XOMA Corp
Form 10-K
March 07, 2018

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 or 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2017

OR

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

Commission File No. 0-14710

XOMA CORPORATION

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	52-2154066 (I.R.S. Employer Identification No.)
2200 Powell Street, Suite 310, Emeryville, California 94608 (Address of principal executive offices, including zip code)	(510) 204-7200 (Telephone number)

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

Title of each class	Name of each exchange on which registered
Common Stock, $0.0075 par value	The NASDAQ Stock Market, LLC

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

None

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

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

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

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See definitions of "large accelerated filer," "accelerated filer", "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large Accelerated Filer Accelerated Filer

Non-Accelerated Filer Smaller reporting company
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

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

The aggregate market value of voting common equity held by non-affiliates of the registrant is $40,595,725 as of June 30, 2017, based on the closing price on the NASDAQ Global Market reported for such date. The calculation of the

aggregate market value of voting and non-voting common equity held by non-affiliates of the registrant excludes shares of common stock held by each officer, director and stockholder that the registrant concluded were affiliates on that date. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

Number of shares of Common Stock outstanding as of March 2, 2018: 8,329,098

DOCUMENTS INCORPORATED BY REFERENCE:

Portions of the Company's Proxy Statement for the Company's 2018 Annual Meeting of Stockholders are incorporated by reference into Part III of this Report.

XOMA Corporation

2017 FORM 10-K ANNUAL REPORT

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This annual report on Form 10-K includes trademarks, service marks and trade names owned by us or others. "XOMA," the XOMA logo and all other XOMA product and service names are registered or unregistered trademarks of XOMA Corporation or a subsidiary of XOMA Corporation in the United States and in other selected countries. All trademarks, service marks and trade names included or incorporated by reference in this annual report are the property of their respective owners.

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PART I

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and the Private Securities Litigation Reform Act of 1995, which are subject to the "safe harbor" created by those sections. Forward-looking statements are based on our management's beliefs and assumptions and on information currently available to them. In some cases, you can identify forward-looking statements by words such as "may," "will," "should," "could," "would," "expects," "plans," "anticipates," "believes," "estimates," "projects," "pred "intend" and similar expressions intended to identify forward-looking statements. Examples of these statements include, but are not limited to, statements regarding: our future operating expenses, our future losses, the extent to which our issued and pending patents may protect our products and technology, the potential of our existing product candidates to lead to the development of commercial products, our ability to receive potential milestone or royalty payments under license and collaboration agreements and the timing of receipt of those payments, the timing and adequacy of cost-cutting measures, and our ability to defend against claims that have been made in litigation. These statements are based on assumptions that may not prove accurate. Actual results could differ materially from those anticipated due to certain risks inherent in the biotechnology industry and for our licensees engaged in the development of new products in a regulated market. Among other things: our product candidates subject to out-license agreements are still being developed, and our licensees' may require substantial funds to continue development which may not be available; we may not realize the expected benefits of our cost-saving initiatives; we may not be successful in entering into out-license agreements for our product candidates; if our therapeutic product candidates do not receive regulatory approval, our third-party licensees will not be able to manufacture and market them; products or technologies of other companies may render some or all of our product candidates noncompetitive or obsolete; we do not know whether there will be, or will continue to be, a viable market for the products in which we have an ownership or royalty interest; even once approved, a product may be subject to additional testing or significant marketing restrictions, its approval may be withdrawn or it may be voluntarily taken off the market; we and our licensees are subject to various state and federal healthcare related laws and regulations that may impact the commercialization of our product candidates and could subject us to significant fines and penalties; and certain of our technologies are in-licensed from third parties, so our capabilities using them are restricted and subject to additional risks. These and other risks, including those related to current economic and financial market conditions, are contained principally in Item 1, Business; Item 1A, Risk Factors; Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations; and other sections of this Annual Report on Form 10-K. Factors that could cause or contribute to these differences include those discussed in Item 1A, Risk Factors, as well as those discussed elsewhere in this Annual Report on Form 10-K.

Forward-looking statements are inherently uncertain and you should not place undue reliance on these statements, which speak only as of the date that they were made. These cautionary statements should be considered in connection with any written or oral forward-looking statements that we may issue in the future. We do not undertake any obligation to release publicly any revisions to these forward-looking statements after completion of the filing of this Annual Report on Form 10-K to reflect later events or circumstances or to reflect the occurrence of unanticipated events.

Item 1. Business
Overview and Strategy

XOMA Corporation ("XOMA"), a Delaware corporation, has a long history of discovering and developing innovative therapeutics derived from its unique platform of antibody technologies. Over our 37 year history, we built an extensive portfolio of fully-funded programs by advancing product candidates into the earlier stages of development and then licensing them to licensees who assumed the responsibilities of later stage development, approval and commercialization. Fully-funded programs are those for which our partners pay all of the development and commercialization costs. As licensees advance these programs, we are eligible for potential milestone and royalty payments.

In March 2017, we transformed our business model to become a royalty aggregator where we focus on expanding our portfolio of fully-funded programs by out-licensing our internally developed product candidates and acquiring potential milestone and royalty revenue streams on additional product candidates. We combined our royalty-aggregator model with a significantly reduced corporate cost structure to further build value for our shareholders. We expect that a significant portion of our future revenue will be based on payments we may receive for milestones and royalties related to these programs.

Our business model is designed to create value for stockholders by assembling a diversified portfolio of biotech and pharmaceutical revenue streams and operating that business with an efficient and low corporate cost structure. Our goal is to become a sustainably profitable company that offers investors an opportunity to participate in the promise of the biotech industry in a diversified, lower-risk business investment than a typical biotech model. The following charts demonstrate the diversification of our fully-funded asset portfolio across therapeutic areas and development stages.

In 2017, we added nine new programs to our fully-funded asset portfolio by out-licensing two of our internally developed product candidates, adding three new phage display licensees and adding four new potential royalty streams through our license agreements with Novartis Pharma AG ("Novartis") and Rezolute, Inc. (formerly AntriaBio, Inc.) ("Rezolute").

Organization

We were incorporated in Delaware in 1981 and became a Bermuda-exempted company in December 1998. Effective December 31, 2011, we changed our jurisdiction of incorporation from Bermuda to Delaware and changed our name from XOMA Ltd. to XOMA Corporation. When referring to a time or period before December 31, 1998 or after December 31, 2011, the terms "Company" and "XOMA" refer to XOMA Corporation, a Delaware corporation; when referring to a time or period between December 31, 1998 and December 31, 2011, such terms refer to XOMA Ltd., a Bermuda company.

Our principal executive offices are located at 2200 Powell Street, Suite 310, Emeryville, California 94608, and we maintain a registered office located at Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware 19801. Our telephone number at our principal executive offices is (510) 204-7200. Our website address is www.xoma.com. The information found on our website is not part of this or any other report filed with or furnished to the Securities and Exchange Commission ("SEC").

Licensing and Collaboration Agreements Underlying Our Fully-Funded Program Portfolio

Historically, we have licensed or provided research and development collaboration services to world-class organizations, such as Novartis in pursuit of new antibody products under which we are eligible to receive potential future milestone payments and royalties. The following is a summary of license and collaboration agreements that represent a significant component of our fully-funded program portfolio.

Novartis - IL-1

In August 2017, we and Novartis entered into a license agreement (the "IL-1 Target License Agreement"), under which we granted Novartis non-exclusive licenses to our intellectual property covering the use of IL-1 beta targeting antibodies in the treatment and prevention of cardiovascular disease and other diseases and conditions and an option to obtain an exclusive license (the "Exclusivity Option") to such intellectual property for the treatment and prevention of cardiovascular disease. We also granted Novartis the right of first negotiation with respect to certain transactions relating to the licensed intellectual property.

Under the IL-1 Target License Agreement, we received an upfront cash payment of $10.0 million. In addition, we are eligible to receive low single-digit royalties on canakinumab sales in cardiovascular indications. If Novartis exercises the Exclusivity Option, the royalties on canakinumab sales will increase to the mid-single digits. In November 2017, Novartis announced it intends to submit data from its canakinumab Phase 3 trial in cardiovascular treatment for regulatory approval.

Novartis – Gevokizumab

In August 2017, we and Novartis entered into a license agreement (the "XOMA-052 License Agreement") under which we granted Novartis an exclusive, worldwide, royalty-bearing license to gevokizumab (an early clinical stage product candidate) and related know-how and patents. Under the terms of the XOMA-052 License Agreement, Novartis will be solely responsible for the development and commercialization of gevokizumab and products containing the antibody.

Under the XOMA-052 License Agreement, we received total consideration of $30.0 million for the license and rights granted to Novartis. Of the total consideration, $15.7 million was paid in cash and $14.3 million (equal to €12.0 million) was paid by Novartis Institutes for Biomedical Research, Inc. ("NIBR"), on our behalf, to settle our loan with Les Laboratories Servier ("Servier"). In addition, NIBR extended the maturity date on our debt to Novartis to September 30, 2022. We also received $5.0 million related to the sale of 539,131 shares of our common stock, at a price per share of $9.2742. Based on the achievement of pre-specified criteria, we are eligible to receive up to $438.0 million in development, regulatory and commercial milestones. We are also eligible to receive royalties on sales of licensed products, which are tiered based on sales levels and range from a high single digit percentage rate to a low double-digit percentage rate.

Novartis – Anti-TGF Antibody

In September 2015, we and Novartis International Pharmaceutical Ltd. ("Novartis International") entered into a license agreement (the "License Agreement") under which we granted Novartis International an exclusive, worldwide, royalty-bearing license to our anti-TGF- antibody program. Novartis International is solely responsible for the development and commercialization of the antibodies and products containing the antibodies arising from this program.

Under the License Agreement, we received a $37.0 million upfront fee, and are eligible to receive up to a total of $480.0 million in development, regulatory and commercial milestones. We also are eligible to receive royalties on sales of licensed products, which are tiered based on sales levels and range from a mid-single digit percentage rate to a low double-digit percentage rate. This program is currently in early clinical testing.

Novartis – Anti-CD40 Antibody

In September 2015, we and Novartis Vaccines and Diagnostics, Inc. ("NVDI"), further amended our 2008 Amended and Restated Research, Development and Commercialization Agreement, relating to anti-CD40 antibodies. Under this agreement, NVDI is solely responsible for the development and commercialization of the antibodies and products containing the antibodies arising from this program. The parties agreed to reduce the royalty rates that we are eligible to receive on sales of NVDI's clinical stage anti-CD40 antibodies. These royalties are tiered based on sales levels and now range from a mid-single digit percentage rate to a low double-digit percentage rate.

In November 2017, Novartis presented the results of a Phase 2a study in Sjögren's syndrome at the American College of Rheumatology Annual Meeting. Our right to royalty payments expires on the later of the expiration of any licensed patent covering each product or 10 years from the first commercial sale of each product.

Rezolute

On December 6, 2017, we entered into a license agreement with Rezolute pursuant to which we granted an exclusive global license to Rezolute to develop and commercialize X358 (now RZ358), a Phase 2 product candidate, for all indications. We and Rezolute also entered into a common stock purchase agreement.

Under the terms of the license agreement, Rezolute is responsible for all development, regulatory, manufacturing and commercialization activities associated with RZ358 and is required to make certain clinical, regulatory and annual net sales milestone payments to us of up to $232.0 million in the aggregate based on the achievement of pre-specified criteria. Rezolute is also obligated to pay us royalties ranging from the high single digits to the mid-teens based upon annual net sales of RZ358. Rezolute is obligated to take customary steps to advance RZ358, including using diligent efforts to commence the next clinical study for RZ358 by a certain deadline and to meet certain spending requirements on an annual basis for the program until a marketing approval application for RZ358 is accepted by the Food and Drug Administration ("FDA"). Rezolute's obligation to pay royalties with respect to a particular RZ358 product and country will continue for the longer of the date of expiration of the last valid patent claim covering the product in that country, or twelve years from the date of the first commercial sale of the product in that country.

Pursuant to the license agreement and common stock purchase agreement, Rezolute is required to pay us $6.0 million in cash and to issue us $12.0 million worth of its common stock, contingent on the completion of its financing activities. Further, in the event that Rezolute does not complete a financing that raises at least $20.0 million in aggregate gross proceeds ("Qualified Financing") by March 31, 2019, it shall issue to us an additional number of shares of its common stock equal to $7.0 million divided by the weighted average of the closing bid and asked prices or the average closing prices of Rezolute's common stock on the ten-day trading period prior to March 31, 2019. Finally, if Rezolute is unable to complete a Qualified Financing by March 31, 2020, it will be obliged to pay us $15.0 million in order to maintain the license. Under the common stock purchase agreement, Rezolute granted us the right and option to sell the greater of (i) 5,000,000 shares of common stock or (ii) one third of the aggregate shares held by us upon failure by Rezolute to list its shares of its common stock on the Nasdaq Stock Market or a similar national exchange on or prior to December 31, 2018. As of December 31, 2017, we have not received any cash or common stock from Rezolute as they have not completed any financing or other activities outlined in the agreement.

In addition, under the terms of the license agreement, Rezolute is required to pay us a low single-digit royalty on sales of Rezolute's other products from its existing programs, currently in preclinical and early clinical stages. Rezolute's obligation to pay royalties with respect to a particular Rezolute product and country will continue for the longer of twelve years from the date of the first commercial sale of the product in that country or for so long as Rezolute or its licensee is selling such product in such country, provided that such royalty will terminate upon the termination of the licensee's obligation to make payments to Rezolute based on sales of such product in such country.

We also granted Rezolute an option through June 1, 2019 for an exclusive license for their choice of one of our preclinical insulin receptor monoclonal antibody fragments, including X129. If Rezolute exercises the option, we will be eligible for an upfront option fee and additional clinical, regulatory and annual net sales milestone payments to us of up to $237.0 million in the aggregate based on the achievement of pre-specified criteria as well as royalties ranging from a high single digit percentage rate to a low double-digit percentage rate based on annual net sales. The license agreement contains customary termination rights relating to material breach by either party. Rezolute also has a unilateral right to terminate the license agreement in its entirety on ninety-days' notice at any time. We have the right to terminate the license agreement if Rezolute challenges the licensed patents.

Ology Bioservices

On November 4, 2015, we entered into an asset purchase agreement with Ology Bioservices, Inc. ("Ology Bioservices") (formerly Nanotherapeutics Inc.) (the "Ology Bioservices Purchase Agreement"), under which Ology Bioservices agreed to acquire our biodefense business and related assets. Under the terms of this agreement, we are eligible to receive a 15% royalty on net sales of any future Ology Bioservices products covered by or involving the related patents or know-how. Further details of the Ology Bioservices Purchase Agreement are provided in the section below,

"Sale of Biodefense Assets and Manufacturing Facility."

Proprietary Product Candidates

We have a portfolio of unique monoclonal antibodies and technologies that we intend to license to pharmaceutical and biotechnology companies to further their clinical development. A summary of these product candidates is provided below:

- X213 (formerly LFA 102) is a first-in-class allosteric inhibitor of prolactin action. It is a humanized IgG1-Kappa monoclonal antibody that binds to the extracellular domain of the human prolactin receptor with high affinity at an allosteric site. The antibody has been shown to inhibit prolactin-mediated signaling, and it is potent and similarly active against several animal and human prolactin receptors. In August 2017, we entered into a license agreement with PRLA Pharma, Inc. ("PrlA") pursuant to which we granted PrlA an exclusive, worldwide license to develop and commercialize X213, contingent on PrlA obtaining a specified level of financing. In the event PrlA does not obtain adequate financing within the specified period, X213 will be returned to us.

- XMetA is an insulin receptor-activating antibody designed to provide long-acting reduction of hyperglycemia in Type 2 diabetic patients, potentially reducing the advancement to a number of insulin injections needed to control their blood glucose levels.
- Additional Preclinical Product Candidates: In November 2016, we unveiled two novel oncology and oncology-related preclinical product candidates.
  - The first targets interleukin 2, ("IL-2"), which has long been recognized as an effective therapy for metastatic melanoma and renal cell carcinoma, but it has serious dose-limiting toxicities that prevent broad clinical use. We have generated novel antibodies that, when given with IL-2, are intended to steer IL-2 to enhance its positive impact with less toxicity, potentially improving the therapeutic index over standard IL-2 therapy.
  - The other is an anti-parathyroid receptor ("PTH1R") portfolio that includes several unique functional antibody antagonists targeting PTH1R, a G-protein-coupled receptor involved in the regulation of calcium metabolism. These antibodies have shown promising efficacy in in vivo studies and could potentially address unmet medical needs, including primary hyperparathyroidism and humoral hypercalcemia of malignancy ("HHM"). HHM is present in many advanced cancers and is caused by high serum calcium due to increased levels of the PTH1R ligand PTH-related peptide ("PTHrP"). Current HHM treatments often fall short and many cancer patients die from 'metabolic death'. Our PTH1R antibodies could be beneficial for the treatment of HHM.

Technologies Available for Non-Exclusive License

We have a unique set of antibody discovery, optimization and development technologies available for licensing, including:

- ADAPT™ (Antibody Discovery Advanced Platform Technologies): proprietary human antibody phage display libraries, integrated with yeast and mammalian display, which can be integrated into antibody discovery programs through license agreements. We believe access to ADAPT™ Integrated Display offers a number of benefits because it enables the diversity of phage libraries to be combined with accelerated discovery due to rapid immunoglobulin ("IgG") reformatting and fluorescence-activated cell sorting based screening using yeast and mammalian display. This increases the probability of success in finding rare and unique functional antibodies directed to targets of interest.
- ModulX™: technology which allows modulation of biological pathways using monoclonal antibodies and offers insights into regulation of signaling pathways, homeostatic control, and disease biology. Using ModulX™, we have generated product candidates with novel mechanisms of action that specifically alter the kinetics of interaction between molecular constituents (e.g. receptor-ligand). ModulX™ technology enables expanded target and therapeutic options and offers a unique approach in the treatment of disease.
- OptimX™ technologies:
  - Human Engineering™ ("HE™"): a proprietary humanization technology that allows modification of non-human monoclonal antibodies to reduce or eliminate detectable immunogenicity and make them suitable for medical purposes in humans. The technology uses a unique method developed by us, based on analysis of the conserved structure-function relationships among antibodies. The method defines which residues in a non-human variable region are candidates to be modified. The result is an HE™ antibody with preserved antigen binding, structure and function that has eliminated or greatly reduced immunogenicity. HE™ technology was used in development of gevokizumab and certain other antibody products.
  - Targeted Affinity Enhancement™ ("TAE™"): a proprietary technology involving the assessment and guided substitution of amino acids in antibody variable regions, enabling efficient optimization of antibody binding affinity and selectivity. TAE™ generates a comprehensive map of the effects of amino acid mutations in the complementarity-determining region likely to impact binding. The technology has been licensed to a number of companies.
  - Flexible Manufacturing: patented technology relating to a flexible arrangement of mobile clean rooms ("MCRs") within a manufacturing facility, with each MCR providing a portable, self-contained environment that allows for drug development. The facility design allows MCRs to connect easily and quickly to a central supply of utilities such as air, water, and electricity. This unique arrangement facilitates flexible manufacturing and eliminates change-over downtime. This translates into significantly reduced capital expenditures, production costs, and maintenance costs

while offering meaningful time advantages over conventional manufacturing facilities. When MCRs are not in use, they can be easily moved to cleaning/refurbishing areas and prepared MCRs can be "plugged in" for manufacturing. The flexible manufacturing system can be applied to fields as diverse as pharmaceuticals, biologics, and electronics.

Sale of Biodefense Assets and Manufacturing Facility

Ology Bioservices

On November 4, 2015, we entered the Ology Bioservices Purchase Agreement with Ology Bioservices, under which Ology Bioservices agreed to acquire our biodefense business and related assets (including, subject to regulatory approval, certain contracts with the U.S. government), and to assume certain liabilities of XOMA. As part of that transaction, the parties, subject to the satisfaction of certain conditions, entered into an intellectual property license agreement (the "Ology Bioservices License Agreement"), under which we agreed to license to Ology Bioservices certain intellectual property rights related to the purchased assets. Under the Ology Bioservices License Agreement, we were eligible for up to $4.5 million of cash payments and 23,008 shares of common stock of Ology Bioservices, based upon Ology Bioservices achieving certain specified future operational objectives. In February 2017, we executed an Amendment and Restatement to both the Ology Bioservices Purchase Agreement and Ology Bioservices License Agreement primarily to (i) remove the obligation to issue 23,008 shares of common stock of Ology Bioservices under the Ology Bioservices Purchase Agreement, and (ii) revise the payment schedule related to the timing of the $4.5 million cash payments due to us under the Ology Bioservices License Agreement. Of the $4.5 million, $3.0 million was contingent upon Ology Bioservices achieving certain specified future operating objectives. In the first quarter of 2017, we were entitled to receive $1.6 million under the agreement in quarterly payments through September 2018. During the third quarter of 2017, Ology Bioservices achieved the specified operating objectives and we earned the $3.0 million milestone payment that we are entitled to receive in monthly payments through July 2018. Of the total $4.6 million owed to us, we received $2.2 million during the year ended December 31, 2017 which was recognized as other income in our consolidated statement of operations.

