Notwithstanding the filing of such election, shares of Common Stock shall be withheld solely from fully vested shares of Common Stock determined as of the date of exercise of your option that are otherwise issuable to you upon such exercise. Any adverse consequences to you arising in connection with such share withholding procedure shall be your sole responsibility.
- **c.** You may not exercise your option unless the tax withholding obligations of the Company and/or any Affiliate are satisfied. Accordingly, you may not be able to exercise your option when desired even though your option is vested, and the Company will have no obligation to issue a certificate for such shares of Common Stock or release such shares of Common Stock from any escrow provided for herein, if applicable, unless such obligations are satisfied.
- 13. TAX CONSEQUENCES. You hereby agree that the Company does not have a duty to design or administer the Plan or its other compensation programs in a manner that minimizes your tax liabilities. You will not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from your option or your other compensation. In particular, you acknowledge that this option is exempt from Section 409A of the Code only if the exercise price per share specified in the Grant Notice is at least equal to the "fair market value" per share of the Common Stock on the Date of Grant and there is no other impermissible deferral of compensation associated with the option.
- **14. NOTICES.** Any notices provided for in your option or the Plan will be given in writing (including electronically) and will be deemed effectively given upon receipt or, in the case of notices delivered by mail by the Company to you, five (5) days after deposit in the United States mail, postage prepaid, addressed to you at the last address you provided to the Company. The

Company may, in its sole discretion, decide to deliver any documents related to participation in the Plan and this option by electronic means or to request your consent to participate in the Plan by electronic means. By accepting this option, you consent to receive such documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

- 15. GOVERNING PLAN DOCUMENT. Your option is subject to all the provisions of the Plan, the provisions of which are hereby made a part of your option, and is further subject to all interpretations, amendments, rules and regulations, which may from time to time be promulgated and adopted pursuant to the Plan. If there is any conflict between the provisions of your option and those of the Plan, the provisions of the Plan will control. In addition, your option (and any compensation paid or shares issued under your option) is subject to recoupment in accordance with The Dodd—Frank Wall Street Reform and Consumer Protection Act and any implementing regulations thereunder, any clawback policy adopted by the Company and any compensation recovery policy otherwise required by applicable law.
- **16. OTHER DOCUMENTS.** You hereby acknowledge receipt of and the right to receive a document providing the information required by Rule 428(b)(1) promulgated under the Securities Act, which includes the Plan prospectus. In addition, you acknowledge receipt of the Company's policy permitting certain individuals to sell shares only during certain "window" periods and the Company's insider trading policy, in effect from time to time.
- 17. EFFECT ON OTHER EMPLOYEE BENEFIT PLANS. The value of this option will not be included as compensation, earnings, salaries, or other similar terms used when calculating your benefits under any employee benefit plan sponsored by the Company or any Affiliate, except as such plan otherwise expressly provides. The Company expressly reserves its rights to amend, modify, or terminate any of the Company's or any Affiliate's employee benefit plans.
- **18. VOTING RIGHTS.** You will not have voting or any other rights as a stockholder of the Company with respect to the shares to be issued pursuant to this option until such shares are issued to you. Upon such issuance, you will obtain full voting and other rights as a stockholder of the Company. Nothing contained in this option, and no action taken pursuant to its provisions, will create or be construed to create a trust of any kind or a fiduciary relationship between you and the Company or any other person.
- **19. SEVERABILITY.** If all or any part of this Option Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity will not invalidate any portion of this Option Agreement or the Plan not declared to be unlawful or invalid. Any Section of this Option Agreement (or part of such a Section) so declared to be unlawful or invalid shall, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

#### 20. MISCELLANEOUS.

**a.** The rights and obligations of the Company under your option will be transferable to any one or more persons or entities, and all covenants and agreements hereunder will inure to the benefit of, and be enforceable by the Company's successors and assigns.

- **b.** You agree upon request to execute any further documents or instruments necessary or desirable in the sole determination of the Company to carry out the purposes or intent of your option.
- **c.** You acknowledge and agree that you have reviewed your option in its entirety, have had an opportunity to obtain the advice of counsel prior to executing and accepting your option, and fully understand all provisions of your option.
- **d.** This Option Agreement will be subject to all applicable laws, rules, and regulations, and to such approvals by any governmental agencies or national securities exchanges as may be required.
- **e.** All obligations of the Company under the Plan and this Option Agreement will be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, or otherwise, of all or substantially all of the business and/or assets of the Company.

\* \* \*

This Option Agreement will be deemed to be signed by you upon the signing by you of the Stock Option Grant Notice to which it is attached.

#### NOTICE OF EXERCISE

Aencor, Inc.	
111 West Lemon Avenue	
Monrovia, CA 91016	Date of Exercise:

This constitutes notice to Xencor, Inc. (the "*Company*") under my stock option that I elect to purchase the below number of shares of Common Stock of the Company (the "*Shares*") for the price set forth below.

Type of option (check one):	Incentive $\square$	Nonstatutory $\square$
Stock option dated:		
Number of Shares as to which option is exercised:		
Certificates to be issued in name of:		
Total exercise price:	\$	\$
Cash payment delivered herewith:	\$	\$
[Value of Shares delivered herewith¹:	\$	\$]
[Value of Shares pursuant to net exercise <sup>2</sup> :	\$	\$]
[Regulation T Program (cashless exercise <sup>3</sup> ):	\$_	\$1

Shares must meet the public trading requirements set forth in the option. Shares must be valued in accordance with the terms of the option being exercised, and must be owned free and clear of any liens, claims, encumbrances or security interests. Certificates must be endorsed or accompanied by an executed assignment separate from certificate.

The option must be a Nonstatutory Stock Option, and Xencor, Inc. must have established net exercise procedures at the time of exercise, in order to utilize this payment method.

Shares must meet the public trading requirements set forth in the option.

By this exercise, I agree (i) to provide such additional documents as you may require pursuant to the terms of the Xencor, Inc. 2013 Equity Incentive Plan, (ii) to provide for the payment by me to you (in the manner designated by you) of your withholding obligation, if any, relating to the exercise of this option, and (iii) if this exercise relates to an incentive stock option, to notify you in writing within fifteen (15) days after the date of any disposition of any of the Shares issued upon exercise of this option that occurs within two (2) years after the date of grant of this option or within one (1) year after such Shares are issued upon exercise of this option.

I further agree that, if required by the Company (or a representative of the underwriters) in connection with the first underwritten registration of the offering of any securities of the Company under the Securities Act, I will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale with respect to any shares of Common Stock or other securities of the Company for a period of one hundred eighty (180) days following the effective date of a registration statement of the Company filed under the Securities Act (or such longer period as the underwriters or the Company shall request to facilitate compliance with FINRA Rule 2711 or NYSE Member Rule 472 or any successor or similar rule or regulation) (the "Lock-Up Period"). I further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to securities subject to the foregoing restrictions until the end of such period.

٦	Very truly yours,		
37	7.		

#### XENCOR, INC. STOCK OPTION GRANT NOTICE (2013 EQUITY INCENTIVE PLAN)

Xencor, Inc. (the "*Company*"), pursuant to its 2013 Equity Incentive Plan (the "*Plan*"), hereby grants to Optionholder an option to purchase the number of shares of the Company's Common Stock set forth below. This option is subject to all of the terms and conditions as set forth in this notice, in the Option Agreement, the Plan and the Notice of Exercise, all of which are attached hereto and incorporated herein in their entirety. Capitalized terms not explicitly defined herein but defined in the Plan or the Option Agreement will have the same definitions as in the Plan or the Option Agreement. If there is any conflict between the terms in this notice and the Plan, the terms of the Plan will control.

Optionholder: Date of Grant: Vesting Commenceme Number of Shares Sub Exercise Price (Per Sh Total Exercise Price:	ject to Option:			- - - - -
Type of Grant:	☐ Incentive Stock Optio		☐ Nonstatutory Stock Op	
Exercise Schedule:	⊠ Same as Vesting Sch	edule	☐ Early Exercise Permitte	ed
Vesting Schedule:	balance of the shares ves	st in a series of thirt anniversary of the V	ear after the Vesting Comme y-six (36) successive equal Vesting Commencement Dat ch such date.]	monthly installments
Payment:	<ul> <li>☑ By cash, check, bank</li> <li>☑ Pursuant to a Regula</li> <li>☑ By delivery of alread</li> <li>☑ If and only to the</li> </ul>	t draft or money ord tion T Program if the ly-owned shares if the extent this option	ems (described in the Option der payable to the Company ne shares are publicly traded the shares are publicly traded is a Nonstatutory Stock Op by a "net exercise" arranger	l d otion, and subject to the
	value (measured by exerc		entive Stock Options) canno lendar year. Any excess ove	
		20		

38.