In addition, we are eligible to receive a 15% royalty on net sales of any future Ology Bioservices products covered by or involving the related patents or know-how. Our right to royalties continues until the expiration of the last-to-expire licensed patent.

Agenus

On November 5, 2015, we entered into an asset purchase agreement (the "Agenus Purchase Agreement") with Agenus West, LLC, a wholly-owned subsidiary of Agenus Inc. ("Agenus"), pursuant to which Agenus agreed to acquire our pilot scale manufacturing facility in Berkeley, California, together with certain related assets, including a license to certain intellectual property related to the purchased assets, and to assume certain liabilities of XOMA, in consideration for the payment to us of up to $5.0 million in cash and the issuance to us of shares of Agenus's common stock having an aggregate value of up to $1.0 million. The Agenus Purchase Agreement closed on December 31, 2015. At closing, we received cash of $4.7 million, net of the assumed liabilities of $0.3 million. In addition to the cash consideration, we received shares of common stock of Agenus with an aggregate value of $0.5 million, which we subsequently sold in August 2016 for $0.6 million. The remaining common stock of Agenus will only be received upon our satisfaction of certain operational matters, which we are unlikely to satisfy.

Sale of Future Revenue Streams

Royalty Acquisition Agreements

On December 21, 2016, we entered into two Royalty Interest Acquisition Agreements (together, the "Royalty Acquisition Agreements") with HealthCare Royalty Partners II, L.P. ("HCRP"). Under the first Royalty Acquisition Agreement, we sold our right to receive milestone payments and royalties on future sales of products subject to a license agreement, dated August 18, 2005, between XOMA and Pfizer, Inc. ("Pfizer") (formerly Wyeth) for an upfront cash payment of $6.5 million, plus potential additional payments totaling $4.0 million in the event three specified net

sales milestones are met by Pfizer in 2017, 2018 and 2019. Based on estimated sales for 2017, the 2017 sales milestone was not achieved. We remain eligible to receive up to $3.0 million if specified net sales milestones are achieved in 2018 and 2019. Under the second Royalty Acquisition Agreement, we sold all rights to royalties under an Amended and Restated License Agreement dated October 27, 2006 between XOMA and Shire Plc. (formerly Dyax, Corp.) for a cash payment of $11.5 million.

Recently Terminated Agreements

Novo Nordisk

In December 2015, we entered into a license agreement with Novo Nordisk under which we granted Novo Nordisk an exclusive, world-wide, royalty-bearing license to our XMetA program of allosteric monoclonal antibodies that positively modulate the insulin receptor (the “XMetA Program”), subject to our retained commercialization rights for rare disease indications. Novo Nordisk had an option to add these additional rights to its license upon payment of an option fee.

Under the agreement, we received a $5.0 million, non-creditable, non-refundable, upfront payment. Based on the achievement of pre-specified criteria, we were eligible to receive up to $290.0 million in development, regulatory and commercial milestones. We were also eligible to receive royalties on sales of licensed products, which are tiered up to a high single-digit percentage rate based on sales levels.

On April 20, 2017, we received notice from Novo Nordisk regarding the termination of the exclusive license agreement due to strategic and business reasons. The termination of the exclusive license agreement became effective on July 20, 2017 and XMetA program is now available to license to other parties.

Financing Agreements

Novartis

In connection with the collaboration between XOMA and Novartis AG (then Chiron Corporation), a secured note agreement was executed in May 2005. The note agreement is secured by our interest in the collaboration and was due and payable in full on June 21, 2015. On June 19, 2015, we and NVDI, who assumed the note agreement, agreed to extend the maturity date of our secured note agreement from June 21, 2015 to September 30, 2015, which was then subsequently extended to September 30, 2020. On September 22, 2017, in connection with the XOMA-052 License Agreement with Novartis, we and NIBR, who assumed the note agreement from NVDI, executed an amendment to the note agreement under which we further extended the maturity date of the note to September 30, 2022. At December 31, 2017, the outstanding principal balance under this note agreement totaled $14.6 million.

Servier

In December 2010, we entered into a license and collaboration agreement (the “Collaboration Agreement”) with Servier to jointly develop and commercialize gevokizumab in multiple indications. Under the terms of the Collaboration Agreement, Servier obtained worldwide rights to cardiovascular disease and diabetes indications (cardiometabolic field) and rights outside the United States and Japan to all other indications, including NIU, Behçet’s disease uveitis and other inflammatory and oncology indications. We retained development and commercialization rights in the United States and Japan for all indications other than cardiovascular disease and diabetes.

In December 2010, we also entered into a loan agreement with Servier (the “Servier Loan Agreement”) that provided for an advance of up to €15.0 million. The loan was fully funded in January 2011, with the proceeds converting to approximately $19.5 million at the date of funding. The loan was secured by an interest in XOMA’s intellectual property rights to all gevokizumab indications worldwide, excluding certain rights in the United States and Japan. Interest was calculated at a floating rate based on a Euro Inter-Bank Offered Rate and was subject to a cap. The interest rate was reset semi-annually in January and July of each year. The Servier Loan Agreement was subsequently amended by a Consent, Transfer, Assumption and Amendment Agreement entered into as of August 12, 2013, where the loan was transferred from XOMA Ireland Limited to XOMA (US) LLC.

On January 9, 2015, Servier and we entered into Amendment No. 2 (“Loan Amendment”) to the Servier Loan Agreement. The Loan Amendment extended the maturity date of the loan from January 13, 2016 to three tranches of principal to be repaid as follows: €3.0 million on January 15, 2016, €5.0 million on January 15, 2017, and €7.0 million on January 15, 2018. In addition, the loan would become immediately due and payable upon certain customary events of default. In January 2016, we paid the principal amount of €3.0 million. In January 2017, we entered into Amendment No. 3 to the Servier Loan Agreement (“Amendment No. 3”). Amendment No. 3 extended the maturity date of the €5.0 million due on January 15, 2017 to July 15, 2017. The other terms of the loan remained unchanged.

On August 25, 2017, NIBR settled the Servier Loan Agreement in cash by paying directly to Servier $14.3 million, which represented the outstanding balance of the loan based on a euro to dollar exchange rate of 1.1932. The funds that NIBR paid directly to Servier were a portion of the upfront payment due to us under the XOMA-052 License Agreement. As a result of the debt being fully paid, the intellectual property securing the Servier Loan Agreement was released.

Hercules Loan and Security Agreement

In February 2015, we entered into a Loan and Security Agreement with Hercules Technology Growth Capital, Inc., (the "Hercules Loan Agreement") under which we borrowed $20.0 million.

The interest rate under the Hercules Loan Agreement was calculated at a rate equal to the greater of either (i) 9.40% plus the prime rate as reported from time to time in The Wall Street Journal minus 7.25%, and (ii) 9.40%. Payments under the Hercules Loan Agreement were interest only until June 1, 2016, after which we paid equal monthly payments of principal and interest amortized over a 30-month schedule through the scheduled maturity date of September 1, 2018 (the "Hercules Loan Maturity Date"). The entire principal balance, including a balloon payment of principal, would be due and payable on the Hercules Loan Maturity Date. In addition, a final payment of $1.2 million would be due on the Hercules Loan Maturity Date, or such earlier date specified in the Hercules Loan Agreement. If we prepaid the loan prior to the Hercules Loan Maturity Date, we would be required to pay Hercules a prepayment charge equal to 1.00% of the amount prepaid. Our obligations under the Hercules Loan Agreement were secured by a security interest in substantially all of our assets, other than our intellectual property.

On December 21, 2016, we entered into Amendment No. 1 (the "Hercules Amendment") to the Hercules Loan Agreement. Under the Hercules Amendment, Hercules agreed to release its security interest on the assets subject to the Acquisition Agreements with HCRP. In turn, in January 2017, we paid $10.0 million of the outstanding principal balance owed to Hercules. The $10.0 million payment was not subject to any prepayment charge. After taking into account the January 2017 payment, the principal balance of the Hercules Loan was $6.9 million.

On March 21, 2017, the Hercules Term Loan was paid in full and we were not required to pay the 1% prepayment charge due pursuant to the terms of the loan.

In connection with the Hercules Loan Agreement, we issued a warrant to Hercules that is exercisable for an aggregate of up to 9,063 shares of our common stock at an exercise price of $66.20 per share (the "Hercules Warrant"). The Hercules Warrant may be exercised on a cashless basis and is exercisable for a term beginning on the date of issuance and ending on the earlier to occur of five years from the date of issuance or the consummation of certain acquisitions of XOMA as set forth in the Hercules Warrant. The number of shares for which the Hercules Warrant is exercisable and the associated exercise price are subject to certain proportional adjustments as set forth in the Hercules Warrant.

Research and Development

Our research and development expenses include costs of personnel, supplies, facilities and equipment, consultants, third-party costs and other expenses related to preclinical and clinical testing. In 2017, our research and development expenses were $7.9 million, compared with $44.2 million in 2016 and $70.9 million in 2015.

Prior to 2017, our research and development activities can be divided into those related to our internal projects and those related to collaborative and contract arrangements, which are reimbursed by our collaborators. In March 2017, we initiated a corporate reorganization to discontinue internal product development and terminated our clinical programs as of June 30, 2017, both of which significantly reduced our research and development expenses. Research and development expenses relating to internal projects were $42.8 million in 2016 and $50.2 million in 2015. Research and development expenses related to collaborative and contract arrangements were $1.4 million in 2016 and $20.7 million in 2015.

Competition

The biotechnology and pharmaceutical industries are subject to continuous and substantial technological change. Some of the drugs our licensees are developing may compete with existing therapies or other drugs in development by other companies. Furthermore, academic institutions, government agencies and other public and private organizations conducting research may seek patent protection with respect to potentially competing products or technologies and may establish collaborative arrangements with our competitors. There can be no assurance that developments by others will not render our, or our licensees', products or technologies obsolete or uncompetitive.

Additionally, our recently-undertaken royalty aggregator model faces competition on at least two fronts. First, there are other companies, funds and other investment vehicles seeking to aggregate royalties or provide alternative financing to development-stage biotechnology and pharmaceutical companies. The competitive companies, funds and other investment vehicles may have a lower target rate of return, a lower cost of capital or access to greater amounts of capital and thereby may be able to acquire assets that we are also targeting for acquisitions. Second, existing or potential competitors to our partners' and licensee's products, particularly large pharmaceutical companies, may have greater financial, technical and human resources than our licensees. Accordingly, these competitors may be better equipped to develop, manufacture and market products. Many of these companies also have extensive experience in preclinical testing and human clinical trials, obtaining FDA and other regulatory approvals and manufacturing and marketing pharmaceutical products.

For a discussion of the risks associated with competition, see below under "Item 1A. Risk Factors."

Government Regulation

The research and development, manufacturing and marketing of pharmaceutical products are subject to regulation by numerous governmental authorities in the United States and other countries. We and our partners and licensees, depending on specific activities performed, are subject to these regulations. In the United States, pharmaceuticals are subject to regulation by both federal and various state authorities, including the FDA. The Federal Food, Drug and Cosmetic Act and the Public Health Service Act govern the testing, manufacture, safety, efficacy, labeling, storage, record keeping, approval, advertising and promotion of pharmaceutical products and there are often comparable regulations that apply at the state level. There are similar regulations in other countries as well. For both currently marketed and products in development, failure to comply with applicable regulatory requirements can, among other things, result in delays, the suspension of regulatory approvals, as well as possible civil and criminal sanctions. In addition, changes in existing regulations could have a material adverse effect on us or our partners. For a discussion of the risks associated with government regulations, see below under “Item 1A. Risk Factors.”

Intellectual Property

Intellectual property is important to our business and our future income streams will depend in part on our ability to obtain issued patents, and our partners’ and licensees’ ability to operate without infringing on the proprietary rights of others. We hold and have filed applications for a number of patents in the United States and internationally to protect our products and technology. We also have obtained or have the right to obtain licenses to, or income streams based on, certain patents and applications filed by others. However, the patent position of biotechnology companies generally is highly uncertain and consistent policy regarding the breadth of allowed claims has not emerged from the actions of the U.S. Patent and Trademark Office with respect to biotechnology patents. Accordingly, no assurance can be given that our, or our partners’ or licensees’ patents will afford protection against competitors with similar products or others will not obtain patents claiming aspects similar to those covered by our, or our partners’ or licensees’ patent applications. Below is a list of our patents and patent applications related to our programs:

Licensee/Partner	Program	Representative Patents/Applications	Subject matter	Expected expiry
Novartis	Anti-IL-1b			
		US 7,531,166 US 7,582,742	Gevokizumab and other antibodies and antibody fragments with similar binding properties for IL-1	2027
			Methods of treating Type 2 diabetes or Type 2 diabetes-induced diseases or conditions with high affinity antibodies and antibody fragments that bind to IL-1	
		US 7,695,718		
		US 8,101,166 US 8,586,036	Methods of treating gout with certain doses of IL-1 binding antibodies or binding fragments	2027

		US 9,163,082	Pharmaceutical compositions comprising anti-IL-1 binding antibodies or fragments for reducing acute coronary syndrome in a subject with a history of myocardial infarction.	
		US 8,637,029		2028
		JP 5763625		2030
Novartis	Anti-TGFb			2032
		US 8,569,464	TGF antibodies and methods of use thereof	
		US 9,145,458		2036
		US 9,714,285		
		WO2016/161410	Combination therapy using an inhibitor of TGFb and an inhibitor of PD-1 for treating or preventing recurrence of cancer	

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Novartis	Anti-CD40	US 8,828,396*	Silent Fc variants of anti-CD40 antibodies	2031
Rezolute	Anti-INSR	EP 2 480 254 JP 5849050	Insulin receptor-modulating antibodies having the functional properties of RZ358 Methods of treating or preventing post-prandial hypoglycemia after gastric bypass surgery using a negative modulator antibody to the insulin receptor	2030
		WO2016/141111		2036
Ology Bio	Anti-BoNT			2030
		US 8,821,879 EP 2 473 191	Coformulations of anti- botulinum neurotoxin antibodies	
PrlA Pharma	Anti-PRLR	US 7,867,493 EP 2 059 535	Prolactin receptor antibodies	2027
Various	Bacterial cell expression/ Phage display libraries	CA 1,341,235	Methods for expression and secretion of recombinant proteins from bacteria	2018
		US 8,546,307 EP 2 344 686 US 7,094,579 EP 2 060 628	XOMA phage display library components	2022
Actively seeking out license	Anti-PTH1R	WO2018/026748	Parathyroid Hormone Receptor 1 Antibodies and Uses Thereof	2037
Actively seeking out license	Anti-IL2	PCT publication pending**	Interleukin-2 Antibodies and Uses Thereof	2037

* Novartis-owned patent

**Jointly-owned with Medical University of South Carolina Foundation for Research Development

If certain patents issued to others are upheld or if certain patent applications filed by others are issued and upheld, our partners and licensees may require certain licenses from others to develop and commercialize certain potential

products incorporating our technology. There can be no assurance that such licenses, if required, will be available on acceptable terms.

We protect our proprietary information, in part, by confidentiality agreements with our employees, consultants and partners. These parties may breach these agreements, and we may not have adequate remedies for any breach. To the extent that we or our consultants or partners use intellectual property owned by others, we may have disputes with our consultants or partners or other third parties, as to the rights in related or resulting know-how and inventions.

Financial Information about Geographic Areas

When and if we are able to generate income, a portion of that income may be derived from product sales and other activities of our third-party licensees and partners outside the United States.

We have determined that we operate in one business segment as we only report operating results on an aggregate basis to the chief operating decision maker of XOMA. Our property and equipment is held in the United States.

Financial information regarding the geographic areas in which we operate and segment information is included in Note 14 to the December 31, 2017, Financial Statements: Concentration of Risk, Segment and Geographic Information.

Concentration of Risk

Novartis accounted for 95 percent of our total revenue in 2017. Five Prime, Servier, and National Institute of Allergy and Infectious Diseases ("NIAID") accounted for 27 percent, 22 percent, and 19 percent, respectively, of our total revenue in 2016. In 2015, Novartis accounted for 67 percent of our total revenue. At December 31, 2017, Janssen Biotech, Inc. (formerly Centocor Biotech Inc.) accounted for 100 percent of the accounts receivable balance. At December 31, 2016, NIAID accounted for 85 percent of the accounts receivable balance. None of these parties represent a related party to XOMA and the loss of one or more of these partners could have a material effect on our business and financial condition.

Employees

As of March 2, 2018, we employed 12 full-time employees. None of our employees are unionized. Our employees are primarily engaged in executive, business development, finance and administrative positions.

Available Information

The following information can be found on our website at http://www.xoma.com or can be obtained free of charge by contacting our Investor Relations Department at investorrelations@xoma.com or by calling (910) 726-1372:

- Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to those reports filed or furnished under Section 13(a) or 15(d) of the Exchange Act will be available as soon as reasonably practicable after such material is electronically filed with the SEC. All reports we file with the SEC also can be obtained free of charge via EDGAR through the SEC's website at http://www.sec.gov.
- Our policies related to corporate governance, including our Code of Ethics applying to our directors, officers and employees (including our principal executive officer and principal financial and accounting officer) that we have adopted to meet the requirements set forth in the rules and regulations of the SEC and its corporate governance principles.
- The charters of the Audit, Compensation and Nominating & Governance Committees of our Board of Directors.

We intend to satisfy the applicable disclosure requirements regarding amendments to, or waivers from, provisions of our Code of Ethics by posting such information on our website.

Item 1A. Risk Factors

The following risk factors and other information included in this annual report should be carefully considered. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us also may impair our business operations. If any of the following risks occur, our business, financial condition, operating results and cash flows could be materially adversely affected.

Risks Related to our Recently Undertaken Royalty Aggregator Strategy

Our planned acquisition of royalties may not produce anticipated revenues, and if such transactions are secured by collateral, we may be, or may become, under-secured by the collateral or such collateral may lose value and we will not be able recuperate our capital expenditures in the acquisition.

We are engaged in a continual review of opportunities to acquire royalties and other intellectual property assets as part of our royalty aggregator strategy or to acquire companies that hold royalty assets. We currently, and generally at any time, have acquisition opportunities in various stages of active review, including, for example, our engagement of consultants and advisors to analyze particular opportunities, technical, financial and other confidential information, submission of indications of interest and involvement as a bidder in competitive auctions. Many potential acquisition targets do not meet our criteria, and for those that do, we may face significant competition for these acquisitions from other royalty buyers and enterprises. Competition for future asset acquisition opportunities in our markets could increase the price we pay for such assets and could reduce the number of potential acquisition targets. The success of our acquisitions is based on our ability to make accurate assumptions regarding the valuation, timing and amount of future royalty and milestone payments as well as the viability of the underlying technology. The failure of any of these acquisitions to produce anticipated revenues may materially and adversely affect our financial condition and results of operations.

Some of these acquisitions may expose us to credit risk in the event of default by the counterparty. To mitigate this risk, on occasion, we may obtain a security interest as collateral in the assets of such counterparty. Our credit risk in respect of such counterparty may be exacerbated when the collateral held by us cannot be realized upon or is liquidated at prices not sufficient to recover the full amount we are due pursuant to the terms of the particular assets. This could occur in circumstances where the original collateral was not sufficient to cover a complete loss (e.g., our interests were only partially secured) or may result from the deterioration in value of the collateral, so that, in either such case, we are unable to recuperate our full capital outlay. Any such losses resulting therefrom could materially and adversely affect our financial condition and results of operations.

Many of our potential royalty acquisitions are in companies or assets that have no approved or commercialized products or are dependent on the actions of unrelated third parties, which may negatively impact our investment returns.

As part of our recently launched royalty aggregator strategy, we will likely make investments in royalty assets, such as an upfront payment for a profit share or royalty stream in the healthcare industry, many of which investments are in companies that, at the time of investment, have limited or no approved or commercialized products. If the assets are not successfully developed and subsequently commercialized, the value of our investments will be negatively affected. The ultimate success of our royalty aggregator strategy will depend on the ability of the counterparty to innovate, develop and commercialize their products, in increasingly competitive and highly regulated markets. Their inability to do so would negatively affect our investment. In addition, we are dependent, to a large extent, on third parties to enforce certain rights for our benefit, such as protection of a patent estate, and their failure to do so would negatively impact our investment returns.

We depend on our licensees and royalty-agreement counterparties for the determination of royalty and milestone payments. While we have rights to audit our licensees and royalty-agreement counterparties, the independent auditors may have difficulty determining the correct royalty calculation, we may not be able to detect errors and payment calculations may call for retroactive adjustments. We may have to exercise legal remedies to resolve any disputes resulting from the audit.