Additional Terms/Acknowledgements: Optionholder acknowledges receipt of, and understands and agrees to, this Stock Option Grant Notice, the Option Agreement and the Plan. Optionholder acknowledges and agrees that this Stock Option Grant Notice and the Option Agreement may not be modified, amended or revised except as provided in the Plan. Optionholder further acknowledges that as of the Date of Grant, this Stock Option Grant Notice, the Option Agreement, and the Plan set forth the entire understanding between Optionholder and the Company regarding this option award and supersede all prior oral and written agreements, promises and/or representations on that subject with the exception of (i) options previously granted and delivered to Optionholder, (ii) any compensation recovery policy that is adopted by the Company or is otherwise required by applicable law and (iii) any written employment or severance arrangement that would provide for vesting acceleration of this option upon the terms and conditions set forth therein. By accepting this option, Optionholder consents to receive such documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

XENCOR, INC.	OPTIONHOLDER:	
By:		
Signature	Signature	
Title:	Date:	
Date:		
ATTACHMENTS: Option Agreement, 2013	Equity Incentive Plan and Notice of Exercise	
	39.	

## ATTACHMENT I

### **OPTION AGREEMENT**

## ATTACHMENT II

## 2013 EQUITY INCENTIVE PLAN

## ATTACHMENT III

## NOTICE OF EXERCISE

#### XENCOR, INC.

#### 2013 EMPLOYEE STOCK PURCHASE PLAN ADOPTED BY THE BOARD OF DIRECTORS: NOVEMBER 1, 2013 APPROVED BY THE STOCKHOLDERS: NOVEMBER 5, 2013

#### 1. GENERAL; PURPOSE.

- **(a)** The Plan provides a means by which Eligible Employees of the Company and certain designated Related Corporations may be given an opportunity to purchase shares of Common Stock. The Plan permits the Company to grant a series of Purchase Rights to Eligible Employees under an Employee Stock Purchase Plan.
- **(b)** The Company, by means of the Plan, seeks to retain the services of such Employees, to secure and retain the services of new Employees and to provide incentives for such persons to exert maximum efforts for the success of the Company and its Related Corporations.

### 2. ADMINISTRATION.

- (a) The Board will administer the Plan unless and until the Board delegates administration of the Plan to a Committee or Committees, as provided in Section 2(c).
- **(b)** The Board will have the power, subject to, and within the limitations of, the express provisions of the Plan:
- **(i)** To determine how and when Purchase Rights will be granted and the provisions of each Offering (which need not be identical).
- **(ii)** To designate from time to time which Related Corporations of the Company will be eligible to participate in the Plan.
- **(iii)** To construe and interpret the Plan and Purchase Rights, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan, in a manner and to the extent it deems necessary or expedient to make the Plan fully effective.
  - (iv) To settle all controversies regarding the Plan and Purchase Rights granted under the Plan.
  - **(v)** To suspend or terminate the Plan at any time as provided in Section 12.
  - **(vi)** To amend the Plan at any time as provided in Section 12.
- **(vii)** Generally, to exercise such powers and to perform such acts as it deems necessary or expedient to promote the best interests of the Company and its Related Corporations and to carry out the intent that the Plan be treated as an Employee Stock Purchase Plan.

- **(viii)** To adopt such procedures and sub-plans as are necessary or appropriate to permit participation in the Plan by Employees who are foreign nationals or employed outside the United States.
- Committees. If administration is delegated to a Committee, the Committee will have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the Committee, including the power to delegate to a subcommittee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board will thereafter be to the Committee or subcommittee), subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. The Board may retain the authority to concurrently administer the Plan with the Committee and may, at any time, revest in the Board some or all of the powers previously delegated. Whether or not the Board has delegated administration of the Plan to a Committee, the Board will have the final power to determine all questions of policy and expediency that may arise in the administration of the Plan.
- **(d)** All determinations, interpretations and constructions made by the Board in good faith will not be subject to review by any person and will be final, binding and conclusive on all persons.

#### 3. SHARES OF COMMON STOCK SUBJECT TO THE PLAN.

- (a) Subject to the provisions of Section 11(a) relating to Capitalization Adjustments, the maximum number of shares of Common Stock that may be issued under the Plan will not exceed 267,741 shares of Common Stock, plus the number of shares of Common Stock that are automatically added on January 1st of each year for a period of up to ten years, commencing on the first January 1 following the IPO Date and ending on (and including) January 1, 2023, in an amount equal to the lesser of (i) 1% of the total number of shares of Capital Stock outstanding on December 31st of the preceding calendar year, and (ii) 621,814 shares of Common Stock. Notwithstanding the foregoing, the Board may act prior to the first day of any calendar year to provide that there will be no January 1st increase in the share reserve for such calendar year or that the increase in the share reserve for such calendar year will be a lesser number of shares of Common Stock than would otherwise occur pursuant to the preceding sentence.
- **(b)** If any Purchase Right granted under the Plan terminates without having been exercised in full, the shares of Common Stock not purchased under such Purchase Right will again become available for issuance under the Plan.
- **(c)** The stock purchasable under the Plan will be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the open market.

#### 4. GRANT OF PURCHASE RIGHTS; OFFERING.

**(a)** The Board may from time to time grant or provide for the grant of Purchase Rights to Eligible Employees under an Offering (consisting of one or more Purchase Periods) on an Offering Date or Offering Dates selected by the Board. Each Offering will be in such form and will contain such terms and conditions as the Board will deem appropriate, and will comply with

the requirement of Section 423(b)(5) of the Code that all Employees granted Purchase Rights will have the same rights and privileges. The terms and conditions of an Offering shall be incorporated by reference into the Plan and treated as part of the Plan. The provisions of separate Offerings need not be identical, but each Offering will include (through incorporation of the provisions of this Plan by reference in the document comprising the Offering or otherwise) the period during which the Offering will be effective, which period will not exceed 27 months beginning with the Offering Date, and the substance of the provisions contained in Sections 5 through 8, inclusive.

- **(b)** If a Participant has more than one Purchase Right outstanding under the Plan, unless he or she otherwise indicates in forms delivered to the Company: (i) each form will apply to all of his or her Purchase Rights under the Plan, and (ii) a Purchase Right with a lower exercise price (or an earlier-granted Purchase Right, if different Purchase Rights have identical exercise prices) will be exercised to the fullest possible extent before a Purchase Right with a higher exercise price (or a later-granted Purchase Right if different Purchase Rights have identical exercise prices) will be exercised.
- **(c)** The Board will have the discretion to structure an Offering so that if the Fair Market Value of a share of Common Stock on the first Trading Day of a new Purchase Period within that Offering is less than or equal to the Fair Market Value of a share of Common Stock on the Offering Date for that Offering, then (i) that Offering will terminate immediately as of that first Trading Day, and (ii) the Participants in such terminated Offering will be automatically enrolled in a new Offering beginning on the first Trading Day of such new Purchase Period.

#### 5. ELIGIBILITY.

- (a) Purchase Rights may be granted only to Employees of the Company or, as the Board may designate in accordance with Section 2(b), to Employees of a Related Corporation. Except as provided in Section 5(b), an Employee will not be eligible to be granted Purchase Rights unless, on the Offering Date, the Employee has been in the employ of the Company or the Related Corporation, as the case may be, for such continuous period preceding such Offering Date as the Board may require, but in no event will the required period of continuous employment be equal to or greater than two years. In addition, the Board may provide that no Employee will be eligible to be granted Purchase Rights under the Plan unless, on the Offering Date, such Employee's customary employment with the Company or the Related Corporation is more than 20 hours per week and more than five months per calendar year or such other criteria as the Board may determine consistent with Section 423 of the Code.
- **(b)** The Board may provide that each person who, during the course of an Offering, first becomes an Eligible Employee will, on a date or dates specified in the Offering which coincides with the day on which such person becomes an Eligible Employee or which occurs thereafter, receive a Purchase Right under that Offering, which Purchase Right will thereafter be deemed to be a part of that Offering. Such Purchase Right will have the same characteristics as any Purchase Rights originally granted under that Offering, as described herein, except that:
- (i) the date on which such Purchase Right is granted will be the "Offering Date" of such Purchase Right for all purposes, including determination of the exercise price of such Purchase Right;

- (ii) the period of the Offering with respect to such Purchase Right will begin on its Offering Date and end coincident with the end of such Offering; and
- **(iii)** the Board may provide that if such person first becomes an Eligible Employee within a specified period of time before the end of the Offering, he or she will not receive any Purchase Right under that Offering.
- (c) No Employee will be eligible for the grant of any Purchase Rights if, immediately after any such Purchase Rights are granted, such Employee owns stock possessing five percent or more of the total combined voting power or value of all classes of stock of the Company or of any Related Corporation. For purposes of this Section 5(c), the rules of Section 424(d) of the Code will apply in determining the stock ownership of any Employee, and stock which such Employee may purchase under all outstanding Purchase Rights and options will be treated as stock owned by such Employee.
- (d) As specified by Section 423(b)(8) of the Code, an Eligible Employee may be granted Purchase Rights only if such Purchase Rights, together with any other rights granted under all Employee Stock Purchase Plans of the Company and any Related Corporations, do not permit such Eligible Employee's rights to purchase stock of the Company or any Related Corporation to accrue at a rate which exceeds \$25,000 of Fair Market Value of such stock (determined at the time such rights are granted, and which, with respect to the Plan, will be determined as of their respective Offering Dates) for each calendar year in which such rights are outstanding at any time.
- **(e)** Officers of the Company and any designated Related Corporation, if they are otherwise Eligible Employees, will be eligible to participate in Offerings under the Plan. Notwithstanding the foregoing, the Board may provide in an Offering that Employees who are highly compensated Employees within the meaning of Section 423(b)(4)(D) of the Code will not be eligible to participate.