The royalty and milestone payments we receive are determined by our licensees based on their reported development and product sales. Each licensee's calculation of the royalty payments is subject to and dependent upon the adequacy and accuracy of its sales and accounting functions, and errors may occur from time to time in the calculations made by a licensee. Our license and royalty agreements provide us the right to audit the calculations and sales data for the associated royalty payments; however, such audits may occur many months following our recognition of the royalty revenue, may require us to adjust our royalty revenues in later periods and may require expense on the part of the Company. Further, our licensees and royalty-agreement counterparties may be uncooperative or have insufficient records, which may complicate and delay the audit process.

Although we intend to regularly exercise our royalty audit rights, we rely in the first instance on our licensees and royalty-agreement counterparties to accurately report sales and calculate and pay applicable royalties and, upon exercise of such royalty audit rights, we rely on licensees' and royalty-agreement counterparties' cooperation in performing such audits. In the absence of such cooperation, we may be forced to exercise legal remedies to enforce our agreements.

The lack of liquidity in our acquisitions may adversely affect our business and, if we need to sell any of our acquired assets, we may not be able to do so at a favorable price. As a result, we may suffer losses.

We generally acquire patents, license agreements and royalty rights that have limited secondary resale markets. The illiquidity of most of our assets may make it difficult for us to dispose of them at a favorable price and, as a result, we may suffer losses if we are required to dispose of any or all such assets in a liquidation or otherwise. In addition, if we liquidate all or a portion of our assets quickly or relating to a liquidation, we may realize significantly less than the value at which we had previously recorded these assets.

As we continue to develop our business, our mix of assets and our sources of income may require that we register with the SEC as an “investment company” in accordance with the Investment Company Act of 1940.

We have not been and have no current intention to register as an "investment company" under the Investment Company Act of 1940, or the ‘40 Act, because we believe the nature of our assets and the sources of our income currently exclude us from the definition of an investment company pursuant to Sections (3)(a)(1)(A) and (3)(a)(1)(C) under the ‘40 Act and Rule 3a-1 thereunder. Accordingly, we are not currently subject to the provisions of the ‘40 Act, such as compliance with the ‘40 Act’s registration and reporting requirements, capital structure requirements, affiliate transaction restrictions, conflict of interest rules, requirements for disinterested directors, and other substantive provisions. Generally, to avoid being a company that is an "investment company" under the ‘40 Act, it must both: (a) not be or hold itself out as being engaged primarily in the business of investing, reinvesting or trading in securities, and (b) either (i) not be engaged or propose to engage in the business of investing in securities or own or propose to acquire investment securities having a value exceeding 40% of the value of its total assets (exclusive of U.S. government securities and cash items) on an unconsolidated basis or (ii) not have more than 45% of the value of its total assets (exclusive of government securities and cash items) consist of or more than 45% of its net income after taxes (for the last four fiscal quarters combined) be derived from certain types of securities. In addition, we would not be an “investment company” if an exception, exemption, or safe harbor under the ‘40 Act applies.

We monitor our assets and income for compliance with the tests under the ‘40 Act and seek to conduct our business activities to ensure that we do not fall within its definitions of “investment company.” If we were to become an “investment company” and be subject to the restrictions of the ‘40 Act, those restrictions would likely require changes in the way we do business and add significant administrative burdens to our operations. To ensure that we do not fall within the ‘40 Act, we may need to take various actions which we might otherwise not pursue. These actions may include restructuring the Company and/or modifying our mixture of assets and income.

Specifically, our mixture of securities vs. royalty assets will be important to our classification as an “investment company”. While we currently believe that none of the definitions of “investment company” apply to us, we may in the future rely on an exception under the ‘40 Act provided by Section 3(c)(5)(A). To qualify under Section 3(c)(5)(A), as interpreted by the staff of the SEC, we would be required to have at least 55% of our total assets in "notes, drafts, acceptances, open accounts receivable, and other obligations representing part or all of the sales price of merchandise, insurance, and services" (or Qualifying Assets). The SEC staff has stated in a no action letter that royalty interests are Qualifying Assets under this exception. If the SEC or its staff in the future adopts a contrary interpretation or otherwise restricts the conclusions in the staff's no-action letter such that our royalty interests are no longer Qualifying Assets for purposes of Section 3(c)(5)(A), or if we fail to have 55% of our total assets in Qualifying Assets, we could be required to register under the ‘40 Act.

The rules and interpretations of the SEC and the courts, relating to the definition of "investment company" are very complex. While we currently intend to conduct our operations so that we will not be an investment company under applicable SEC interpretations, we can provide no assurance that the SEC would not take the position that the Company would be required to register under the ‘40 Act.

Risks Related to our Financial Results and Capital Requirements

We have sustained losses in the past, and we expect to sustain losses in the foreseeable future.

We had net income of $14.6 million for the year ended December 31, 2017, and net losses of $53.5 million and $20.6 million for the years ended December 31, 2016, and 2015, respectively. As of December 31, 2017, we had an

accumulated deficit of $1.2 billion.

We do not know whether we will ever achieve sustained profitability or whether cash flow from future operations will be sufficient to meet our needs.

To date, we have financed our operations primarily through the sale of equity securities and debt, and collaboration and licensing arrangements. The size of our future net losses will depend, in part, on the rate of our future expenditures and our partner's ability to generate revenues. If our partner's product candidates are not successfully developed or commercialized by our licensees, or if revenues are insufficient following marketing approval, we will not achieve profitability and our business may fail. Our ability to achieve profitability is dependent in large part on the success of our ability to license our product candidates, and the success of our licensees' development programs, both of which are uncertain. Our success is also dependent on our licensees obtaining regulatory approval to market our product candidates which may not materialize or prove to be successful.

Our new strategy may require us to raise additional funds to acquire royalty assets; we cannot be certain that funds will be available, and if they are not available, we may be unsuccessful in acquiring assets to sustain the business in the future.

We may need to commit substantial funds to continue our business, and we may not be able to obtain sufficient funds on acceptable terms, or at all. Any additional debt financing or additional equity that we raise may contain terms that are not favorable to our stockholders or us. If we raise additional funds through licensing arrangements with third parties, we may be required to relinquish some rights to our technologies or our product candidates, grant licenses on terms that are not favorable to us or enter into a license arrangement for a product candidate at an earlier stage of development or for a lesser amount than we might otherwise choose.

Additional funds may not be available when we need them on terms that are acceptable to us, or at all. If adequate funds are not available on a timely basis, we may:

- reduce or eliminate royalty aggregation efforts; or
- further reduce our capital or operating expenditures; or
- curtail our spending on protecting our intellectual property.

We have significantly restructured our business and revised our business plan and there are no assurances that we will be able to successfully implement our business plan or successfully operate as a royalty aggregator.

We have historically been focused on discovering and developing innovative therapeutics derived from our unique platform of antibody technologies. Prospectively, we will become a royalty aggregator where we focus on expanding our portfolio of fully-funded programs by out-licensing our internally developed product candidates and acquiring potential milestone and royalty revenue streams on additional product candidates. Our strategy is based on a number of factors and assumptions, some of which are not within our control, such as the actions of third parties. There can be no assurance that we will be able to successfully execute all or any elements of our strategy, or that our ability to successfully execute our strategy will be unaffected by external factors. If we are unsuccessful in acquiring potential milestone and royalty revenue streams on additional product candidates, or those acquisitions do not perform to our expectations, our financial performance could be adversely affected.

We may not realize the expected benefits of our cost-saving initiatives.

Reducing costs is a key element of our current business strategy. On August 21, 2015, in connection with our efforts to lower operating expenses and preserve capital while continuing to focus on our product pipeline, we implemented a workforce reduction, which led to the termination of 52 employees during the second half of 2015. On December 19, 2016, we approved a restructuring of our business based on our decision to focus our efforts on clinical development, with an initial focus on the X358 clinical program. The restructuring included a reduction-in-force in which we terminated 57 employees (the “2016 Restructuring”). In early 2017, we implemented a royalty-aggregator business model (the “2017 Restructuring”), which resulted in the termination of five additional employees effective June 30, 2017.

If we experience excessive unanticipated inefficiencies or incremental costs in connection with restructuring activities, such as unanticipated inefficiencies caused by reducing headcount, we may be unable to meaningfully realize cost savings and we may incur expenses in excess of what we anticipate. Either of these outcomes could prevent us from meeting our strategic objectives and could adversely impact our results of operations and financial condition.

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Risks Related to Our Reliance on Third Parties

We rely heavily on licensee relationships, and any disputes or litigation with our partners or termination or breach of any of the related agreements could reduce the financial resources available to us, including milestone payments and future royalty revenues.

Our existing collaborations may not continue or be successful, and we may be unable to enter into future collaborative arrangements to develop and commercialize our unpartnered assets. Generally, our current collaborative partners also have the right to terminate their collaborations at will or under specified circumstances. If any of our collaborative partners breach or terminate their agreements with us or otherwise fail to conduct their collaborative activities successfully (for example, by not making required payments when due, or at all), our product development under these agreements will be delayed or terminated. Disputes or litigation may also arise with our collaborators (with us and/or with one or more third parties), including those over ownership rights to intellectual property, know-how or technologies developed with our collaborators. For example, we are asserting our rights to receive payment against one of our collaborative partners which could harm our relationship with such partner. Such disputes or litigation could adversely affect our rights to one or more of our product candidates and could delay, interrupt or terminate the collaborative research, development and commercialization of certain potential products, create uncertainty as to ownership rights of intellectual property, or could result in litigation or arbitration. In addition, a significant downturn or deterioration in the business or financial condition of our collaborators or partners could result in a loss of expected revenue and our expected returns on investment. The occurrence of any of these problems could be time-consuming and expensive and could adversely affect our business.

Our licensees rely on third parties to provide services in connection with our product candidate development and manufacturing programs. The inadequate performance by or loss of any of these service providers could affect our licensees' product candidate development.

Third parties provide services in connection with preclinical and clinical development programs, including in vitro and in vivo studies, assay and reagent development, immunohistochemistry, toxicology, pharmacokinetics, clinical trial support, manufacturing and other outsourced activities. If these service providers do not adequately perform the services for which we or our licensees have contracted, or cease to continue operations, and we are not able to find a replacement provider quickly or we lose information or items associated with our product candidates, our development programs may be delayed.

Agreements with other third parties, many of which are significant to our business, expose us to numerous risks.

Because our licensees, suppliers and contractors are independent third parties, they may be subject to different risks than we are and have significant discretion in, and different criteria for, determining the efforts and resources they will apply related to their agreements with us. If these licensees, suppliers and contractors do not successfully perform the functions for which they are responsible, we may not have the capabilities, resources or rights to do so on our own.

We do not know whether we or our licensees will successfully develop and market any of the products that are or may become the subject of any of our licensing arrangements. In addition, third-party arrangements such as ours also increase uncertainties in the related decision-making processes and resulting progress under the arrangements, as we and our licensees may reach different conclusions, or support different paths forward, based on the same information, particularly when large amounts of technical data are involved.

Under our contract with NIAID, a part of the National Institute of Health ("NIH"), we invoiced using NIH provisional rates, and these are subject to future audits at the discretion of NIAID's contracting office. These audits can result in an adjustment to revenue previously reported, which potentially could be significant.

Failure of our licensees' product candidates to meet current Good Manufacturing Practices standards may subject us to delays in regulatory approval and penalties for noncompliance.

Our licensees may rely on third party manufacturers and such contract manufacturers are required to produce clinical product candidates under current Good Manufacturing Practices ("cGMP") to meet acceptable standards for use in clinical trials and for commercial sale, as applicable. If such standards change, the ability of contract manufacturers to produce our product candidates on the schedule required for our clinical trials or to meet commercial requirements may be affected. In addition, contract manufacturers may not perform their obligations under their agreements with our licensees, may discontinue their business before the time required by us to successfully produce clinical and commercial supplies of our product candidates.

Contract manufacturers are subject to pre-approval inspections and periodic unannounced inspections by the FDA and corresponding state and foreign authorities to ensure strict compliance with cGMP and other applicable government regulations and corresponding foreign standards. We do not have control over a third-party manufacturer's compliance with these regulations and standards. Any difficulties or delays in contractors' manufacturing and supply of our product candidates or any failure of our licensees' contractors to maintain compliance with the applicable regulations and standards could increase costs, cause us to reduce revenue, make us or our licensees postpone or cancel clinical trials, prevent or delay regulatory approval by the FDA and corresponding state and foreign authorities, prevent the import and/or export of our product candidates, or cause any of our product candidates that may be approved for commercial sale to be recalled or withdrawn.

Certain of our technologies are in-licensed from third parties, so our and our licensees' capabilities using them are restricted and subject to additional risks.

We have licensed technologies from third parties. These technologies include phage display technologies licensed to us in connection with our bacterial cell expression technology licensing program and antibody products. However, our and our licensees' use of these technologies is limited by certain contractual provisions in the licenses relating to them, and although we have obtained numerous licenses, intellectual property rights in the area of phage display are particularly complex. If we are unable to maintain our licenses, patents or other intellectual property, we could lose important protections that are material to continuing our operations and for future prospects. Our licensors also may seek to terminate our license, which could cause us and our licensees to lose the right to use the licensed intellectual property and adversely affect our ability to commercialize our technologies, products or services.

Because many of the companies with which we do business also are in the biotechnology sector, the volatility of that sector can affect us indirectly as well as directly.

The same factors that affect us directly also can adversely affect us indirectly by affecting the ability of our partners and others with whom we do business to meet their obligations to us and reduce our ability to realize the value of the consideration provided to us by these other companies.

For example, in connection with our dispositions or license arrangements, we have in the past and may in the future agree to accept equity securities of the licensee in payment of fees. The future value of these or any other shares we receive is subject both to market risks affecting our ability to realize the value of these shares and more generally to the business and other risks to which the issuer of these shares may be subject.

Risks Related to an Investment in Our Common Stock

Our share price may be volatile, and there may not be an active trading market for our common stock.

There can be no assurance the market price of our common stock will not decline below its present market price or there will be an active trading market for our common stock. The market prices of biotechnology companies have been and are likely to continue to be highly volatile. Fluctuations in our operating results and general market conditions for biotechnology stocks could have a significant impact on the volatility of our common stock price. We have experienced significant volatility in the price of our common stock. From January 1, 2017, through March 2,

2018, the share price of our common stock has ranged from a high of $37.25 to a low of $3.96. Additionally, we have two significant holders of our stock that could affect the liquidity of our stock and have a significant negative impact on our stock price if one or both of the holders were to quickly sell their ownership positions.

If we fail to meet continued listing standards of NASDAQ, our common stock may be delisted, which could have a material adverse effect on the liquidity of our common stock.

Our common stock is currently traded on the Nasdaq Global Market. The NASDAQ Stock Market LLC ("NASDAQ") has requirements that a company must meet in order to remain listed on NASDAQ.

We have in the past temporarily fallen out of compliance with NASDAQ listing standards and there can be no assurance that we will continue to meet NASDAQ listing requirements in the future.

We received a letter from the Listing Qualifications Staff of The NASDAQ Stock Market LLC (the "Staff") on March 22, 2017, providing notification that we no longer complied with the $50 million in total assets and total revenue standard for continued listing on The Nasdaq Global Market under NASDAQ's Listing Rule 5450(b)(3)(A) and that we also did not comply with either of the two alternative standards of Listing Rule 5450(b), the equity standard and the market value standard.

On May 2, 2017, following ten consecutive business days where the market value of our listed securities was $50 million or greater, we regained compliance with NASDAQ Listing Rule 5450(b)(2)(A).

If future events cause our common stock to be delisted, the liquidity of our common stock would be adversely affected and the market price of our common stock could decrease.

We may issue additional equity securities and thereby materially and adversely affect the price of our common stock.

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.

We are authorized to issue, without stockholder approval, 1,000,000 shares of preferred stock, of which 5,003 shares of Series X preferred stock were issued and outstanding as of March 2, 2018. Each share of Series X is convertible into 1,000 shares of registered common stock based on a conversion price of $4.03 per share of common stock. The total number of shares of common stock issued upon conversion of all issued Series X convertible preferred stock will be 5,003,000 shares. Each share is convertible at the option of the holder at any time, provided that the holder will be prohibited from converting into common stock if, as a result of such conversion, the holder, together with its affiliates, would beneficially own a number of shares above a conversion blocker, which is initially set at 19.99% of our total common stock then issued and outstanding immediately following the conversion of such shares. In addition, we are authorized to issue, generally without stockholder approval, up to 277,333,332 shares of common stock, of which 8,329,098 were issued and outstanding as of March 2, 2018. If we issue additional equity securities, the price of our common stock may be materially and adversely affected.

In addition, funding from collaboration partners and others has in the past and may in the future involve issuance by us of our common stock. We cannot be certain how the purchase price of such shares, the relevant market price or premium, if any, will be determined or when such determinations will be made.

Any issuance by us of equity securities, whether through an underwritten public offering, an at the market offering, a private placement, in connection with a collaboration or otherwise could result in dilution in the value of our issued and outstanding shares, and a decrease in the trading price of our common stock.

We may sell additional equity or debt securities to fund our operations, which may result in dilution to our stockholders and impose restrictions on our business.

In order to raise additional funds to support our operations, we may sell additional equity or debt securities, which would result in dilution to our stockholders and may impose restrictive covenants that would adversely impact our business. The sale of additional equity or convertible debt securities could result in the issuance of additional shares of our capital stock and dilution to all of our stockholders. The incurrence of indebtedness would result in increased fixed payment obligations and could also result in certain restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating

restrictions that could adversely impact our ability to conduct our business. If we are unable to expand our operations or otherwise capitalize on our business opportunities, our business, financial condition and results of operations could be materially adversely affected and we may not be able to meet our debt service obligations.

Our organizational documents contain provisions that may prevent transactions that could be beneficial to our stockholders and may insulate our management from removal.

Our charter and by-laws:

- require certain procedures to be followed and time periods to be met for any stockholder to propose matters to be considered at annual meetings of stockholders, including nominating directors for election at those meetings; and
- authorize our Board of Directors to issue up to 1,000,000 shares of preferred stock without stockholder approval and to set the rights, preferences and other designations, including voting rights, of those shares as the Board of Directors may determine.

In addition, we are subject to the provisions of Section 203 of the Delaware General Corporation Law (the “DGCL”), that may prohibit large stockholders, in particular those owning 15% or more of our outstanding common stock, from merging or combining with us.

These provisions of our organizational documents and the DGCL, alone or in combination with each other, may discourage transactions involving actual or potential changes of control, including transactions that otherwise could involve payment of a premium over prevailing market prices to holders of common stock, could limit the ability of stockholders to approve transactions that they may deem to be in their best interests, and could make it considerably more difficult for a potential acquirer to replace management.

As a public company in the United States, we are subject to the Sarbanes-Oxley Act. We have determined our disclosure controls and procedures and our internal control over financial reporting are effective. We can provide no assurance that we will, at all times, in the future be able to report that our internal controls over financial reporting are effective.

Companies that file reports with the SEC, including us, are subject to the requirements of Section 404 of the Sarbanes-Oxley Act of 2002 (“SOX”). Section 404 requires management to establish and maintain a system of internal control over financial reporting, and annual reports on Form 10-K filed under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), must contain a report from management assessing the effectiveness of our internal control over financial reporting. Ensuring we have adequate internal financial and accounting controls and procedures in place to produce accurate financial statements on a timely basis is a time-consuming effort that needs to be re-evaluated frequently. Failure on our part to have effective internal financial and accounting controls would cause our financial reporting to be unreliable, could have a material adverse effect on our business, operating results, and financial condition, and could cause the trading price of our common stock to fall.

We incur significant costs as a result of operating as a public company, which may adversely affect our operating results and financial condition.

As a public company, we incur significant accounting, legal and other expenses, including costs associated with our public company reporting requirements. We also anticipate that we will continue to incur costs associated with corporate governance requirements, including requirements and rules under SOX and the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank") among other rules and regulations implemented by the SEC, as well as listing requirements of NASDAQ. Furthermore, these laws and regulations could make it difficult or costly for us to obtain certain types of insurance, including director and officer 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 requirements could also make it difficult for us to attract and retain qualified persons to serve on our Board of Directors, our Board Committees or as executive officers.

New laws and regulations as well as changes to existing laws and regulations affecting public companies, including the provisions of SOX and Dodd-Frank and rules adopted by the SEC and NASDAQ, would likely result in increased costs to us as we respond to their requirements. We continue to invest resources to comply with evolving laws and regulations, and this investment may result in increased general and administrative expense.

Our ability to use our net operating loss carry-forwards and other tax attributes will be substantially limited by Section 382 of the U.S. Internal Revenue Code.