#### 6. PURCHASE RIGHTS; PURCHASE PRICE.

- (a) On each Offering Date, each Eligible Employee, pursuant to an Offering made under the Plan, will be granted a Purchase Right to purchase up to that number of shares of Common Stock purchasable either with a percentage or with a maximum dollar amount, as designated by the Board, but in either case not exceeding 15% of such Employee's earnings (as defined by the Board in each Offering) during the period that begins on the Offering Date (or such later date as the Board determines for a particular Offering) and ends on the date stated in the Offering, which date will be no later than the end of the Offering.
- **(b)** The Board will establish one or more Purchase Dates during an Offering on which Purchase Rights granted for that Offering will be exercised and shares of Common Stock will be purchased in accordance with such Offering.
- **(c)** In connection with each Offering made under the Plan, the Board may specify (i) a maximum number of shares of Common Stock that may be purchased by any Participant on any Purchase Date during such Offering, (ii) a maximum aggregate number of shares of Common Stock that may be purchased by all Participants pursuant to such Offering and/or (iii) a maximum aggregate number of shares of Common Stock that may be purchased by all Participants on any

Purchase Date under the Offering. If the aggregate purchase of shares of Common Stock issuable upon exercise of Purchase Rights granted under the Offering would exceed any such maximum aggregate number, then, in the absence of any Board action otherwise, a pro rata (based on each Participant's accumulated Contributions) allocation of the shares of Common Stock available will be made in as nearly a uniform manner as will be practicable and equitable.

- **(d)** The purchase price of shares of Common Stock acquired pursuant to Purchase Rights will be not less than the lesser of:
- (i) an amount equal to 85% of the Fair Market Value of the shares of Common Stock on the Offering Date; or
- **(ii)** an amount equal to 85% of the Fair Market Value of the shares of Common Stock on the applicable Purchase Date.

#### 7. PARTICIPATION; WITHDRAWAL; TERMINATION.

- (a) An Eligible Employee may elect to authorize payroll deductions as the means of making Contributions by completing and delivering to the Company, within the time specified in the Offering, an enrollment form provided by the Company. The enrollment form will specify the amount of Contributions not to exceed the maximum amount specified by the Board. Each Participant's Contributions will be credited to a bookkeeping account for such Participant under the Plan and will be deposited with the general funds of the Company except where applicable law requires that Contributions be deposited with a third party. If permitted in the Offering, a Participant may begin such Contributions with the first payroll occurring on or after the Offering Date (or, in the case of a payroll date that occurs after the end of the prior Offering but before the Offering Date of the next new Offering, Contributions from such payroll will be included in the new Offering). If permitted in the Offering, a Participant may thereafter reduce (including to zero) or increase his or her Contributions. If specifically provided in the Offering, in addition to making Contributions by payroll deductions, a Participant may make Contributions through the payment by cash or check prior to a Purchase Date.
- **(b)** During an Offering, a Participant may cease making Contributions and withdraw from the Offering by delivering to the Company a withdrawal form provided by the Company. The Company may impose a deadline before a Purchase Date for withdrawing. Upon such withdrawal, such Participant's Purchase Right in that Offering will immediately terminate and the Company will distribute to such Participant all of his or her accumulated but unused Contributions and such Participant's Purchase Right in that Offering shall thereupon terminate. A Participant's withdrawal from that Offering will have no effect upon his or her eligibility to participate in any other Offerings under the Plan, but such Participant will be required to deliver a new enrollment form to participate in subsequent Offerings.
- **(c)** Purchase Rights granted pursuant to any Offering under the Plan will terminate immediately if the Participant either (i) is no longer an Employee for any reason or for no reason (subject to any post-employment participation period required by law) or (ii) is otherwise no longer eligible to participate. The Company will distribute to such individual all of his or her accumulated but unused Contributions.

- **(d)** During a Participant's lifetime, Purchase Rights will be exercisable only by such Participant. Purchase Rights are not transferable by a Participant, except by will, by the laws of descent and distribution, or, if permitted by the Company, by a beneficiary designation as described in Section 10.
- **(e)** Unless otherwise specified in the Offering, the Company will have no obligation to pay interest on Contributions.

#### 8. EXERCISE OF PURCHASE RIGHTS.

- (a) On each Purchase Date, each Participant's accumulated Contributions will be applied to the purchase of shares of Common Stock, up to the maximum number of shares of Common Stock permitted by the Plan and the applicable Offering, at the purchase price specified in the Offering. No fractional shares will be issued unless specifically provided for in the Offering.
- **(b)** If any amount of accumulated Contributions remains in a Participant's account after the purchase of shares of Common Stock and such remaining amount is less than the amount required to purchase one share of Common Stock on the final Purchase Date of an Offering, then such remaining amount will be held in such Participant's account for the purchase of shares of Common Stock under the next Offering under the Plan, unless such Participant withdraws from or is not eligible to participate in such Offering, in which case such amount will be distributed to such Participant after the final Purchase Date, without interest. If the amount of Contributions remaining in a Participant's account after the purchase of shares of Common Stock is at least equal to the amount required to purchase one whole share of Common Stock on the final Purchase Date of an Offering, then such remaining amount will not roll over to the next Offering and will instead be distributed in full to such Participant after the final Purchase Date of such Offering without interest.
- (c) No Purchase Rights may be exercised to any extent unless the shares of Common Stock to be issued upon such exercise under the Plan are covered by an effective registration statement pursuant to the Securities Act and the Plan is in material compliance with all applicable federal, state, foreign and other securities and other laws applicable to the Plan. If on a Purchase Date the shares of Common Stock are not so registered or the Plan is not in such compliance, no Purchase Rights will be exercised on such Purchase Date, and the Purchase Date will be delayed until the shares of Common Stock are subject to such an effective registration statement and the Plan is in material compliance, except that the Purchase Date will in no event be more than 6 months from the Offering Date. If, on the Purchase Date, as delayed to the maximum extent permissible, the shares of Common Stock are not registered and the Plan is not in material compliance with all applicable laws, no Purchase Rights will be exercised and all accumulated but unused Contributions will be distributed to the Participants without interest.

#### 9. COVENANTS OF THE COMPANY.

The Company will seek to obtain from each federal, state, foreign or other regulatory commission or agency having jurisdiction over the Plan such authority as may be required to grant Purchase Rights and issue and sell shares of Common Stock thereunder. If, after commercially reasonable efforts, the Company is unable to obtain the authority that counsel for the Company

deems necessary for the grant of Purchase Rights or the lawful issuance and sale of Common Stock under the Plan, and at a commercially reasonable cost, the Company will be relieved from any liability for failure to grant Purchase Rights and/or to issue and sell Common Stock upon exercise of such Purchase Rights.

#### 10. DESIGNATION OF BENEFICIARY.

- **(a)** The Company may, but is not obligated to, permit a Participant to submit a form designating a beneficiary who will receive any shares of Common Stock and/or Contributions from the Participant's account under the Plan if the Participant dies before such shares and/or Contributions are delivered to the Participant. The Company may, but is not obligated to, permit the Participant to change such designation of beneficiary. Any such designation and/or change must be on a form approved by the Company.
- **(b)** If a Participant dies, and in the absence of a valid beneficiary designation, the Company will deliver any shares of Common Stock and/or Contributions to the executor or administrator of the estate of the Participant. If no executor or administrator has been appointed (to the knowledge of the Company), the Company, in its sole discretion, may deliver such shares of Common Stock and/or Contributions to the Participant's spouse, dependents or relatives, or if no spouse, dependent or relative is known to the Company, then to such other person as the Company may designate.

#### 11. ADJUSTMENTS UPON CHANGES IN COMMON STOCK; CORPORATE TRANSACTIONS.

- (a) In the event of a Capitalization Adjustment, the Board will appropriately and proportionately adjust: (i) the class(es) and maximum number of securities subject to the Plan pursuant to Section 3(a), (ii) the class(es) and maximum number of securities by which the share reserve is to increase automatically each year pursuant to Section 3(a), (iii) the class(es) and number of securities subject to, and the purchase price applicable to outstanding Offerings and Purchase Rights, and (iv) the class(es) and number of securities that are the subject of the purchase limits under each ongoing Offering. The Board will make these adjustments, and its determination will be final, binding and conclusive.
- **(b)** In the event of a Corporate Transaction, then: (i) any surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company) may assume or continue outstanding Purchase Rights or may substitute similar rights (including a right to acquire the same consideration paid to the stockholders in the Corporate Transaction) for outstanding Purchase Rights, or (ii) if any surviving or acquiring corporation (or its parent company) does not assume or continue such Purchase Rights or does not substitute similar rights for such Purchase Rights, then the Participants' accumulated Contributions will be used to purchase shares of Common Stock within ten business days prior to the Corporate Transaction under the outstanding Purchase Rights, and the Purchase Rights will terminate immediately after such purchase.