Under the newly enacted federal income tax law, federal net operating losses incurred in 2018 and in future years may be carried forward indefinitely, but the deductibility of such federal net operating losses is limited. It is uncertain if and to what extent various states will conform to the newly enacted federal tax law. In addition, Section 382 of the U.S. Internal Revenue Code of 1986, as amended, and corresponding provisions of state law, generally limit the ability of a corporation that undergoes an "ownership change" to utilize its net operating loss carry-forwards ("NOLs") and certain other tax attributes against any taxable income in taxable periods after the ownership change. The amount of taxable income in each taxable year after the ownership change that may be offset by pre-change NOLs and certain other pre-change tax attributes is generally equal to the product of (a) the fair market value of the corporation's outstanding shares (or, in the case of a foreign corporation, the fair market value of items treated as connected with the conduct of a trade or business in the United States) immediately prior to the ownership change and (b) the long-term tax exempt rate (i.e., a rate of interest established by the U.S. Internal Revenue Service that fluctuates from month to month). In general, an "ownership change" occurs whenever the percentage of the shares of a corporation owned, directly or indirectly, by "5-percent shareholders" (within the meaning of Section 382 of the Internal Revenue Code) increases by more than 50 percentage points over the lowest percentage of the shares of such corporation owned, directly or indirectly, by such "5-percent shareholders" at any time over the preceding three years.

Based on an analysis under Section 382 of the Internal Revenue Code (which subjects the amount of pre-change NOLs and certain other pre-change tax attributes that can be utilized to an annual limitation), we experienced ownership changes in 2009 and 2012, which substantially limit the future use of our pre-change NOLs and certain other pre-change tax attributes per year. In February 16, 2017, we completed an equity financing for net proceeds of $24.8 million which triggered an additional ownership change under Section 382 that significantly impacted the availability of our tax attributes against future income. Further, due to the existence of a net unrealized built-in loss at the ownership change date, Section 382 further limits our ability to fully utilize the tax deductions associated with certain of our assets, including depreciation and amortization deductions recognized during the 60-month period following the ownership change ending in 2022. Although these deductions will occur in the post-change period, Section 382 treats the deductions as pre-change losses subject to the annual 382 limitation. As of December 31, 2017, we have excluded the NOLs and research and development credits that will expire as a result of the annual limitations. To the extent that we do not utilize our carry-forwards within the applicable statutory carry-forward periods, either because of Section 382 limitations or the lack of sufficient taxable income, the carry-forwards will also expire unused.

The recently passed comprehensive tax reform bill could adversely affect our business and financial condition.

On December 22, 2017, the Tax Cuts and Jobs Act of 2017 was signed into law that significantly revises the Internal Revenue Code of 1986, as amended. The newly enacted federal income tax law, among other things, contains significant changes to corporate taxation, including reduction of the corporate tax rate from a top marginal rate of 35% to a flat rate of 21%, limitation of the tax deduction for interest expense to 30% of adjusted earnings (except for certain small businesses), limitation of the deduction for net operating losses to 80% of current year taxable income and elimination of net operating loss carrybacks, one time taxation of offshore earnings at reduced rates regardless of whether they are repatriated, immediate deductions for certain new investments instead of deductions for depreciation expense over time, and modifying or repealing many business deductions and credits (including reducing the business tax credit for certain clinical testing expenses incurred in the testing of certain drugs for rare diseases or conditions). Notwithstanding the reduction in the corporate income tax rate, the overall impact of the new federal tax law is uncertain and our business and financial condition could be adversely affected. In addition, it is uncertain if and to what extent various states will conform to the newly enacted federal tax law. The impact of this tax reform on holders of our common stock is also uncertain and could be adverse. We urge our stockholders to consult with their legal and tax advisors with respect to this legislation and the potential tax consequences of investing in or holding our common stock.

Risks Related to the Development and Commercialization of our Current and Future Product Candidates

We may not be able to successfully identify and acquire and/or in-license other products, product candidates, programs or companies to grow and diversify our business, and, even if we are able to do so, we may not be able to successfully manage the risks associated with integrating any such products, product candidates, programs or companies into our business or we may otherwise fail to realize the anticipated benefits of these licenses or acquisitions.

To grow and diversify our business, we plan to continue our business development efforts to identify and seek to acquire and/or in-license other products, product candidates, programs or companies. Future growth through acquisition or in-licensing will depend upon the availability of suitable products, product candidates, programs or

companies for acquisition or in-licensing on acceptable prices, terms and conditions. Even if appropriate opportunities are available, we may not be able to acquire rights to them on acceptable terms, or at all. The competition to acquire or in-license rights to promising products, product candidates, programs and companies is fierce, and many of our competitors are large, multinational pharmaceutical and biotechnology companies with considerably more financial, development and commercialization resources, personnel, and experience than we have. In order to compete successfully in the current business climate, we may have to pay higher prices for assets than may have been paid historically, which may make it more difficult for us to realize an adequate return on any acquisition.

Even if we are able to successfully identify and acquire or in-license new products, product candidates, programs or companies, we may not be able to successfully manage the risks associated with integrating any products, product candidates, programs or companies into our business or the risks arising from anticipated and unanticipated problems in connection with an acquisition or in-licensing. Further, while we seek to mitigate risks and liabilities of potential acquisitions through, among other things, due diligence, there may be risks and liabilities that such due diligence efforts fail to discover, that are not disclosed to us, or that we inadequately assess. Any failure in identifying and managing these risks and uncertainties effectively would have a material adverse effect on our business. In any event, we may not be able to realize the anticipated benefits of any acquisition or in-licensing for a variety of reasons, including the possibility that a product candidate fails to advance to clinical development, proves not to be safe or effective in clinical trials, or that a product fails to reach its forecasted commercial potential or that the integration of a product, product candidate, program or company gives rise to unforeseen difficulties and expenditures. Any failure in identifying and managing these risks and uncertainties would have a material adverse effect on our business.

We may not be successful in entering into out-license agreements for our product candidates, which may adversely affect our liquidity and business.

We intend to pursue a strategy to out-license all of our product candidates in order to provide for potential payments, funding and/or royalties on future product sales. The out-license agreements may be structured to share in the proceeds received by a licensee as a result of further development or commercialization of the product candidates. We may not be successful in entering into out-licensing agreements with favorable terms as a result of factors, many of which are outside of our control. These factors include:

- research and spending priorities of potential licensing partners;
- willingness of, and the resources available to, pharmaceutical and biotechnology companies to in-license drug candidates to fill their clinical pipelines; or
- our inability to generate proof-of-concept data and to agree with a potential partner on the value of our product candidates, or on the related terms.

If we are unable to enter into out-licensing agreements for our product candidates and realize license, milestone and royalty fees when anticipated, it may adversely affect our liquidity, which in turn may harm our business.

If our licensees' therapeutic product candidates do not receive regulatory approval, our licensees will be unable to market them.

Our licensees' product candidates cannot be manufactured and marketed in the United States or any other countries without required regulatory approvals. The U.S. government and governments of other countries extensively regulate many aspects of our product candidates, including:

- clinical development and testing;
- manufacturing;
- labeling;
- storage;
- record keeping;
- promotion and marketing; and
- importing and exporting.

In the United States, the FDA regulates pharmaceutical products under the Federal Food, Drug, and Cosmetic Act and other laws, including, in the case of biologics, the Public Health Service Act. At the present time, we believe all of our product candidates will be regulated by the FDA as biologics.

Initiation of clinical trials requires approval by health authorities. Clinical trials involve the administration of the investigational new drug to healthy volunteers or to patients under the supervision of a qualified principal investigator. Clinical trials must be conducted in accordance with FDA and International Conference on Harmonization Good Clinical Practices and the European Clinical Trials Directive, as applicable, under protocols that detail the objectives of the study, the parameters to be used to monitor safety and the efficacy criteria to be evaluated. Other national, foreign and local regulations also may apply. The developer of the drug must provide information relating to the characterization and controls of the product before administration to the patients participating in the clinical trials. This requires developing approved assays of the product to test before administration to the patient and during the conduct of the trial. In addition, developers of pharmaceutical products must provide periodic data regarding clinical trials to the FDA and other health authorities, and these health authorities may issue a clinical hold upon a trial if they

do not believe, or cannot confirm, that the trial can be conducted without unreasonable risk to the trial participants.

The results of the preclinical studies and clinical testing, together with chemistry, manufacturing and controls information, are submitted to the FDA and other health authorities in the form of a New Drug Application ("NDA") for a drug, and in the form of a Biologic License Application ("BLA") for a biological product, requesting approval to commence commercial sales. In responding to an NDA or BLA, the FDA or foreign health authorities may grant marketing approvals, request additional information or further research, or deny the application if they determine the application does not satisfy regulatory approval criteria. Regulatory approval of an NDA, BLA, or supplement is never guaranteed. The approval process can take several years, is extremely expensive and can vary substantially based upon the type, complexity, and novelty of the products involved, as well as the target indications. Our licensees ultimately may not be able to obtain approval in a timely fashion or at all.

The FDA and foreign health authorities have substantial discretion in the drug and biologics approval processes. Despite the time and expense incurred, failure can occur at any stage, and our potential development partners could encounter problems that cause abandonment of clinical trials or to repeat or perform additional preclinical, clinical or manufacturing-related studies.

Changes in the regulatory approval policy during the development period, changes in, or the enactment of additional regulations or statutes, or changes in regulatory review for each submitted product application may cause delays in the approval or rejection of an application.

The FDA and other regulatory agencies have substantial discretion in both the product approval process and manufacturing facility approval process, and as a result of this discretion and uncertainties about outcomes of testing, we cannot predict at what point, or whether, the FDA or other regulatory agencies will be satisfied with our licensees' submissions or whether the FDA or other regulatory agencies will raise questions that may be material and delay or preclude product approval or manufacturing facility approval. In light of this discretion and the complexities of the scientific, medical and regulatory environment, our licensees' interpretation or understanding of the FDA's or other regulatory agencies' requirements, guidelines or expectations may prove incorrect, which also could delay further or increase the cost of the approval process.

Our licensees face uncertain results of clinical trials of product candidates.

Drug development has inherent risk, and our licensees are required to demonstrate through adequate and well-controlled clinical trials that product candidates are effective, with a favorable benefit-risk profile for use in their target profiles before they can seek regulatory approvals for commercial use. It is possible we or our licensees may never receive regulatory approval for any licensed product candidates. Even if a product candidate receives regulatory approval, the resulting product may not gain market acceptance among physicians, patients, healthcare payors and the medical community.

Our licensees' product candidates require significant additional research and development, extensive preclinical studies and clinical trials and regulatory approval prior to any commercial sales. This process is lengthy and expensive, often taking a number of years. As clinical results frequently are susceptible to varying interpretations that may delay, limit or prevent regulatory approvals, the length of time necessary to complete clinical trials and to submit an application for marketing approval for a final decision by a regulatory authority varies significantly. As a result, it is uncertain whether:

- our licensees' future filings will be delayed;
- our licensees' preclinical studies will be successful;
- our licensees will be successful in generating viable product candidates;
- we will be successful in finding collaboration and licensing partners to advance our product candidates on our behalf;
- our licensees will be able to provide necessary data;
- results of future clinical trials by our licensees will justify further development; or
- our licensees ultimately will achieve regulatory approval for our product candidates.

The timing of the commencement, continuation and completion of clinical trials by our licensees may be subject to significant delays relating to various causes, including failure to complete preclinical testing and earlier-stage clinical trials in a timely manner, engaging contract research organizations and other service providers, scheduling conflicts with participating clinicians and clinical institutions, changes in key personnel at clinical institutions, difficulties in identifying and enrolling patients who meet trial eligibility criteria and shortages of available drug supply. In addition, since we license our product candidates to others to fund and conduct clinical trials, we have limited control over how

quickly and efficiently such licensees advance those trials. Patient enrollment is a function of many factors, including the size of the patient population, the proximity of patients to clinical sites, the concentration of patients in specialist centers, the eligibility criteria for the trial, the existence of competing clinical trials and the availability of alternative or new treatments. Regardless of the initial size or relative complexity of a clinical trial, the costs of such trial may be higher than expected due to increases in duration or size of the trial, changes in the protocol under which the trial is being conducted, additional or special requirements of one or more of the healthcare centers where the trial is being conducted, or changes in the regulatory requirements applicable to the trial or in the standards or guidelines for approval of the product candidate being tested or for other unforeseen reasons.

In addition, our licensees conduct clinical trials in foreign countries, which may subject us to further delays and expenses as a result of increased drug shipment costs, additional regulatory requirements and the engagement of foreign clinical research organizations, and may expose us to risks associated with foreign currency transactions to make contract payments denominated in the foreign currency where the trial is being conducted.

All of our licensees' product candidates are prone to the risks of failure inherent in drug development. Preclinical studies may not yield results that satisfactorily support the filing of an Investigational New Drug application ("IND") (or a foreign equivalent) with respect to our product candidates. Even if these applications would be or have been filed with respect to our product candidates, the results of preclinical studies do not necessarily predict the results of clinical trials. Similarly, early stage clinical trials may not predict the results of later-stage clinical trials, including the safety and efficacy profiles of any particular product candidates.

In addition, there can be no assurance the design of our licensees' clinical trials will be focused on appropriate indications, patient populations, dosing regimens or other variables that will result in obtaining the desired efficacy data to support regulatory approval to commercialize the drug. Moreover, FDA officials or foreign regulatory agency officials may question the integrity of our data or otherwise subject our licensees' clinical trials to additional scrutiny when the clinical trials are conducted by principal investigators who serve, or previously served, as scientific advisors or consultants to us and receive cash compensation in connection with such services. Preclinical and clinical data can also be interpreted in different ways. Accordingly, FDA officials or officials from foreign regulatory authorities could interpret the data differently than we or our collaboration or development partners do, which could delay, limit or prevent regulatory approval.

Administering any of our product candidates may produce undesirable side effects, also known as adverse effects. Toxicities and adverse effects that we have observed in preclinical studies for some compounds in a particular research and development program may occur in preclinical studies or clinical trials of other compounds from the same program. Such toxicities or adverse effects could delay or prevent the filing of an IND (or a foreign equivalent) with respect to such product candidates or cause us to cease clinical trials with respect to any drug candidate. In clinical trials, administering any of our product candidates to humans may produce adverse effects. These adverse effects could interrupt, delay or halt clinical trials of our product candidates and could result in the FDA or other regulatory authorities denying approval of our product candidates for any or all targeted indications. The FDA, other regulatory authorities, our development partners or we may suspend or terminate clinical trials at any time. Even if one or more of our product candidates were approved for sale, the occurrence of even a limited number of toxicities or adverse effects when used in large populations may cause the FDA or other regulatory authorities to impose restrictions on, or stop, the further marketing of such drugs. Indications of potential adverse effects or toxicities that may occur in clinical trials and that we believe are not significant during the course of such clinical trials may actually turn out later to constitute serious adverse effects or toxicities when a drug has been used in large populations or for extended periods of time. Any failure or significant delay in completing preclinical studies or clinical trials for our product candidates, or in receiving and maintaining regulatory approval for the sale of any drugs resulting from our product candidates, may severely harm our reputation and business.

Products and technologies of other companies may render some or all of our licensees' product candidates noncompetitive or obsolete.

Developments by others may render our licensees' product candidates or technologies obsolete or uncompetitive. Technologies developed and utilized by the biotechnology and pharmaceutical industries are changing continuously and substantially. Competition in antibody-based technologies is intense and is expected to increase in the future as a number of established biotechnology firms and large chemical and pharmaceutical companies advance in these fields. Many of these competitors may be able to develop products and processes competitive with or superior to our own for many reasons, including that they may have:

- significantly greater financial resources;
- larger research and development staffs;

- entered into arrangements with, or acquired, biotechnology companies to enhance their capabilities; or
- extensive experience in preclinical testing and human clinical trials.

These factors may enable others to develop products and processes competitive with or superior to our own or those of our licensees. In addition, a significant amount of research in biotechnology is being carried out in universities and other non-profit research organizations. These entities are becoming increasingly interested in the commercial value of their work and may become more aggressive in seeking patent protection and licensing arrangements. Furthermore, many companies and universities tend not to announce or disclose important discoveries or development programs until their patent position is secure or, for other reasons, later. As a result, we and our licensees may not be able to track development of competitive products, particularly at the early stages.

Positive developments in connection with a potentially competing product may have an adverse impact on our revenue derived from development milestones. For example, if another product is perceived to have a competitive advantage, or another product's failure is perceived to increase the likelihood that our licensed product will fail, our licensees may halt development of our licensed product candidates.

Our licensees may be unable to price our products effectively or obtain adequate reimbursement for sales of our products, which would prevent our products from becoming profitable.

If our third-party licensees succeed in bringing our product candidates to the market, they may not be considered cost effective, and reimbursement to the patient may not be available or may not be sufficient to allow us to sell our products on a competitive basis. In both the United States and elsewhere, sales of medical products and treatments are dependent, in part, on the availability of reimbursement to the patient from third-party payors, such as government and private insurance plans. Third-party payors are increasingly challenging the prices charged for pharmaceutical products and services. Our business is affected by the efforts of government and third-party payors to contain or reduce the cost of healthcare through various means. In the United States, there have been and will continue to be a number of federal and state proposals to implement government controls on pricing.

In addition, the emphasis on managed care in the United States has increased and will continue to increase the pressure on the pricing of pharmaceutical products. We cannot predict whether any legislative or regulatory proposals will be adopted or the effect these proposals or managed care efforts may have on our business.

We do not know whether there will be, or will continue to be, a viable market for the product candidates in which we have an ownership or royalty interest.

Even if product candidates in which we have an interest receive approval in the future, they may not be accepted in the marketplace. In addition, we or our licensees may experience difficulties in launching new products, many of which are novel and based on technologies that are unfamiliar to the healthcare community. We have no assurance healthcare providers and patients will accept such products, if developed. Similarly, physicians may not accept a product if they believe other products to be more effective or more cost effective or are more comfortable prescribing other products.

Furthermore, government agencies, as well as private organizations involved in healthcare, from time to time publish guidelines or recommendations to healthcare providers and patients. Such guidelines or recommendations can be very influential and may adversely affect product usage directly (for example, by recommending a decreased dosage of a product in conjunction with a concomitant therapy) or indirectly (for example, by recommending a competitive product over our product). Consequently, we do not know if physicians or patients will adopt or use our products for their approved indications.

Even approved and marketed products are subject to risks relating to changes in the market for such products. Introduction or increased availability of generic or biosimilar versions of products can alter the market acceptance of branded products. In addition, unforeseen safety issues may arise at any time, regardless of the length of time a product has been on the market.

We are exposed to an increased risk of product liability claims.

The testing, marketing and sales of medical products entails an inherent risk of allegations of product liability. In the past, we were party to product liability claims filed against Genentech Inc. and, even though Genentech agreed to indemnify us in connection with these matters and these matters have been settled, there can be no assurance other product liability lawsuits will not result in liability to us or that our insurance or contractual arrangements will provide us with adequate protection against such liabilities. In the event of one or more large, unforeseen awards of damages against us, our product liability insurance may not provide adequate coverage. A significant product liability claim for

which we were not covered by insurance or indemnified by a third party would have to be paid from cash or other assets, which could have an adverse effect on our business and the value of our common stock. To the extent we have sufficient insurance coverage, such a claim would result in higher subsequent insurance rates. In addition, product liability claims can have various other ramifications, including loss of future sales opportunities, increased costs associated with replacing products, a negative impact on our goodwill and reputation, and divert our management's attention from our business, each of which could also adversely affect our business and operating results.

If we and our partners are unable to protect our intellectual property, in particular our patent protection for our principal products, product candidates and processes, and prevent the use of the covered subject matter by third parties, our licensees' ability to compete in the market will be harmed, and we may not realize our profit potential.

We rely on patent protection, as well as a combination of copyright, trade secret, and trademark laws to protect our proprietary technology and prevent others from duplicating our products or product candidates. However, these means may afford only limited protection and may not:

- prevent our competitors from duplicating our products;
- prevent our competitors from gaining access to our proprietary information and technology; or
- permit us to gain or maintain a competitive advantage.

Because of the length of time and the expense associated with bringing new products to the marketplace, we and our collaboration and development partners hold and are in the process of applying for a number of patents in the United States and abroad to protect our product candidates and important processes and also have obtained or have the right to obtain exclusive licenses to certain patents and applications filed by others. However, the mere issuance of a patent is not conclusive as to its validity or its enforceability.

The U.S. Federal Courts, the U.S. Patent & Trademark Office or equivalent national courts or patent offices elsewhere may invalidate our patents or find them unenforceable. The America Invents Act introduced post-grant review procedures subjecting U.S. patents to post-grant review procedures similar to European oppositions. U.S. patents owned or licensed by us may therefore be subject to post-grant review procedures, as well as other forms of review and re-examination. A decision in such proceedings adverse to our interests could result in the loss of valuable patent rights, which would have a material adverse effect on our business. In addition, the laws of foreign countries may not protect our intellectual property rights effectively or to the same extent as the laws of the United States.

If our intellectual property rights are not protected adequately, our licensees may not be able to commercialize our technologies or products, and our competitors could commercialize our technologies or products, which could result in a decrease in our licensees' sales and market share that would harm our business and operating results. Specifically, the patent position of biotechnology companies generally is highly uncertain and involves complex legal and factual questions. The legal standards governing the validity of biotechnology patents are in transition, and current defenses as to issued biotechnology patents may not be adequate in the future. Accordingly, there is uncertainty as to:

- whether any pending or future patent applications held by us will result in an issued patent, or whether issued patents will provide meaningful protection against competitors or competitive technologies;
- whether competitors will be able to design around our patents or develop and obtain patent protection for technologies, designs or methods that are more effective than those covered by our patents and patent applications; or
- the extent to which our product candidates could infringe on the intellectual property rights of others, which may lead to costly litigation, result in the payment of substantial damages or royalties, and prevent our licensees from using our technology or product candidates.

If certain patents issued to others are upheld or if certain patent applications filed by others issue and are upheld, our licensees may require licenses from others to develop and commercialize certain potential products incorporating our technology or we may become involved in litigation to determine the proprietary rights of others. These licenses, if required, may not be available on acceptable terms, and any such litigation may be costly and may have other adverse effects on our business, such as inhibiting our licensees' ability to compete in the marketplace and absorbing significant management time.

Due to the uncertainties regarding biotechnology patents, we also have relied and will continue to rely upon trade secrets, know-how and continuing technological advancement to develop and maintain our competitive position. All of our employees and contractors have signed confidentiality agreements under which they have agreed not to use or disclose any of our proprietary information. Research and development contracts and relationships between us and our scientific consultants and potential licensees provide access to aspects of our know-how that are protected generally under confidentiality agreements. These confidentiality agreements may be breached or may not be enforced by a court. To the extent proprietary information is divulged to competitors or to the public generally, such disclosure may affect our licensees' ability to develop or commercialize our products adversely by giving others a competitive advantage or by undermining our patent position.

Litigation regarding intellectual property can be costly and expose us to risks of counterclaims against us.

We may be required to engage in litigation or other proceedings to protect our intellectual property. The cost to us of this litigation, even if resolved in our favor, could be substantial. Such litigation also could divert management's attention and resources. If this litigation is resolved against us, our patents may be declared invalid, and we could be held liable for significant damages.

In addition, we may be subject to claims that we, or our licensees, are infringing other parties' patents. If such claims are resolved against us, we or our licensees may be enjoined from developing, manufacturing, selling or importing products, processes or services unless we obtain a license from the other party. Such license may not be available on reasonable terms, thus preventing us, or our licensees, from using these products, processes or services and adversely affecting our revenue.

Risks Related to Employees, Location, Data Integrity, and Litigation

The loss of key personnel, including our Chief Executive Officer or Chief Financial Officer, could delay or prevent achieving our objectives.

Our business efforts could be affected adversely by the loss of one or more key members of our staff, particularly our executive officers: James R. Neal, our Chief Executive Officer and Thomas Burns, our Senior Vice President, Finance and Chief Financial Officer. We currently do not have key person insurance on any of our employees.

Because we are a small biopharmaceutical company with limited resources, we may not be able to attract and retain qualified personnel.

After a series of restructuring activities during 2016 and 2017, we had 12 employees as of March 2, 2018. We may require additional experienced executive, accounting, legal, administrative and other personnel from time to time in the future. There is intense competition for the services of these personnel, especially in California. Moreover, we expect that the high cost of living in the San Francisco Bay Area, where our headquarters are located, may impair our ability to attract and retain employees in the future. If we do not succeed in attracting new personnel and retaining and motivating existing personnel, our business may suffer and we may be unable to implement our current initiatives or grow effectively.

Calamities, power shortages or power interruptions at our Emeryville headquarters could disrupt our business and adversely affect our operations.

Our principal operations are located in Northern California, including our corporate headquarters in Emeryville, California. This location is in an area of seismic activity near active earthquake faults. Any earthquake, terrorist attack, fire, power shortage or other calamity affecting our facilities may disrupt our business and could have material adverse effect on our results of operations.

Our business and operations would suffer in the event of system failures.

Despite the implementation of security measures, our internal computer systems and those of our current and any future licensees, suppliers, contractors and consultants are vulnerable to damage from cyber−attacks, computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. We could experience failures in our information systems and computer servers, which could be the result of a cyber−attack and could result in an interruption of our normal business operations and require substantial expenditure of financial and administrative resources to remedy. System failures, accidents or security breaches can cause interruptions in our operations and can result in a material disruption of our development programs and other business operations. The loss of clinical trial data from completed or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. Similarly, we rely on third parties to manufacture our product candidates, and conduct clinical trials of our product candidates, and similar events relating to their computer systems could also have a material adverse effect on our business. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the development of any of our product candidates

could be delayed or otherwise adversely affected.

Data breaches and cyber-attacks could compromise our intellectual property or other sensitive information and cause significant damage to our business and reputation.

In the ordinary course of our business, we maintain sensitive data on our networks, including our intellectual property and proprietary or confidential business information relating to our business and that of our customers and business partners. The secure maintenance of this information is critical to our business and reputation. We believe companies have been increasingly subject to a wide variety of security incidents, cyber-attacks and other attempts to gain unauthorized access. These threats can come from a variety of sources, all ranging in sophistication from an individual hacker to a state-sponsored attack. Cyber threats may be generic, or they may be custom-crafted against our information systems. Cyber-attacks have become more prevalent and much harder to detect and defend against. Our network and storage applications may be subject to unauthorized access by hackers or breached due to operator error, malfeasance or other system disruptions. It is often difficult to anticipate or immediately detect such incidents and the damage caused by such incidents. These data breaches and any unauthorized access or disclosure of our information or intellectual property could compromise our intellectual property and expose sensitive business information. A data security breach could also lead to public exposure of personal information of our clinical trial patients, customers and others. Cyber-attacks could cause us to incur significant remediation costs, result in product development delays, disrupt key business operations and divert attention of management and key information technology resources. These incidents could also subject us to liability, expose us to significant expense and cause significant harm to our reputation and business.

Shareholder lawsuits, and potential similar or related lawsuits, could result in substantial damages, divert management's time and attention from our business, and have a material adverse effect on our results of operations.

Securities-related class action and shareholder derivative litigation has often been brought against companies, including many biotechnology companies, which experience volatility in the market price of their securities. This risk is especially relevant for us because biotechnology and biopharmaceutical companies often experience significant stock price volatility in connection with their product development programs.

It is possible that suits will be filed, or allegations received from stockholders, naming us and/or our officers and directors as defendants. These potential lawsuits are subject to inherent uncertainties, and the actual defense and disposition costs will depend upon many unknown factors. The outcome of these lawsuits are uncertain. We could be forced to expend significant resources in the defense of these suits and we may not prevail. In addition, we may incur substantial legal fees and costs in connection with these lawsuits. It is possible that we could, in the future, incur judgments or enter into settlements of claims for monetary damages. A decision adverse to our interests on these actions could result in the payment of substantial damages, or possibly fines, and could have a material adverse effect on our cash flow, results of operations and financial position.

Monitoring, initiating and defending against legal actions, including the currently pending litigation, are time-consuming for our management, are likely to be expensive and may detract from our ability to fully focus our internal resources on our business activities. The outcome of litigation is always uncertain, and in some cases could include judgments against us that require us to pay damages, enjoin us from certain activities, or otherwise affect our legal or contractual rights, which could have a significant adverse effect on our business. In addition, the inherent uncertainty of the currently pending litigation and any future litigation could lead to increased volatility in our stock price and a decrease in the value of an investment in our common stock.

Risks Related to Government Regulation

Even after FDA approval, a product may be subject to additional testing or significant marketing restrictions, its approval may be withdrawn or it may be removed voluntarily from the market.

Even if we or our licensees receive regulatory approval for our product candidates, we or our licensees will be subject to ongoing regulatory oversight and review by the FDA and other regulatory entities. The FDA, the European Medicines Agency ("EMA"), or another regulatory agency may impose, as a condition of the approval, ongoing requirements for post-approval studies or post-approval obligations, including additional research and development and clinical trials, and the FDA, EMA or other regulatory agency subsequently may withdraw approval based on these additional trials.

Even for approved products, the FDA, EMA or other regulatory agency may impose significant restrictions on the indicated uses, conditions for use, labeling, advertising, promotion, marketing and production of such product. In addition, the labeling, packaging, adverse event reporting, storage, advertising, promotion and record-keeping for our products are subject to extensive regulatory requirements.

Furthermore, marketing approval of a product may be withdrawn by the FDA, the EMA or another regulatory agency or such a product may be withdrawn voluntarily by us based, for example, on subsequently arising safety concerns. The FDA, EMA and other agencies also may impose various civil or criminal sanctions for failure to comply with regulatory requirements, including withdrawal of product approval.

Healthcare reform measures and other statutory or regulatory changes could adversely affect our business.

The United States and some foreign jurisdictions have enacted or are considering a number of legislative and regulatory proposals to change the healthcare system in ways that could affect our or our licensees' ability to sell our products, if approved, profitably. Among policy makers and payers 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 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.

An expansion in the government's role in the U.S. healthcare industry may cause general downward pressure on the prices of prescription drug products, lower reimbursements for providers, reduced product utilization and adversely affect our business and results of operations. Moreover, certain politicians have announced plans to regulate the prices of pharmaceutical products. We cannot know what form any such legislation may take or the market's perception of how such legislation would affect us. Any reduction in reimbursement from government programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our current product candidates and those for which we may receive regulatory approval in the future. In addition, given the uncertainties related to the Trump Administration's stated goal of letting the Affordable Care Act (the "ACA") fail, we cannot be certain that current provisions of the ACA will continue to cover prescription drug products.

We and our licensees are subject to various state and federal healthcare-related laws and regulations that may impact the commercialization of our product candidates or could subject us to significant fines and penalties.

Our operations may be directly or indirectly subject to various state and federal healthcare laws, including the federal Anti-Kickback Statute, the federal False Claims Act and state and federal privacy and security laws. These laws may impact, among other things, the commercial operations for any of our product candidates that may be approved for commercial sale.

The federal Anti-Kickback Statute prohibits persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in exchange for or to induce either the referral of an individual, or the furnishing 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. Several courts have interpreted the statute's intent requirement to mean that if any one purpose of an arrangement involving remuneration is to induce referrals of federal healthcare covered business, the statute has been violated. The Anti-Kickback Statute is broad and prohibits many arrangements and practices that are lawful in businesses outside of the healthcare industry. Penalties for violations of the federal Anti-Kickback Statute include criminal penalties and civil sanctions such as fines, penalties, imprisonment and possible exclusion from Medicare, Medicaid and other federal healthcare programs.

The federal False Claims Act prohibits persons from knowingly filing, or causing to be filed, a false claim to, or the knowing use of false statements to obtain payment from the federal government. Suits filed under the False Claims Act, known as "qui tam" actions, can be brought by any individual on behalf of the government and such individuals, commonly known as "whistleblowers," may share in any amounts paid by the entity to the government in fines or settlement. The filing of qui tam actions has caused a number of pharmaceutical, medical device and other healthcare companies to have to defend a False Claims Act action. When an entity is determined to have violated the False Claims Act, it may be required to pay up to three times the actual damages sustained by the government, plus civil penalties for each separate false claim. Various states also have enacted laws modeled after the federal False Claims Act.

The Federal Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), created new federal criminal statutes that prohibit executing a scheme to defraud any healthcare benefit program and making false statements relating to healthcare matters. The health care fraud statute prohibits knowingly and willfully executing a scheme to defraud any health care benefit program, including private payors. The statute prohibits knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for health care benefits, items or services. HIPAA, as amended by the Health Information Technology and Clinical Health Act, and its implementing regulations, also impose certain requirements relating to the privacy, security and transmission of individually identifiable health information. We take

our obligation to maintain our compliance with these various laws and regulations seriously.

Many states also have adopted laws similar to each of the federal laws described above, some of which apply to healthcare items or services reimbursed by any source, not only the Medicare and Medicaid programs. In addition, some states have laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the applicable compliance guidance promulgated by the federal government, or otherwise restrict payments that may be made to healthcare providers and other potential referral sources, and to report information related to payments and other transfers of value to physicians and other healthcare providers; and state laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

Because of the breadth of these laws, it is possible that some of our or our licensees' business activities could be subject to challenge under one or more of such laws.

If we or our licensees are found to be in violation of any of the laws and regulations described above or other applicable state and federal healthcare laws, we may be subject to penalties, including civil and criminal penalties, damages, fines, exclusion from government healthcare reimbursement programs and the curtailment or restructuring of our operations, any of which could have a material adverse effect on our business and results of operations.

As we or our licensees do more business internationally, we will be subject to additional political, economic and regulatory uncertainties.

We or our licensees may not be able to operate successfully in any foreign market. We believe that because the pharmaceutical industry is global in nature, international activities will be a significant part of future business activities and when and if we or our licensees are able to generate income, a substantial portion of that income will be derived from product sales and other activities outside the United States. Foreign regulatory agencies often establish standards different from those in the United States, and an inability to obtain foreign regulatory approvals on a timely basis could put us at a competitive disadvantage or make it uneconomical to proceed with a product or product candidate's development. International sales may be limited or disrupted by:

- imposition of government controls;
- export license requirements;
- political or economic instability;
- trade restrictions;
- changes in tariffs;
- restrictions on repatriating profits;
- exchange rate fluctuations; and
- withholding and other taxation.

Item 1B. Unresolved Staff Comments
None.

Item 2. Properties
Our corporate headquarters is located in Emeryville, California. We currently lease three buildings that housed our office space and legacy research and development laboratories. Our building leases expire in the period from 2021 to 2023, and total minimum lease payments due from January 2018 until expiration of the leases is $18.9 million. We have the option to renew our lease agreements for up to two successive five-year periods. On November 21, 2017, we entered into a sublease agreement for a portion of one of our leased facilities. Under the term of the sublease agreement, we will receive $5.1 million over the term of the sublease, which ends at the same time as the original lease in April 2023.

Item 3. Legal Proceedings
On July 24, 2015, a purported securities class action lawsuit was filed in the United States District Court for the Northern District of California, captioned Markette v. XOMA Corp., et al. (Case No. 3:15-cv-3425) naming as defendants us and certain of our officers. The complaint asserted that all defendants violated Section 10(b) of the Exchange Act and SEC Rule 10b-5, by making materially false or misleading statements regarding our EYEGUARD-B study between November 6, 2014 and July 21, 2015. The plaintiff also alleged that Messrs. Varian and Rubin violated Section 20(a) of the Exchange Act. On September 2, 2016, the defendants filed a motion to dismiss. On September 28, 2017, the Court granted defendants' motion to dismiss with leave to amend. All parties

subsequently agreed to dismiss the action and on October 25, 2017, the Court issued an Order of Dismissal, dismissing the action with prejudice with respect to the named Plaintiff's individual claims and without prejudice with respect to unnamed class members.

On October 1, 2015, a stockholder purporting to act on our behalf, filed a derivative lawsuit in the Superior Court of California for the County of Alameda, purportedly asserting claims on behalf of the Company against certain of our officers and the members of our board of directors, captioned Silva v. Scannon, et al. (Case No. RG15787990). The lawsuit asserted claims for breach of fiduciary duty, corporate waste and unjust enrichment based on the dissemination of allegedly false and misleading statements related to the Company's EYEGUARD-B study. The plaintiff was seeking unspecified monetary damages and other relief, including reforms and improvements to our corporate governance and internal procedures. On December 6, 2017, the parties filed a joint stipulation, agreeing to dismiss the action. On December 7, 2017, the Court granted the stipulation, issuing an order of dismissal. The order dismissed the action without prejudice.

On November 16, and November 25, 2015, two derivative lawsuits were filed purportedly on our behalf in the United States District Court for the Northern District of California, captioned Fieser v. Van Ness, et al. (Case No. 4:15-CV-05236-HSG) and Csoka v. Varian, et al. (Case No. 3:15-cv-05429-SI), against certain of our officers and the members of our board of directors. The lawsuits asserted claims for breach of fiduciary duty and other violations of law based on the dissemination of allegedly false and misleading statements related to the Company's EYEGUARD-B study. The plaintiffs sought unspecified monetary damages and other relief including reforms and improvements to our corporate governance and internal procedures. On December 4, 2017, the parties in each case filed joint stipulations, agreeing to dismiss the actions. On December 6, 2017, the Court granted the stipulations, issuing an order of dismissal in each of the Fieser and Csoka actions. The order dismissed the actions without prejudice.

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 for Registrant's Common Equity

Our common stock trades on The Nasdaq Global Market tier of the Nasdaq Stock Market LLC ("NASDAQ") under the symbol "XOMA." All references to numbers of common shares and per-share information in this Annual Report prior to October 17, 2016 reflect an adjustment for the Company's 1-for-20 reverse stock split. The following table sets forth the quarterly range of high and low reported sale prices of our common stock on NASDAQ for the periods indicated:

	Price Range	
	High	Low
2017		
First Quarter	$7.56	$3.96
Second Quarter	$8.13	$5.86
Third Quarter	$22.69	$6.85
Fourth Quarter	$37.25	$18.94
2016		
First Quarter	$27.20	$13.80
Second Quarter	$19.00	$8.80
Third Quarter	$14.00	$8.80
Fourth Quarter	$9.60	$4.16

On March 2, 2018, there were 212 stockholders of record of our common stock, one of which was Cede & Co., a nominee for Depository Trust Company ("DTC"). All of the shares of our common stock held by brokerage firms, banks and other financial institutions as nominees for beneficial owners are deposited into participant accounts at DTC and are therefore considered to be held of record by Cede & Co. as one stockholder.

Dividend Policy

We have not paid dividends on our common stock. We currently intend to retain any earnings for use in the operations of our business. We, therefore, do not anticipate paying cash dividends on our common stock in the foreseeable future.

Recent Sales of Unregistered Securities

Except as previously reported in our quarterly reports on Form 10-Q and current reports on Form 8-K filed with the Securities and Exchange Commission ("SEC"), during the year ended December 31, 2017, there were no unregistered sales of equity securities by us during the year ended December 31, 2017.

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Performance Graph

The following graph compares the five-year cumulative total stockholder return for XOMA's common stock with the comparable cumulative return of certain indices. The graph assumes $100 invested on the same date in each of the indices. Returns of the company are not indicative of future performance.

This Section is not "soliciting material," is not deemed "filed" with the SEC and is not to be incorporated by reference in any filing of XOMA Corporation under the Securities Act, or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

As of December 31,	XOMA	Nasdaq Composite Index	Arca Biotechnology Index
2012	$100.00	$ 100.00	$ 100.00
2013	$280.42	$ 138.32	$ 150.64
2014	$149.58	$ 156.85	$ 222.30
2015	$55.42	$ 165.84	$ 246.53
2016	$8.79	$ 178.28	$ 198.77
2017	$74.17	$ 228.63	$ 272.92

Item 6.Selected Consolidated Financial Data

The following table contains our selected financial information including consolidated statement of operations and consolidated balance sheet data for the years 2013 through 2017. The consolidated statement of operations data for the years ended December 31, 2017, 2016, and 2015 and the consolidated balance sheet data as of December 31, 2017 and 2016 are derived from our audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K. The consolidated statement of operations data for the years ended December 31, 2014 and 2013, and the consolidated balance sheet data as of December 31, 2015, 2014 and 2013 were derived from our audited consolidated financial statements that are not included in this Annual Report on Form 10-K. The selected financial information should be read in conjunction with Item 8: Financial Statements and Supplementary Data and Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations included in this Annual Report. The data set forth below is not necessarily indicative of the results of future operations. All references to number of common shares and per-share information prior to October 17, 2016 reflect an adjustment for XOMA's 1-for-20 reverse stock split.