### 12. AMENDMENT, TERMINATION OR SUSPENSION OF THE PLAN.

**(a)** The Board may amend the Plan at any time in any respect the Board deems necessary or advisable. However, except as provided in Section 11(a) relating to Capitalization

Adjustments, stockholder approval will be required for any amendment of the Plan for which stockholder approval is required by applicable law or listing requirements, including any amendment that either (i) materially increases the number of shares of Common Stock available for issuance under the Plan, (ii) materially expands the class of individuals eligible to become Participants and receive Purchase Rights, (iii) materially increases the benefits accruing to Participants under the Plan or materially reduces the price at which shares of Common Stock may be purchased under the Plan, (iv) materially extends the term of the Plan, or (v) expands the types of awards available for issuance under the Plan, but in each of (i) through (v) above only to the extent stockholder approval is required by applicable law or listing requirements.

- **(b)** The Board may suspend or terminate the Plan at any time. No Purchase Rights may be granted under the Plan while the Plan is suspended or after it is terminated.
- (c) Any benefits, privileges, entitlements and obligations under any outstanding Purchase Rights granted before an amendment, suspension or termination of the Plan will not be materially impaired by any such amendment, suspension or termination except (i) with the consent of the person to whom such Purchase Rights were granted, (ii) as necessary to comply with any laws, listing requirements, or governmental regulations (including, without limitation, the provisions of Section 423 of the Code and the regulations and other interpretive guidance issued thereunder relating to Employee Stock Purchase Plans) including without limitation any such regulations or other guidance that may be issued or amended after the date the Plan is adopted by the Board, or (iii) as necessary to obtain or maintain favorable tax, listing, or regulatory treatment. To be clear, the Board may amend outstanding Purchase Rights without a Participant's consent if such amendment is necessary to ensure that the Purchase Right and/or the Plan complies with the requirements of Section 423 of the Code.

#### 13. EFFECTIVE DATE OF PLAN.

The Plan will become effective immediately prior to and contingent upon the IPO Date. No Purchase Rights will be exercised unless and until the Plan has been approved by the stockholders of the Company, which approval must be within 12 months before or after the date the Plan is adopted (or if required under Section 12(a) above, materially amended) by the Board.

#### 14. MISCELLANEOUS PROVISIONS.

- **(a)** Proceeds from the sale of shares of Common Stock pursuant to Purchase Rights will constitute general funds of the Company.
- **(b)** A Participant will not be deemed to be the holder of, or to have any of the rights of a holder with respect to, shares of Common Stock subject to Purchase Rights unless and until the Participant's shares of Common Stock acquired upon exercise of Purchase Rights are recorded in the books of the Company (or its transfer agent).
- **(c)** The Plan and Offering do not constitute an employment contract. Nothing in the Plan or in the Offering will in any way alter the at will nature of a Participant's employment or be deemed to create in any way whatsoever any obligation on the part of any Participant to continue in the employ of the Company or a Related Corporation, or on the part of the Company or a Related Corporation to continue the employment of a Participant.

**(d)** The provisions of the Plan will be governed by the laws of the State of California without resort to that state's conflicts of laws rules.

#### 15. **DEFINITIONS.**

As used in the Plan, the following definitions will apply to the capitalized terms indicated below:

- **(a)** "*Board*" means the Board of Directors of the Company.
- **(b)** "*Capital Stock*" means each and every class of common stock of the Company, regardless of the number of votes per share.
- **(c)** "*Capitalization Adjustment*" means any change that is made in, or other events that occur with respect to, the Common Stock subject to the Plan or subject to any Purchase Right after the date the Plan is adopted by the Board without the receipt of consideration by the Company through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or other similar equity restructuring transaction, as that term is used in Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any successor thereto). Notwithstanding the foregoing, the conversion of any convertible securities of the Company will not be treated as a Capitalization Adjustment.
- **(d)** "*Code*" means the Internal Revenue Code of 1986, as amended, including any applicable regulations and guidance thereunder.
- **(e)** "*Committee*" means a committee of one or more members of the Board to whom authority has been delegated by the Board in accordance with Section 2(c).
- **(f)** "Common Stock" means, as of the IPO Date, the common stock of the Company, having 1 vote per share.
  - **(g)** "Company" means Xencor, Inc., a Delaware corporation.
- **(h)** *"Contributions"* means the payroll deductions and other additional payments specifically provided for in the Offering that a Participant contributes to fund the exercise of a Purchase Right. A Participant may make additional payments into his or her account if specifically provided for in the Offering, and then only if the Participant has not already had the maximum permitted amount withheld during the Offering through payroll deductions.
- **(i)** "*Corporate Transaction*" means the consummation, in a single transaction or in a series of related transactions, of any one or more of the following events:
- (i) a sale or other disposition of all or substantially all, as determined by the Board in its sole discretion, of the consolidated assets of the Company and its Subsidiaries;