	Year Ended December 31,				
	2017	2016	2015	2014	2013
	(In thousands, except per share amounts)				
Consolidated Statement of Operations Data					
Total revenues	$52,690	$5,564	$55,447	$18,866	$35,451
Research and development	7,875	44,234	70,852	80,748	74,851
General and administrative	24,337	18,322	20,620	19,866	18,477
Restructuring costs	3,447	4,566	3,699	84	328
Income (loss) from operations	17,031	(61,558)	(39,724)	(81,832)	(58,205)
Other income (expense), net [1]	(773)	8,028	19,118	43,531	(65,867)
Income (loss) before taxes	16,258	(53,530)	(20,606)	(38,301)	(124,072)
Income tax (expense) benefit	(1,662)	—	—	—	14
Net income (loss)	$14,596	$(53,530)	$(20,606)	$(38,301)	$(124,058)
Basic net income (loss) per share available to common stockholders	$0.75	$(8.89)	$(3.50)	$(7.13)	$(28.54)
Diluted net income (loss) per share available to common stockholders	$0.73	$(8.89)	$(3.50)	$(13.49)	$(28.54)
Shares used in computing basic net income (loss) per share available to common stockholders	7,619	6,021	5,890	5,372	4,347
Shares used in computing diluted net income (loss) per share available to common stockholders	7,980	6,021	5,890	5,767	4,347

	December 31,				
	2017	2016	2015	2014	2013
	(In thousands)				
Consolidated Balance Sheet Data					
Cash and cash equivalents	$43,471	$25,742	$65,767	$78,445	$101,659

Marketable securities	$—	$—	$496	$—	$19,990
Current assets	$44,195	$27,160	$72,219	$83,613	$127,060
Working capital (deficiency)	$36,773	$(5,346)	$48,924	$47,367	$97,415
Total assets	$44,935	$28,677	$74,880	$89,402	$134,782
Current liabilities	$7,422	$32,506	$23,295	$36,246	$29,645
Long-term liabilities [2]	$14,572	$25,381	$53,894	$50,057	$109,124
Accumulated deficit	$(1,179,059)	$(1,193,613)	$(1,140,083)	$(1,119,477)	$(1,081,176)
Total stockholders' equity (deficit)	$5,786	$(47,210)	$(2,309)	$3,099	$(3,987)

(1) 2016, 2015, 2014, and 2013 include $10.5 million, $17.8 million, $45.8 million, and ($61.0) million, respectively, related to the revaluation of contingent warrant liabilities issued in connection with equity financings in June 2009, February 2010, March 2012 and December 2014. There was no gain or loss on revaluation of contingent warrant liabilities recognized in 2017. All outstanding warrants issued in June 2009, February 2010, December 2014 and March 2012 expired in June 2014, February 2015, December 2016 and March 2017, respectively.

(2) 2015, 2014, and 2013 include $10.5 million, $31.8 million and $69.9 million, respectively, related to contingent warrant liabilities in connection with equity financings in June 2009, February 2010, March 2012 and December 2014. There was no contingent warrant liabilities in 2017 and 2016. All outstanding warrants issued in June 2009, February 2010, December 2014 expired in June 2014, February 2015, December 2016 and March 2017, respectively. The balance in 2017, 2016, 2015, 2014, and 2013 includes total non-current interest bearing obligations equal to $14.6 million, $25.3 million, $42.8 million, $16.3 million, and $35.2 million, respectively. During the year ended December 31, 2017, we paid off our outstanding obligations aggregating to $31.8 million under our loans with Hercules Technology Growth Capital, Inc. and Les Laboratories Servier.

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

Overview

We have a long history of discovering and developing innovative therapeutics derived from our unique platform of antibody technologies. Over our 37 year history, we built an extensive portfolio of fully-funded programs by advancing product candidates into the earlier stages of development and then licensing them to licensees who assumed the responsibilities of later stage development, approval and commercialization. Fully-funded programs are those for which our partners pay all of the development and commercialization costs. As licensees advance these programs, we are eligible for potential development, regulatory and commercial milestone and royalty payments.

In March 2017, we transformed our business model to become a royalty aggregator where we focus on expanding our portfolio of fully-funded programs by out-licensing our internally developed product candidates and acquiring potential milestone and royalty revenue streams on additional product candidates. We combined our royalty-aggregator model with a significantly reduced corporate cost structure to further build value for our shareholders. We expect that a significant portion of our future revenue will be based on payments we may receive for development, regulatory and commercial milestones and royalties related to these programs.

Our business model is designed to create value for stockholders by assembling a diversified portfolio of biotech and pharmaceutical revenue streams and operating that business with an efficient and low corporate cost structure.

Significant Developments in 2017

Equity Financing

In February 2017, we sold 1,200,000 shares of our common stock and 5,003 shares of Series X convertible preferred stock directly to Biotechnology Value Fund, L.P. and certain of its affiliates ("BVF") in a registered direct offering, for aggregate net proceeds of $24.8 million.

Novartis License Agreements

On August 24, 2017, we entered into two license agreements with Novartis AG ("Novartis"). Under the first license agreement (the "XOMA-052 License Agreement"), we granted Novartis an exclusive, worldwide, royalty-bearing license to gevokizumab, a novel anti-Interleukin-1 (IL-1) beta allosteric monoclonal antibody and related know-how and patents. Under the XOMA-052 License Agreement, we received total consideration of $30.0 million, which included $15.7 million in cash and $14.3 million (equal to €12.0 million) paid by Novartis Institutes for BioMedical Research, Inc. ("NIBR") on our behalf to settle our debt to Les Laboratories Servier ("Servier Loan"). We also received $5.0 million cash related to the sale of 539,131 shares of our common stock. We are eligible to receive up to $438.0 million in development, regulatory and commercial milestones and royalties on sales of licensed products, which are tiered based on sales levels and range from the high single digits to mid-teens.

Under the second license agreement (the "IL-1 Target License Agreement"), we granted to Novartis non-exclusive licenses to our intellectual property covering the use of IL-1 beta targeting antibodies in the treatment of cardiovascular disease and other diseases and conditions. We also granted Novartis the right of first negotiation with respect to certain transactions relating to the licensed intellectual property. Under the IL-1 Target License Agreement, we received a $10.0 million upfront payment and are eligible to receive low-single-digit royalties on canakinumab sales in cardiovascular indications. We also granted Novartis an exclusive option to convert its non-exclusive license with respect to cardiovascular indications into an exclusive license. If Novartis exercises this option, the royalties on canakinumab sales will increase to the mid-single digits.

Extension of Novartis Note Maturity Date

In September 2017, in connection with the XOMA-052 License Agreement with Novartis, we and NIBR executed an amendment to our secured note agreement ("Novartis Note") under which NIBR extended the maturity date of the Novartis Note from September 30, 2020 to September 30, 2022.

Rezolute

In December 2017, we entered into a license agreement with Rezolute, Inc. (formerly AntriaBio, Inc.) ("Rezolute") pursuant to which we granted an exclusive global license to Rezolute to develop and commercialize X358 for all indications.

Under the terms of the license agreement, Rezolute is responsible for all development, regulatory, manufacturing and commercialization activities associated with X358 and is required to make certain clinical, regulatory and commercial milestone payments to us of up to $232.0 million in the aggregate based on the achievement of pre-specified criteria. Rezolute is also obligated to pay us royalties ranging from the high single digits to the mid-teens based upon annual net sales of any commercial product incorporating X358. Rezolute is obligated to take customary steps to advance X358, including using diligent efforts to commence the next clinical study for X358 by a certain deadline and to meet certain spending requirements on an annual basis for the program until a marketing approval application for X358 is accepted by the FDA. Rezolute has an option to obtain an exclusive license for their choice of one of our preclinical monoclonal antibody fragments, including X129, in exchange for an option fee and additional clinical, regulatory and commercial milestone payments to us of up to $237.0 million in the aggregate based on the achievement of pre-specified criteria as well as royalties ranging from the high single digits to the mid-teens based on annual net sales.

Rezolute is required to pay us $6.0 million in cash and to issue us $12.0 million worth of its common stock contingent on the completion of its financing activities. Further, in the event that Rezolute does not complete a financing that raises at least $20.0 million in aggregate gross proceeds (“Qualified Financing”) by March 31, 2019, it shall issue to us an additional number of shares of its common stock equal to $7.0 million. Finally, in the event that Rezolute is unable to complete a Qualified Financing by March 31, 2020, it will be obliged to pay us $15.0 million in order to maintain the license.

The license agreement contains customary termination rights relating to material breach by either party. Rezolute also has a unilateral right to terminate the license agreement in its entirety on ninety days’ notice at any time. We have the right to terminate the license agreement if Rezolute challenges the licensed patents. As of December 31, 2017, we have not received any cash or common stock from Rezolute as they have not completed any financing or other activities outlined in the agreement.

Hercules Term Loan

In March 2017, we paid off our outstanding principal balance of $17.5 million under our loan and security agreement with Hercules Technology Growth Capital, Inc. (“Hercules”). We recognized a loss on extinguishment of $0.5 million from the payoff of the loan with Hercules.

Servier Loan

In August 2017, in connection with the XOMA-052 License Agreement, the Servier Loan balance of €12.0 million was paid in full. We recognized a loss on extinguishment of $0.1 million from the payoff of the loan with Servier.

Asset Purchase Agreement and License Agreement with Ology Bioservices, Inc.

In February 2017, we executed an Amendment and Restatement to both the asset purchase agreement and license agreement with Ology Bioservices, Inc. (formerly Nanotherapeutics, Inc.) (“Ology Bioservices”) primarily to (i) remove the obligation to issue 23,008 shares of common stock of Ology Bioservices under the asset purchase agreement, and (ii) revise the payment schedule related to the timing of the $4.5 million cash payments due to us under the license agreement. Of the $4.5 million, $3.0 million was contingent upon Ology Bioservices achieving certain specified future operating objectives. In the first quarter of 2017, we were entitled to receive $1.6 million under the agreement that we will receive in quarterly payments through September 2018. In the third quarter of 2017, Ology Bioservices achieved the specified operating objectives and we earned the $3.0 million milestone fee that we will receive in monthly payments through July 2018.

Termination of Novo Nordisk A/S License Agreement

In April 2017, we received notice from Novo Nordisk A/S regarding the termination of its license agreement with us due to strategic and business reasons. The termination of the license agreement became effective in July 2017.

Critical Accounting Estimates

The accompanying discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements and the related disclosures, which have been prepared in accordance with generally accepted accounting principles in the United States. The preparation of these consolidated financial statements requires us to make estimates, assumptions and judgments that affect the reported amounts in our consolidated financial statements and accompanying notes. On an ongoing basis, we evaluate our estimates, assumptions and judgments described below that have the greatest potential impact on our consolidated financial statements, including those related to revenue recognition and stock-based compensation. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Accounting assumptions and estimates are inherently uncertain and actual results may differ materially from these estimates under different assumptions or conditions.

While our significant accounting policies are more fully described in Note 2 to the consolidated financial statements, we believe the following policies to be the most critical to an understanding of our financial condition and results of operations because they require us to make estimates, assumptions and judgments about matters that are inherently uncertain.

Revenue Recognition

License Fees

Revenue from non-refundable license, technology access or other payments under license agreements are recognized over the estimated period when the transfer of related materials, process and know-how should be delivered to the licensee. After the delivery of the materials, process and know-how to the licensee, we do not have a continuing obligation to perform under the license agreements.

Our license agreements with certain third parties also provide for contingent payments to be paid to us based solely upon the performance of the partner. For such contingent payments, we recognize the payments as revenue upon completion of the milestone event, once confirmation is received from the third party, provided that collection is reasonably assured and the other revenue recognition criteria have been satisfied.

Sale of Future Revenue Streams

In December 2016, we sold our rights to receive milestone payments and royalties on future sales of products under our license agreement with Pfizer and our right to receive royalties on future sales of products under our license agreement with Shire PLC (formerly Dyax Corp.) to HealthCare Royalty Partners II, L.P. (“HCRP”). In the circumstance where we have sold our rights to future milestones and royalties under a license agreement and also maintain limited continuing involvement in the arrangement (but not significant continuing involvement in the generation of the cash flows that are due to the purchaser), we defer recognition of the proceeds we receive for the milestone or royalty stream and recognize such deferred revenues as contract and other revenue over the life of the underlying license agreement. We recognize this revenue under the "units-of-revenue" method. Under this method, amortization for a reporting period is calculated by computing a ratio of the proceeds received from the purchaser to the total payments expected to be made to the purchaser over the term of the agreement, and then applying that ratio to the period’s cash payment.

Estimating the total payments expected to be received by the purchaser over the term of such arrangements requires management to use subjective estimates and assumptions. Changes to our estimate of the payments expected to be

made to the purchaser over the term of such arrangements could have a material effect on the amount of revenues we recognize in any particular period.

Stock-based Compensation

Stock-based compensation expense for stock options and other stock awards is estimated at the grant date based on the award's fair value-based measurement. The valuation of stock-based compensation awards is determined at the date of grant using the Black-Scholes option pricing model (the "Black-Scholes Model"). This model requires highly complex and subjective inputs, such as the expected term of the option, expected volatility, and risk-free interest rate. These inputs are subjective and generally require significant analysis and judgment to develop. Our current estimate of volatility is based on the historical volatility of our stock price. To the extent volatility in our stock price increases in the future, our estimates of the fair value of options granted in the future could increase, thereby increasing stock-based compensation cost recognized in future periods. To establish an estimate of expected term, we consider the vesting period and contractual period of the award and our historical experience of stock option exercises, post-vesting cancellations and volatility. The risk-free rate is based on the yield available on United States Treasury zero-coupon issues. In January 2017, pursuant to the adoption of Accounting Standards Update No. 2016-09, Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting, we made an election to record forfeitures when they occur.

We review our valuation assumptions quarterly and, as a result, we likely will change our valuation assumptions used to value stock-based awards granted in future periods. In the future, as additional empirical evidence regarding these input estimates becomes available, we may change or refine our approach of deriving these input estimates. These changes could impact our fair value-based measurement of stock options granted in the future. Changes in the fair value-based measurement of stock awards could materially impact our operating results.

For our stock options and service-based awards, we recognize compensation expense on a straight-line basis over the award's vesting period. In 2017, we granted to certain employees equity awards with performance-based conditions. The actual number of equity awards earned and eligible to vest will be determined based on a specified level of achievement against a Board-approved budget and operational targets. For awards with performance-based conditions, at the point that it becomes probable that the performance conditions will be met, we record a cumulative catch-up of the expense from the grant date to the current date, and we then amortize the remainder of the expense over the remaining service period. Management evaluates when the achievement of a performance-based condition is probable based on the expected satisfaction of the performance conditions as of the reporting date. The amount of stock-based compensation expense recognized during a period is based on the value of the portion of the awards that are ultimately expected to vest.

Results of Operations

Revenues

Total revenues for the years ended December 31, 2017, 2016, and 2015 were as follows (in thousands):

	Year Ended December 31,			2016-2017	2015-2016
	2017	2016	2015	Change	Change
License fees	$52,311	$3,296	$49,064	$ 49,015	$ (45,768)
Contract and other	379	2,268	6,383	(1,889)	(4,115)
Total revenues	$52,690	$5,564	$55,447	$ 47,126	$ (49,883)

License Fees

License fees include fees and milestone payments related to the out-licensing of our product candidates and technologies. The primary components of license fees in 2017 were $40.2 million of license fee revenue recognized in connection with the XOMA 052 License Agreement and IL-1 Target License Agreement with Novartis and a $10.0 million milestone earned under a previously existing license agreement with Novartis International Pharmaceutical Ltd.

The primary components of license fees in 2016 were $2.0 million in upfront and milestone payments related to various out-licensing arrangements, $0.7 million in annual maintenance fees related to various out-licensing arrangements and $0.6 million in revenue recognized related to the collaboration agreement with Servier, which was terminated in March 2016. The $2.0 million of upfront and milestone payments included a $1.5 million fee for a phage display library license delivered during the first quarter of 2016.

The primary components of license fees in 2015 were $46.3 million in upfront and milestone payments related to various out-licensing arrangements, $1.6 million in annual maintenance fees related to various out-licensing arrangements and $1.2 million in revenue recognized related to the loan agreement with Servier. The $46.3 million included a $37.0 million upfront payment from Novartis International Pharmaceutical Ltd., a $5.0 million upfront payment from Novo Nordisk A/S and a $3.8 million payment from Pfizer.

Contract and Other Revenues

Contract and other revenues include agreements where we have provided contracted research and development services to our contract and collaboration partners, including Servier and NIAID. Starting in 2017, contract and other revenues include revenue recognized under the Royalty Acquisition Agreements with HCRP. The following table shows the activity in contract and other revenues for the years ended December 31, 2017, 2016, and 2015, (in thousands):

	Year Ended December 31,			2016-2017 Change	2015-2016 Change
	2017	2016	2015		
NIAID	$101	$1,082	$5,084	$ (981)	$ (4,002)
Servier	—	586	1,178	(586)	(592)
Royalties and other	278	600	121	(322)	479
Total contract and other revenues	$379	$2,268	$6,383	$ (1,889)	$ (4,115)

The novation of our NIAID contract to Ology Bioservices and the termination of our Servier collaboration in March 2016 resulted in the decreases in related contract revenue in 2017 and 2016, as compared with the relative prior periods. In addition, in December 2017, we recognized $0.1 million of deferred revenue related to the NIH rate audit related to billings from 2008-2009. Royalty and other revenue in 2017 relates primarily to the amortization of the deferred revenue from the sale of royalty interests in December 2016 under the Royalty Acquisition Agreements with HCRP.

The generation of future revenues related to license, milestone, and royalties is dependent on our ability to attract new licensees to our antibody technologies and the achievement of milestones or product sales by our existing licensees. Due to the novation of our contract with NIAID to Ology Bioservices and the termination of our collaboration agreement with Servier in March 2016, we do not anticipate significant future contract revenues.

Research and Development Expenses

Research and development expenses were $7.9 million in 2017, compared with $44.2 million in 2016 and $70.9 million in 2015. The decrease of $36.3 million in 2017, as compared with 2016, was primarily due to the implementation of our royalty-aggregator business model during the first quarter of 2017, which included the cessation of substantially all development activities. The decrease consisted of a $12.9 million decrease in salaries and related expenses due to a reduction in headcount, an $8.5 million decrease in external manufacturing activities, a $7.6 million decrease in clinical trial costs, a $4.0 million decrease in the allocation of facilities and information technology costs, and a $1.0 million decrease in consulting costs. The decrease in allocation of facilities and information technology costs is a result of a decreased proportion of research and development employees as a result of our restructuring activities in December 2016 and June 2017. The decrease of $26.7 million in 2016, as compared with 2015, was primarily due to decreases of $13.7 million in salaries and related expenses due to a reduction in headcount, $6.8 million in clinical trial costs, $2.2 million in consulting services due to the termination of the EYEGUARD global Phase 3 program in the third quarter of 2015 and gevokizumab in pyoderma gangrenosum (“PG”) global Phase 3 program in the first quarter of 2016, and $0.8 million in depreciation and facility expenses due to the sale of our manufacturing facility to Agenus in December 2015.

Salaries and related personnel costs are a significant component of research and development expenses. We recorded $2.1 million in research and development salaries and employee-related expenses in 2017, compared with $15.0 million in 2016 and $28.7 million in 2015. Included in these expenses for 2017 were $1.0 million for salaries and benefits, $0.2 million for bonus expense and $0.9 million for stock-based compensation, which is a non-cash expense. The decrease of $12.9 million in 2017, as compared with 2016, was primarily due to decreases of $10.2 million in salaries and benefits costs, $1.9 million in stock-based compensation and $0.8 million in bonus expense. The decreases were primarily due to the headcount reductions resulting from the restructuring activities initiated in December 2016 and June 2017.

We recorded $15.0 million in research and development salaries and employee-related expenses in 2016, compared with $28.7 million in 2015. Included in these expenses for 2016 were $11.2 million for salaries and benefits, $1.0 million for bonus expense and $2.8 million for stock-based compensation, which is a non-cash expense. The decrease of $13.7 million in 2016, as compared with 2015, was primarily due to decreases of $10.6 million in salaries and benefits costs due to fewer employees resulting from our 2015 restructuring activities, $0.9 million in bonus expense and $2.2 million in stock-based compensation.

As our business model has changed, so has our research and development spending activity. For the years ended December 31, 2016 and 2015, approximately 3% and 29%, respectively, of our research and development expense spending relate to collaborative and contract arrangements with Servier and NIAID with the remaining 97% and 71%, respectively, relating to our internal projects; whereas 100% of our research and development spending for the year ended December 31, 2017 relates to our internal projects.

For the year ended December 31, 2017, X358, for which we incurred the largest amount of expenses, accounted for between 40% and 50% of our total research and development expenses. Each of our remaining development programs accounted for less than 10% of our total research and development expenses. Due to our change in business model, for the third and fourth quarters of 2017, we did not incur significant expenses for internally developed projects.

For the year ended December 31, 2016, X358, for which we incurred the largest amount of expenses, accounted for between 50% and 60% of our total research and development expenses. The gevokizumab program and our endocrine research-stage programs each accounted for between 10% and 20% of our total research and development expenses. Each of our remaining development programs accounted for less than 10% of our total research and development expenses.

For the year ended December 31, 2015, the gevokizumab program, for which we incurred the largest amount of expense, accounted for between 40% and 50% of our total research and development expenses. A second development program, XMet, accounted for between 30% and 40% of our total research and development expenses. All remaining development programs accounted for less than 10% of our total research and development expenses.

We expect our research and development spending in 2018 will be reduced as compared with 2017 levels due to the implementation of our royalty-aggregator business model and related discontinuation of clinical trial activities.

General and Administrative Expenses

General and administrative expenses include salaries and related personnel costs, facilities cost and professional fees. In 2017, general and administrative expenses were $24.3 million compared with $18.3 million in 2016 and $20.6 million in 2015. The increase of $6.0 million in 2017 as compared with 2016 was primarily due to increases of $4.0 million in the allocation of facilities and information technology costs due to a greater proportion of general and administrative personnel after our restructuring activities, $2.9 million in costs related to the execution of license agreements, including the two Novartis agreements in August 2017, $2.2 million in stock-based compensation, and $0.4 million in consulting services, partially offset by decreases of $2.8 million in salaries as a result of our restructuring activities and $1.0 million in legal fees.

The decrease of $2.3 million in 2016 as compared with 2015 was primarily due to a $2.4 million decrease in salaries and related personnel costs due to fewer employees resulting from our 2015 restructuring activities, of which $0.5 million was a decrease in stock-based compensation, which is a non-cash expense.

We expect our general and administrative expenses during 2018 to be decreased as compared with 2017 levels due to expected cost savings related to our royalty-aggregator business model and streamlined operations.

Restructuring and Other Charges

On December 19, 2016, we announced a restructuring of our business based on our decision to focus our efforts on clinical development, with an initial focus on the X358 clinical programs. The restructuring included a reduction-in-force in which we terminated 57 employees, which was implemented in December 2016 (the “2016 Restructuring”). In early 2017, we transformed our business model to become a royalty aggregator where we focus on

expanding our portfolio of fully-funded programs by out-licensing our internally developed product candidates and acquiring potential milestone and royalty revenue streams on additional product candidates and eliminated an additional five employees with an effective termination date of June 30, 2017 (the "2017 Restructuring"). During the years ended December 31, 2017 and 2016, we recorded charges of $3.4 million and $3.8 million, respectively, related to severance, other termination benefits and outplacement services for the 2016 Restructuring and 2017 Restructuring activities. During the year ended December 31, 2016, we recognized an additional restructuring charge of $0.6 million in stock-based compensation resulting from the acceleration of vesting of stock awards granted to a former executive under his retention benefit agreement. In connection with the restructuring in 2016, we recorded an asset impairment charge of $0.2 million for leasehold improvements that have no future use.

On July 22, 2015, we announced the Phase 3 EYEGUARD-B study of gevokizumab in patients with Behçet's disease uveitis, run by Servier, did not meet the primary endpoint of time to first acute ocular exacerbation. In August 2015, we announced our intention to end the EYEGUARD global Phase 3 program. On August 21, 2015, in connection with our efforts to lower operating expenses and preserve capital while continuing to focus on our endocrine product pipeline, we implemented a restructuring plan that included a workforce reduction resulting in the termination of 52 employees during the second half of 2015. During the years ended December 31, 2016 and 2015, we recorded a credit of $32,000 and a charge of $2.9 million, respectively, related to severance, other termination benefits and outplacement services. In addition, we recognized additional restructuring charges of $29,000 and $0.8 million in contract termination costs in the years ended December 31, 2016 and 2015, respectively, which primarily include costs in connection with the discontinuation of the EYEGUARD studies.

Other Income (Expense)

Interest Expense

Amortization of debt issuance costs and discounts are included in interest expense. Interest expense is shown below for the years ended December 31, 2017, 2016, and 2015, (in thousands):

	Year Ended December 31,			2016-2017 Change	2015-2016 Change
	2017	2016	2015		
Novartis note	$490	$405	$329	$ 85	$ 76
Servier loan	431	892	1,083	(461)	(191)
Hercules loan	311	2,628	2,223	(2,317)	405
GECC term loan	—	—	119	—	(119)
Other	6	21	11	(15)	10
Total interest expense	$1,238	$3,946	$3,765	$ (2,708)	$ 181

Interest expense related to the Hercules term loan decreased by $2.3 million in 2017, compared with 2016. The decrease was due to the special prepayment of $10.0 million under the Hercules term loan in January 2017 and pay off of the remaining balance of the debt in March 2017. In addition, in August 2017, the remaining balance of the Servier Loan was paid off.

Interest expense related to the Servier loan and General Electric Capital Corporation ("GECC") term loan decreased by $0.2 million and $0.1 million, respectively in 2016, compared with 2015. The decrease was due to the payment of €3.0 million in principal under the Servier loan in January 2016 and the extinguishment of the GECC term loan in February 2015. This decrease was partially offset by an increase of $0.4 million in interest expense due under our term loan with Hercules that was entered into in February 2015.

We expect interest expense in 2018 to decrease as compared with 2017 due to the March 2017 payoff of the Hercules loan and August 2017 payoff of the Servier Loan.

Loss on Extinguishment of Debt

In March 2017, we paid off our outstanding principal balance, final payment fee and accrued interest totaling $6.5 million under our loan and security agreement with Hercules, and we were not required to pay the 1% prepayment

charge pursuant to the terms of the loan. We recognized a loss on extinguishment of $0.5 million from the payoff of the term loan.

In August 2017, NIBR, on our behalf, paid off our outstanding principal balance and accrued interest on our Servier Loan totaling $14.3 million in conjunction with the XOMA-052 License Agreement. We recognized a loss on extinguishment of $0.1 million from the payoff of the loan.

In February 2015, the GECC term loan was fully paid. We used a portion of the proceeds under the Hercules term loan to repay GECC's outstanding principle balance, final payment fee, prepayment fee, and accrued interest totaling $5.5 million. We recognized a loss on extinguishment of $0.4 million from the payoff of the GECC term loan.

Other Income, Net

The following table shows the activity in other income, net for the years ended December 31, 2017, 2016, and 2015, (in thousands):

	Year Ended December 31, 2017	2016	2015	2016-2017 Change	2015-2016 Change
Other income, net					
Gain on sale of business	$—	$—	$3,505	$ —	$ (3,505)
Realized foreign exchange gain (loss)	(1,635)	4	69	(1,639)	(65)
Unrealized foreign exchange gain	—	489	1,870	(489)	(1,381)
Sublease income (loss)	(751)	398	—	(1,149)	398
Gain on sale and disposal of equipment	1,226	—	—	1,226	—
Income under the agreement with Ology Bioservices	2,150	—	—	2,150	—
Other	125	619	56	(494)	563
Total other income, net	$1,115	$1,510	$5,500	$ (395)	$ (3,990)

The gain of $2.2 million in income under the agreement with Ology Bioservices was due to payments we received for milestones achieved by Ology Bioservices in 2017. The realized foreign exchange loss of $1.6 million was primarily related to re-measurement of the Servier Loan which was paid in 2017. The gain of $1.2 million on the sale and disposal of equipment and leasehold improvements is primarily related to the sale and disposal of equipment located in one of our leased facilities during the year ended December 31, 2017. In 2017 we entered into a sublease for a portion of one of our leased facilities and recognized a loss on the sublease of $0.8 million. Unrealized foreign exchange gains for the years ended December 31, 2016, and 2015, are primarily related to the re-measurement of the Servier loan which was denominated in Euros. The sublease income in 2016 is related to the sublease arrangements executed with Agenus in December 2015 and Ology Bioservices in March 2016. Other income in 2016 primarily consist of $0.4 million generated from our transition service agreements with Agenus and Ology Bioservices, partially offset by an other-than-temporary impairment of $0.2 million related to a non-marketable cost method investment that we determined was impaired. The gain on sale of business for the year ended December 31, 2015 is related to the $3.5 million gain recognized from the sale of our pilot scale manufacturing facility, including certain equipment, to Agenus in 2015.

Revaluation of Contingent Warrant Liabilities

We have previously issued warrants that contained provisions that were contingent on the occurrence of a change in control, which could conditionally obligate us to repurchase the warrants for cash in an amount equal to their estimated fair value using the Black-Scholes Model on the date of such change in control. Due to these provisions, we accounted for the warrants issued as a liability at estimated fair value. In addition, the estimated liability related to the warrants was revalued at each reporting period until the earlier of the exercise of the warrants, at which time the liability would be reclassified to stockholders' equity at its then estimated fair value, or expiration of the warrants. There were no such warrant liabilities as of December 31, 2017.

We revalued the March 2012 warrants at December 31, 2016 using the Black-Scholes Model and recorded a $7.5 million reduction in the estimated fair value as a gain on the revaluation of contingent warrant liabilities line of our consolidated statement of comprehensive loss for the year ended December 31, 2016. The decrease in the

estimated fair value of the warrants is primarily due to the decrease in the market price of our common stock at December 31, 2016 as compared to December 31, 2015. We revalued the warrants at December 31, 2015 and recorded a $15.6 million reduction in the estimated fair value in 2015, as gains on the revaluation of contingent warrant liabilities line of our consolidated statement of comprehensive income (loss) for the year ended December 31, 2015. During 2017, all of these warrants expired unexercised.

The December 2014 warrants expired in December 2016. During the year ended December 31, 2016, we revalued the December 2014 warrants using the Black-Scholes Model and recorded a $3.0 million reduction in the estimated fair value as a gain on the revaluation of contingent warrant liabilities line of our consolidated statement of comprehensive income (loss). We revalued the warrants at December 31, 2015 and recorded a $2.2 million reduction in the estimated fair value as a gain on the revaluation of contingent warrant liabilities line on our consolidated statement of comprehensive income (loss). The decrease in the estimated fair value of the warrants is primarily due to the decrease in the market price of our common stock during 2016 as compared to December 31, 2015.

Provision for Income Taxes

Our provision for income taxes for the year ended December 31, 2017 differs from the amounts computed by multiplying the federal statutory rate by income before taxes primary due to a reduction in the valuation allowance and the use of a tax credit carryforward. We are subject to an ownership change pursuant to IRC Section 382 which occurred in February 2017 which significantly limits our ability to use our net operating loss carryforwards and tax credits against our 2017 taxable income. Due to historical losses, we did not record a provision for income taxes for any period in 2016 and 2015.

Liquidity and Capital Resources

The following table summarizes our cash and cash equivalents, our working capital and our cash flow activities for each of the periods presented (in thousands):

	December 31,		
	2017	2016	Change
Cash and cash equivalents	$43,471	$25,742	$17,729
Working capital (deficit)	$36,773	$(5,346)	$42,119

	Year Ended December 31,			2016-2017	2015-2016
	2017	2016	2015	Change	Change
Net cash provided by (used in) operating activities	$2,686	$(33,689)	$(30,892)	$ 36,375	$ (2,797)
Net cash provided by investing activities	1,606	612	4,450	994	(3,838)
Net cash provided by (used in) financing activities	13,258	(6,942)	13,801	20,200	(20,743)
Effect of exchange rate changes on cash	179	(6)	(37)	185	31
Net increase (decrease) in cash and cash equivalents	$17,729	$(40,025)	$(12,678)	$ 57,754	$ (27,347)

Cash Provided by (Used in) Operating Activities

The change in net cash from operating activities for 2017, as compared with the same period in 2016, was primarily due to the $25.7 million cash receipts under the license agreements executed with Novartis in August 2017, combined with decreased research and development spending related to manufacturing and clinical trial costs during 2017 due to the implementation of our royalty aggregator business model.

The increase in net cash used in operating activities in 2016 as compared to 2015 was primarily due to lower cash received from revenue sources in 2016 as compared with 2015. This increase was partially offset by lower salaries and related costs resulting from our 2015 restructuring activities combined with decreased research and development spending related to manufacturing and clinical trial costs primarily due to the discontinuation of the gevokizumab studies under our collaboration agreement with Servier in the third quarter of 2015 and the termination of the collaboration agreement with Servier in March 2016. Also contributing to the decrease in clinical trial costs was the termination of the gevokizumab PG global Phase 3 program in March 2016.

Cash Provided by Investing Activities

Net cash provided by investing activities for the year ended December 31, 2017 of $1.6 million was primarily related to proceeds from the sale of equipment.

Net cash provided by investing activities for the year ended December 31, 2016 was primarily related to proceeds from the sale of marketable securities of $0.6 million.

Net cash provided by investing activities for the year ended December 31, 2015 was primarily related to proceeds from the sale of our manufacturing facility of $4.9 million, partially offset by $0.4 million in purchases of property and equipment.

Cash Provided by (Used in) Financing Activities

Net cash provided by financing activities for the year ended December 31, 2017 of $13.3 million was primarily related to the sale of convertible preferred stock and common stock to BVF for total net proceeds of $24.8 million and the sale of common stock to Novartis for proceeds of $5.0 million. These cash inflows were partially offset by the payoff of our outstanding loan with Hercules of $17.5 million.

Net cash used in financing activities for the year ended December 31, 2016 was primarily related to $6.9 million of principal payments on our loans with Servier and Hercules.

Net cash provided by financing activities for the year ended December 31, 2015 was primarily related to proceeds from the Hercules term loan of $20.0 million and proceeds from the issuance of common stock of $0.5 million. These cash inflows were partially offset by $6.1 million of principal payments on the GECC term loan, and payment of debt issuance costs of $0.5 million on the Hercules term loan.

ATM Agreement

On November 12, 2015, we entered into an At The Market Issuance Sales Agreement (the "2015 ATM Agreement") with Cowen and Company, LLC ("Cowen"), under which we may offer and sell from time to time at our sole discretion shares of our common stock through Cowen as our sales agent, in an aggregate amount not to exceed $75.0 million. Cowen may sell the shares by any method permitted by law deemed to be an "at the market" offering as defined in Rule 415 of the Securities Act, including without limitation sales made directly on The NASDAQ Global Market, on any other existing trading market for our common stock or to or through a market maker. Cowen also may sell the shares in privately negotiated transactions, subject to our prior approval. We will pay Cowen a commission up to 3% of the gross proceeds of the sales price of all shares sold through it as sales agent under the 2015 ATM Agreement. For the year ended December 31, 2017, we sold a total of 110,252 shares of common stock under the 2015 ATM Agreement for aggregate gross proceeds of $0.6 million. Total offering costs of $0.2 million were offset against the proceeds from the sale of common stock. In January 2018, we sold 67,658 shares of common stock under the 2015 ATM Agreement for aggregate net cash proceeds of $2.3 million.

* * *

We have incurred operating losses since inception and have an accumulated deficit of $1.2 billion at December 31, 2017. As of December 31, 2017, we had $43.5 million in cash and cash equivalents, which will enable us to maintain our operations for a period of at least 12 months following the filing date of this report.

Our ability to raise additional capital in the equity and debt markets, should we choose to do so, is dependent on a number of factors, including the market demand for our common stock or debt, which itself is subject to a number of pharmaceutical development and business risks and uncertainties, as well as the uncertainty that we would be able to raise such additional capital at a price or on terms that are favorable to us.

Commitments and Contingencies

Schedule of Contractual Obligations

Payments by period due under contractual obligations at December 31, 2017, are as follows (in thousands):

Contractual Obligations	Total	Less than 1 year	1 to 3 years	3 to 5 years	More than 5 years
Capital leases[1]	$75	$27	$48	$—	$—
Operating leases, net of sublease income[1]	13,843	2,951	6,210	4,116	566

Debt obligations[2]					
Principal	14,572	—	—	14,572	—
Interest	2,929	—	—	2,929	—
Total	$31,419	$2,978	$6,258	$21,617	$566

(1) See Note 13: Commitment and Contingencies to the accompanying consolidated financial statements for further discussion.

(2) See Item 7A: Quantitative and Qualitative Disclosures about Market Risk and Note 8: Long-Term Debt and Other Financings to the accompanying consolidated financial statements for further discussion of our debt obligation.

We lease administrative facilities and office equipment under operating leases expiring on various dates through April 2023. These leases require us to pay taxes, insurance, maintenance and minimum lease payments. In addition to the above, we have committed to make potential future milestone payments to third parties as part of licensing and development programs. Payments under these agreements become due and payable only upon the achievement by our licensees of certain developmental, regulatory and/or commercial milestones. Because it is uncertain if and when these milestones will be achieved, such contingencies, aggregating up to $15.5 million (assuming one product per contract meets all milestones) have not been recorded on our consolidated balance sheet as of December 31, 2017. We are also obligated to pay royalties, ranging generally from 0.5% to 3.5% of the selling price of the licensed component and up to 40% of any sublicense fees to various universities and other research institutions based on future sales or licensing of products that incorporate certain products and technologies developed by those institutions. We are unable to determine precisely when and if our payment obligations under the agreements will become due as these obligations are based on future events, the achievement of which is subject to a significant number of risks and uncertainties.

Although operations are influenced by general economic conditions, we do not believe inflation had a material impact on financial results for the periods presented. We believe that we are not dependent on materials or other resources that would be significantly impacted by inflation or changing economic conditions in the foreseeable future.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board (“FASB”) issued guidance codified in Accounting Standards Codification (“ASC”) 606, Revenue Recognition — Revenue from Contracts with Customers, which amends the guidance in ASC 605, Revenue Recognition. The standard’s core principle is that a company will recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. In August 2015, the FASB issued an accounting update to defer the effective date by one year for public entities such that it is now applicable for annual and interim periods beginning after December 15, 2017. Early adoption is permitted for periods beginning after December 15, 2016. ASC 606 also permits two methods of adoption: retrospectively to each prior reporting period presented (full retrospective method), or retrospectively with the cumulative effect of initially applying the guidance recognized at the date of initial application (the modified retrospective method). We are required to adopt the standard on January 1, 2018. To date, we have primarily derived our revenues from various license and collaboration arrangements and sale of future royalties. The consideration we are eligible to receive under these agreements includes upfront payments, milestone payments and royalties. Each of our agreements has unique terms that will need to be evaluated separately under ASC 606. We have completed our assessment of our active license and collaboration agreements and sale of future royalty arrangements, the impact of the new guidance on our consolidated financial statements, as well as the evaluation of the disclosure requirements under the new standard. We will adopt the new standard using the modified retrospective method. We have evaluated the accounting, transition and disclosure requirements of the new standard and we do not expect it to have a material impact on our consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842), (“ASU 2016-02”). Under ASU 2016-02, a lessee will be required to recognize assets and liabilities for leases with lease terms of more than 12 months. Recognition, measurement, and presentation of expenses and cash flows arising from a lease by a lessee primarily will depend on its classification as a finance or operating lease. ASU 2016-02 will require both types of leases to be recognized on the balance sheet. The ASU also will require disclosures to help investors and other financial statement users better understand the amount, timing, and uncertainty of cash flows arising from leases. These disclosures include qualitative and quantitative requirements, providing additional information about the amounts recorded in the financial statements. ASU 2016-02 is effective for us for all interim and annual reporting periods beginning after December 15, 2018. Early adoption is permitted. We are in the process of assessing the impact of ASU No. 2016-02

on our consolidated financial statements.

In August 2016, the FASB issued ASU No. 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments (a consensus of the FASB Emerging Issues Task Force), ("ASU 2016-15"). ASU 2016-15 addresses eight specific cash flow issues including debt prepayment or debt extinguishment costs, settlement of zero-coupon debt instruments or other debt instruments with coupon interest rates that are insignificant in relation to the effective interest rate of the borrowing and contingent consideration payments made after a business combination. ASU 2016-15 is effective for all interim and annual reporting periods beginning after December 15, 2017. Early adoption is permitted. We do not expect the adoption of ASU 2016-15 to have a material impact on our consolidated statements of cash flows.

In May 2017, the FASB issued ASU No. 2017-09, Compensation - Stock Compensation (Topic 718): Scope of Modification Accounting, ("ASU 2017-04"). ASU 2017-09 streamlines the application of modification accounting by stating that when making a change to the terms or conditions of a share-based payment award, a company should apply modification accounting to the award, unless each of the following conditions is met: 1. The fair value (or calculated value or intrinsic value, if such an alternative measurement method is used) of the modified award is the same as the fair value (or calculated value or intrinsic value, if such an alternative measurement method is used) of the original award immediately before the original award is modified. If the modification does not affect any of the inputs to the valuation technique that the entity uses to value the award, the entity is not required to estimate the value immediately before and after the modification, and 2. The vesting conditions of the modified award are the same as the vesting conditions of the original award immediately before the original award is modified, and 3. The classification of the modified award as an equity instrument or a liability instrument is the same as the classification of the original award immediately before the original award is modified. ASU 2017-09 is effective for all interim and annual reporting periods beginning after December 15, 2017. Early adoption is permitted. We do not expect the adoption of ASU 2017-09 to have a material impact on our consolidated financial statements.

Off Balance Sheet Arrangements

We do not have any off balance sheet arrangements, as defined in Item 303(a)(4)(ii) of Regulation S-K promulgated by the SEC.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

Interest Rate Risk

Our exposure to market rate risk for changes in interest rates relates primarily to our investment portfolio and our loan facilities. By policy, we make our investments in high-quality debt securities, limit the amount of credit exposure to any one non-U.S. Treasury issuer, and limit duration by restricting the term of the instrument. We generally hold investments to maturity, with a weighted average portfolio period of less than twelve months. However, if the need arose to liquidate such securities before maturity, we may experience losses on liquidation.