- (ii) a sale or other disposition of at least 90% of the outstanding securities of the Company;
- **(iii)** a merger, consolidation or similar transaction following which the Company is not the surviving corporation; or
- **(iv)** a merger, consolidation or similar transaction following which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger, consolidation or similar transaction are converted or exchanged by virtue of the merger, consolidation or similar transaction into other property, whether in the form of securities, cash or otherwise.
  - **(j)** "*Director*" means a member of the Board.
- **(k)** "*Eligible Employee*" means an Employee who meets the requirements set forth in the document(s) governing the Offering for eligibility to participate in the Offering, provided that such Employee also meets the requirements for eligibility to participate set forth in the Plan.
- **(l)** "*Employee*" means any person, including an Officer or Director, who is "employed" for purposes of Section 423(b)(4) of the Code by the Company or a Related Corporation. However, service solely as a Director, or payment of a fee for such services, will not cause a Director to be considered an "Employee" for purposes of the Plan.
- **(m)** "*Employee Stock Purchase Plan*" means a plan that grants Purchase Rights intended to be options issued under an "employee stock purchase plan," as that term is defined in Section 423(b) of the Code.
- **(n)** "*Exchange Act*" means the Securities Exchange Act of 1934, as amended and the rules and regulations promulgated thereunder.
  - (o) "Fair Market Value" means, as of any date, the value of the Common Stock determined as follows:
- (i) If the Common Stock is listed on any established stock exchange or traded on any established market, the Fair Market Value of a share of Common Stock will be the <u>closing sales price</u> for such stock as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) <u>on the date of determination</u>, as reported in such source as the Board deems reliable. Unless otherwise provided by the Board, if there is no closing sales price for the Common Stock on the date of determination, then the Fair Market Value will be the closing sales price on the last preceding date for which such quotation exists.
- **(ii)** In the absence of such markets for the Common Stock, the Fair Market Value will be determined by the Board in good faith in compliance with applicable laws and in a manner that complies with Sections 409A of the Code.
- **(iii)** Notwithstanding the foregoing, for any Offering that commences on the IPO Date, the Fair Market Value of the shares of Common Stock on the Offering Date will be the

price per share at which shares are first sold to the public in the Company's initial public offering as specified in the final prospectus for that initial public offering.

- **(p)** "*IPO Date*" means the date of the underwriting agreement between the Company and the underwriter(s) managing the initial public offering of the Common Stock, pursuant to which the Common Stock is priced for the initial public offering.
- **(q)** "*Offering*" means the grant to Eligible Employees of Purchase Rights, with the exercise of those Purchase Rights automatically occurring at the end of one or more Purchase Periods. The terms and conditions of an Offering will generally be set forth in the "*Offering Document*" approved by the Board for that Offering.
  - (r) "Offering Date" means a date selected by the Board for an Offering to commence.
- **(s)** "*Officer*" means a person who is an officer of the Company or a Related Corporation within the meaning of Section 16 of the Exchange Act.
  - (t) "Participant" means an Eligible Employee who holds an outstanding Purchase Right.
  - (u) "Plan" means this Xencor, Inc. 2013 Employee Stock Purchase Plan.
- **(v)** "*Purchase Date*" means one or more dates during an Offering selected by the Board on which Purchase Rights will be exercised and on which purchases of shares of Common Stock will be carried out in accordance with such Offering.
- **(w)** "*Purchase Period*" means a period of time specified within an Offering, generally beginning on the Offering Date or on the first Trading Day following a Purchase Date, and ending on a Purchase Date. An Offering may consist of one or more Purchase Periods.
- (x) "Purchase Right" means an option to purchase shares of Common Stock granted pursuant to the Plan.
- **(y)** "*Related Corporation*" means any "parent corporation" or "subsidiary corporation" of the Company whether now or subsequently established, as those terms are defined in Sections 424(e) and (f), respectively, of the Code.
  - (z) "Securities Act" means the Securities Act of 1933, as amended.
- **(aa)** "*Trading Day*" means any day on which the exchange(s) or market(s) on which shares of Common Stock are listed, including but not limited to the NYSE, Nasdaq Global Select Market, the Nasdaq Global Market, the Nasdaq Capital Market or any successors thereto, is open for trading.

#### 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 27, 2018 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, 2017.

/s/ RSM US LLP

Los Angeles, California February 27, 2018

## 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, 2017 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 27, 2018

## 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, 2017 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 27, 2018

# 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, 2017, 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 27, 2018 /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, 2017, 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 27, 2018 /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.