We hold interest-bearing instruments that are classified as cash and cash equivalents. Fluctuations in interest rates can affect the principal values and yields of fixed income investments. If interest rates in the general economy were to rise rapidly in a short period of time, our fixed income investments could lose value.

The following table presents the amounts and related weighted average interest rates of our cash and cash equivalents at December 31, 2017 and 2016 (in thousands, except interest rate):

	Maturity	Carrying Amount (in thousands)	Fair Value (in thousands)	Weighted Average Interest Rate
December 31, 2017				

Cash and cash equivalents	Daily to 90 days	$ 43,471	$ 43,471	0.83	%
December 31, 2016					
Cash and cash equivalents	Daily to 90 days	$ 25,742	$ 25,742	0.23	%

As of December 31, 2017, we have an outstanding principal balance on our note with Novartis of $14.6 million, which is due in 2022. The interest rate on this note is charged at a rate of USD six-month London Interbank Offered Rate (“LIBOR”) plus 2%, which was 3.81% at December 31, 2017. No further borrowing is available under this note.

The variable interest rate related to our long-term debt instrument is based on LIBOR for our Novartis note. We estimate a hypothetical 100 basis point change in interest rates could increase or decrease our interest expense by approximately $0.1 million on an annualized basis.

Foreign Currency Risk

As of December 31, 2017, we are no longer subject to changes in exchange rates related to our debt with Servier as the outstanding principal balance and accrued interest were paid off in August 2017.

We incur expenses denominated in foreign currencies. The amount of expenses incurred will be impacted by fluctuations in these foreign currencies. When the U.S. Dollar weakens against foreign currencies, the U.S. Dollar value of the foreign-currency denominated expense increases, and when the U.S. Dollar strengthens against these currencies, the U.S. dollar value of the foreign-currency denominated expense decreases. A hypothetical 10% change in foreign exchange rates would not have had a material impact on our consolidated financial statements.

Item 8. Financial Statements and Supplementary Data

The following consolidated financial statements of the registrant, related notes and report of independent registered public accounting firm are set forth beginning on page F-1 of this report.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure
Not applicable.

Item 9A. Controls and Procedures
Under the supervision and with the participation of our management, including our Chief Executive Officer and our Senior Vice President, Finance and Chief Financial Officer, we conducted an evaluation of our disclosure controls and procedures, as such term is defined under Rule 13a-15 promulgated under the Securities Exchange Act of 1934, as amended, as of the end of the period covered by this report. Our disclosure controls and procedures are intended to ensure that the information we are required to disclose in the reports that we file or submit under the Securities Exchange Act of 1934 is (i) recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and (ii) accumulated and communicated to our management, including the Chief Executive Officer and Senior Vice President, Finance and Chief Financial Officer, as the principal executive and financial officers, respectively, to allow timely decisions regarding required disclosures. Based on this evaluation, our Chief Executive Officer and our Senior Vice President, Finance and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this report.

Management's Report on Internal Control over Financial Reporting

Management, including our Chief Executive Officer and our Senior Vice President, Finance and Chief Financial Officer, is responsible for establishing and maintaining adequate internal control over financial reporting (as such term is defined in Exchange Act Rules 13a-15(f). The Company's internal control system was designed to provide reasonable assurance to the Company's management and board of directors regarding the preparation and fair presentation of published financial statements in accordance with accounting principles generally accepted in the United States.

Management assessed the effectiveness of our internal control over financial reporting as of December 31, 2017. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in Internal Control—Integrated Framework (2013 Framework). Based on our assessment we believe that, as of December 31, 2017, our internal control over financial reporting is effective based on those criteria.

This annual report does not include an attestation report of the Company's registered public accounting firm regarding internal control over financial reporting. For as long as we remain a smaller reporting company as defined in Rule 12b-2 of the Exchange Act, we are exempt from the requirement that our registered public accounting firm provide an attestation report on the effectiveness of our internal control over financial reporting.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in connection with the evaluation required by paragraph (d) of Exchange Act Rules 13a-15 or 15d-15 that occurred during our last fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information
None.

PART III

Item 10. Directors, Executive Officers, Corporate Governance

Certain information regarding our executive officers required by this Item is set forth as a Supplementary Item at the end of Part I of this Form 10-K (under Instruction 3 to Item 401(b) of Regulation S-K). Other information required by this Item will be included in the Company's proxy statement for the 2018 Annual Meeting of Stockholders ("2018 Proxy Statement"), under the sections labeled "Item 1—Election of Directors" and "Compliance with Section 16(a) of the Securities Exchange Act of 1934", and is incorporated by reference. The 2018 Proxy Statement will be filed with the SEC within 120 days after the end of the fiscal year to which this report relates.

Code of Ethics

The Company's Code of Ethics applies to all employees, officers and directors including the Chief Executive Officer (principal executive officer) and the Vice President, Finance and Chief Financial Officer (principal financial and principal accounting officer) and is posted on the Company's website at www.xoma.com. We intend to satisfy the applicable disclosure requirements regarding amendments to, or waivers from, provisions of our Code of Ethics by posting such information on our website.

Item 11. Executive Compensation

Information required by this Item will be included in the sections labeled "Compensation of Executive Officers", "Summary Compensation Table", "Outstanding Equity Awards as of December 31, 2017", "Pension Benefits", "Non-Qualified Deferred Compensation" and "Compensation of Directors" appearing in our 2018 Proxy Statement, and is incorporated by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Information required by this Item will be included in the sections labeled "Common Stock of Certain Beneficial Owners and Management" and "Equity Compensation Plan Information" appearing in our 2018 Proxy Statement, and is incorporated by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence

Information required by this Item will be included in the section labeled "Transactions with Related Persons" appearing in our 2018 Proxy Statement, and is incorporated by reference.

Item 14. Principal Accountant Fees and Services

Information required by this Item will be included in the section labeled “Appointment of Independent Registered Public Accounting Firm” appearing in our 2018 Proxy Statement, and is incorporated by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules
(a) The following documents are included as part of this Annual Report on Form 10-K:

(1) Financial Statements:

All financial statements of the registrant referred to in Item 8 of this Report on Form 10-K.

(2) Financial Statement Schedules:

All financial statements schedules have been omitted because the required information is included in the consolidated financial statements or the notes thereto or is not applicable or required.

(3) Exhibits:

		Incorporation By Reference		
Exhibit Number	Exhibit Description	SEC File No.	Exhibit	Filing Date
3.1	Certificate of Incorporation of XOMA Corporation	000-14710	3.1	01/03/2012
3.2	Certificate of Amendment of Certificate of Incorporation of XOMA Corporation	000-14710	3.1	05/31/2012
3.3	Certificate of Amendment to the Amended Certificate of Incorporation of XOMA Corporation	000-14710	3.1	05/28/2014
3.4	Certificate of Amendment to the Amended Certificate of Incorporation	000-14710	3.1	10/18/2016

	of XOMA Corporation				
3.5	Certificate of Designation of Preferences, Rights and Limitations of Series X Convertible Preferred Stock	8-K	000-14710	3.1	02/16/2017
3.6	By-laws of XOMA Corporation	8-K	000-14710	3.2	01/03/2012
4.1	Reference is made to Exhibits 3.1, 3.2 , 3.3, 3.4, 3.5 and 3.6				
4.2	Specimen of Common Stock Certificate	8-K	000-14710	4.1	01/03/2012
4.3	Form of Series X Preferred Stock Certificate	8-K	000-14710	4.1	02/16/2017
4.5	Form of Warrants (February 2015 Warrants)	10-Q	000-14710	4.10	05/07/2015
4.6	Form of Warrants (February 2016 Warrants)	10-Q	000-14710	4.9	05/04/2016
10.1*	1981 Share Option Plan as amended and restated	S-3	333-171429	10.1	12/27/2010

10.2*	Form of Share Option Agreement for 1981 Share Option Plan	10-K	001-14710	10.1A	03/11/2008
10.3*	Restricted Share Plan as amended and restated	S-8	333-171429	10.1	12/27/2010
10.4*	Form of Share Option Agreement for Restricted Share Plan	10-K	001-14710	10.2A	03/11/2008
10.6*	1992 Directors Share Option Plan as amended and restated	S-8	333-171429	10.1	12/27/2010
10.7*	Form of Share Option Agreement for 1992 Directors Share Option Plan (initial grants)	10-K	001-14710	10.3A	03/11/2008
10.8*	Form of Share Option Agreement for 1992 Directors Share Option Plan (subsequent grants)	10-K	001-14710	10.3B	03/11/2008
10.9*	2002 Director Share Option Plan	S-8	333-151416	10.10	08/28/2003
10.10*	Amended and Restated 2010	8-K	001-14710	10.1	05/24/2017

	Long Term Incentive and Stock Award Plan				
10.11*	XOMA Corporation Amended and Restated 2010 Long Term Incentive and Stock Award Plan	S-8	000-14710	99.1	09/12/2014

Exhibit Number	Exhibit Description	Incorporation By Reference Form	SEC File No.	Exhibit	Filing Date
10.12*	Form of Stock Option Agreement for Amended and Restated 2010 Long Term Incentive and Stock Award Plan	10-K	000-14710	10.6A	03/14/2012
10.13*	Form of Restricted Stock Unit Agreement for Amended and Restated 2010 Long Term Incentive and Stock Award Plan	10-K	000-14710	10.6B	03/14/2012
10.14*	2016 Incentive Compensation Plan	10-Q	000-14710	10.1	05/04/2016
10.15*	Form of Amended and Restated Indemnification Agreement for Officers	10-K	000-14710	10.6	03/08/2007
10.16*	Form of Amended and Restated Indemnification Agreement for Employee Directors	10-K	000-14710	10.7	03/08/2007
10.17*	Form of Amended and Restated Indemnification Agreement for Non-employee Directors	10-K	000-14710	10.8	03/08/2007
10.18*	Amended 2015 Employee Share Purchase Plan	8-K	001-14710	10.2	05/24/2017
10.19*		S-8	333-204367	99.1	05/21/2015

	2015 Employee Stock Purchase Plan				
10.20*	Form of Subscription Agreement and Authorization of Deduction under the 2015 Employee Stock Purchase Plan	S-8	333-204367	99.2	05/21/2015
10.21	Lease of premises at 804 Heinz Street, Berkeley, California dated February 13, 2013	10-K	000-14710	10.29	03/12/2014
10.22	Lease of premises at 2910 Seventh Street, Berkeley, California dated February 13, 2013	10-K	000-14710	10.30	03/12/2014
10.23	First amendment to lease of premises at 2910 Seventh Street, Berkeley, California dated February 22, 2013	10-K	000-14710	10.31	03/12/2014
10.24†	License Agreement by and between XOMA Ireland Limited and MorphoSys AG, dated as of February 1, 2002	10-Q/A	000-14710	10.43	12/04/2002
10.25†	License Agreement, dated as of December 29, 2003, by and between Diversa Corporation (n/k/a BP Biofuels Advanced Technology Inc.) and XOMA Ireland Limited	8-K/A	000-14710	2	03/19/2004

10.26	First Amendment, dated October 28, 2014, to the License Agreement between XOMA (US) LLC (assigned to it by XOMA Ireland Limited) and BP Biofuels Advanced Technology Inc. (previously Diversa Corporation, previously Verenium Corporation).	10-Q	000-14710	10.3	11/06/2014
10.27†	Secured Note Agreement, dated as of May 26, 2005, by and between Chiron Corporation and XOMA (US) LLC	10-Q	000-14710	10.3	08/08/2005
10.28†	Amended and Restated Research, Development and Commercialization Agreement, executed November 7, 2008, by and between Novartis Vaccines and Diagnostics, Inc. (formerly Chiron Corporation) and XOMA (US) LLC	10-K	000-14710	10.24C	03/11/2009
10.29†	Amendment No. 1 to Amended and Restated Research, Development and Commercialization Agreement, effective as of April 30, 2010, by and between Novartis Vaccines	10-K	000-14710	10.25B	03/14/2012

	and Diagnostics, Inc. (formerly Chiron Corporation) and XOMA (US) LLC				
10.30†	Amendment to Amended and Restated Research, Development and Commercialization Agreement, dated September 30, 2015, by and between XOMA (US) LLC and Novartis Vaccines and Diagnostics, Inc. (formerly Chiron Corporation)	10-Q	000-14710	10.4	11/06/2015

Exhibit Number	Exhibit Description	Incorporation By Reference			
		Form	SEC File No.	Exhibit	Filing Date
10.31+	Amendment to Secured Note Agreement, executed September 22, 2017, by and between Novartis Vaccines and Diagnostics, Inc. (formerly Chiron Corporation) and XOMA (US) LLC				
10.32†	Collaboration Agreement, dated as of November 1, 2006, between Takeda Pharmaceutical Company Limited and XOMA (US) LLC	10-K	000-14710	10.46	03/08/2007
10.33	First Amendment to Collaboration Agreement, effective as of February 28, 2007, between Takeda Pharmaceutical Company Limited and XOMA (US) LLC	10-Q/A	000-14710	10.48	03/05/2010
10.34	Second Amendment to Collaboration Agreement,	10-K	000-14710	10.31B	03/11/2009

	effective as of February 9, 2009, among Takeda Pharmaceutical Company Limited and XOMA (US) LLC				
10.35†	License Agreement, effective as of August 27, 2007, by and between Pfizer Inc. and XOMA Ireland Limited	8-K	000-14710	2	09/13/2007
10.36†	Discovery Collaboration Agreement dated September 9, 2009, by and between XOMA Development Corporation and Arana Therapeutics Limited	10-Q/A	000-14710	10.35	03/05/2010
10.37†	Loan Agreement dated as of December 30, 2010, by and between XOMA Ireland Limited and Les Laboratoires Servier	10-K/A	000-14710	10.42A	05/26/2011
10.38†	Amendment No. 2, effective January 9, 2015, to the Loan Agreement, effective December 30, 2010, by and among XOMA (US) LLC, Les Laboratoires	10-K	000-14710	10.71	03/11/2015

	Servier and Institut de Recherches Servier				
10.39	Amendment No. 1 (Consent, Transfer, Assumption and Amendment), effective January 9, 2015, to the Loan Agreement, effective December 30, 2010, by and among XOMA (US) LLC, Les Laboratoires Servier and Institut de Recherches Servier	10-K	000-14710	10.74	03/11/2015
10.40	Loan and Security Agreement, dated February 27, 2015, by and among XOMA Corporation, XOMA(US) LLC and XOMA Commercial as borrowers and Hercules Technology Growth Capital, Inc., as agent and lender	10-Q	000-14710	10.3	05/07/2015
10.41+	Amendment No. 1, dated December 20, 2016, to Loan and Security Agreement, dated February 27, 2015, by and among XOMA Corporation,				

	XOMA(US) LLC and XOMA Commercial as borrowers and Hercules Technology Growth Capital, Inc., as agent and lender				
10.42	Letter Agreement, dated June 19, 2015, by and between XOMA (US) LLC and Novartis Vaccines and Diagnostics, Inc.	10-Q	000-14710	10.1	08/10/2015
10.43†	License Agreement, dated September 30, 2015, by and between XOMA (US) LLC and Novartis Institutes for Biomedical Research, Inc.	10-Q	000-14710	10.2	11/06/2015
10.44	Amended Secured Note Agreement, dated September 30, 2015, by and between XOMA (US) LLC and Novartis Institutes for Biomedical Research, Inc.	10-Q	000-14710	10.3	11/06/2015
10.45	Sales Agreement, dated November 12, 2015, by and between XOMA Corporation and Cowen and Company, LLC	8-K	001-14710	10.1	11/12/2015

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Exhibit Number	Exhibit Description	Incorporation By Reference			
		Form	SEC File No.	Exhibit	Filing Date
10.46	Settlement and Amended License Agreement dated December 3, 2015, by and between XOMA (US) LLC, as a successor-in-interest of XOMA Ireland Limited and Pfizer Inc.	10-K	001-14710	10.64	03/09/2016
10.47†	Asset Purchase Agreement dated November 5, 2015 by and between the Company and Agenus West, LLC	10-K	001-14710	10.65	03/09/2016
10.48	Protective Rights Agreement dated December 21, 2016 by and between XOMA (US) LLC and HealthCare Royalty Partners II, L.P. relating to the Royalty Interest Acquisition Agreement dated December 20, 2016, by and between XOMA Corporation and HealthCare Royalty Partners II, L.P. and the Amended and Restated License Agreement, dated effective as of October 27, 2006, between XOMA (US) LLC and	10-K	001-14710	10.60	03/16/2017

	DYAX, Corp.				
10.49	Protective Rights Agreements dated December 21, 2016 by and between XOMA (US) LLC and HealthCare Royalty Partners II, L.P. relating to the Royalty Interest Acquisition Agreement dated December 20, 2016, by and between XOMA Corporation and HealthCare Royalty Partners II, L.P. and the License Agreement, dated effective as of August 18, 2005, between XOMA (US) LLC and Wyeth Pharmaceuticals	10-K	001-14710	10.61	03/16/2017
10.50	Royalty Interest Acquisition Agreement dated December 20, 2016, by and between XOMA Corporation and HealthCare Royalty Partners II, L.P., relating to the Amended and Restated License Agreement, dated effective as of October 27, 2006, between XOMA (US) LLC and DYAX, Corp.	10-K	001-14710	10.62	03/16/2017
10.51	Royalty Interest Acquisition Agreement dated December 20, 2016, by and between XOMA Corporation	10-K	001-14710	10.63	03/16/2017

	and HealthCare Royalty Partners II, L.P., relating to the License Agreement, dated effective as of August 18, 2005, between XOMA (US) LLC and Wyeth Pharmaceuticals				
10.52	Amendment of Section 6.10(a) and (b), dated March 8, 2017, to Royalty Interest Acquisition Agreements dated December 20, 2016, by and between XOMA Corporation and HealthCare Royalty Partners II, L.P.	10-K	001-14710	10.64	03/16/2017
10.53+	Amendment No. 3, effective January 17, 2017, to the Loan Agreement, effective December 30, 2010, by and among XOMA (US) LLC, Les Laboratoires Servier and Institut de Recherches Servier				
10.54	Subscription Agreement, dated February 10, 2017, by and among XOMA Corporation, Biotechnology Value Fund, L.P., and certain entities affiliated with BVF	424(b)(5)	333-201882	Annex A	02/13/2017
10.55	Common Stock Purchase Agreement, dated August 24, 2017, by and between XOMA	10-Q	001-14710	10.1	11/06/2017

	Corporation and Novartis Pharma AG				
10.56†	IL-1b Target License Agreement, dated August 24, 2017, by and between XOMA Corporation and Novartis Pharma AG	10-Q	001-14710	10.2	11/06/2017
10.57†	License Agreement, dated August 24, 2017, by and between XOMA Corporation and Novartis Pharma AG	10-Q	001-14710	10.3	11/06/2017

Exhibit Number	Exhibit Description	Incorporation By Reference			
		Form	SEC File No.	Exhibit	Filing Date
10.58	Asset Purchase Agreement, dated November 4, 2015, between XOMA Corporation and Ology Bioservices, Inc. (formerly Nanotherapeutics Inc.)	10-Q	001-14710	10.4	11/06/2017
10.59†	License Agreement, dated March 23, 2016, between XOMA Corporation and Ology Bioservices, Inc. (formerly Nanotherapeutics Inc.)	10-Q	001-14710	10.5	11/06/2017
10.60†	Amendment and Restatement, dated February 2, 2017, to the Asset Purchase Agreement, dated November 4, 2015, and License Agreement, dated March 23, 2016, between XOMA Corporation and Ology Bioservices, Inc. (formerly Nanotherapeutics Inc.)	10-Q	001-14710	10.6	11/06/2017
10.61*	Officer Employment	10-Q	001-14710	10.7	11/06/2017

	Agreement, dated August 7, 2017, between XOMA Corporation and James R. Neal				
10.62*	Officer Employment Agreement, dated August 7, 2017, between XOMA Corporation and Thomas Burns	10-Q	001-14710	10.8	11/06/2017
10.63*	Amended and Restated Change of Control Severance Agreement, dated August 7, 2017, to the Change of Control Severance Agreement, dated January 3, 2011, between XOMA Corporation and James R. Neal	10-Q	001-14710	10.9	11/06/2017
10.64*	Amended and Restated Change of Control Severance Agreement, dated August 7, 2017, to the Change of Control Severance Agreement, dated October 28, 2015, between XOMA Corporation and Thomas Burns	10-Q	001-14710	10.10	11/06/2017
10.65+#	License Agreement, dated December 6, 2017, between XOMA (US) LLC and Rezolute, Inc.				

	(formerly AntriaBio)
10.66+#	Common Stock Purchase Agreement, dated December 6, 2017, between XOMA (US) LLC and Rezolute, Inc. (formerly AntriaBio)
21.1+	Subsidiaries of the Company
23.1+	Consent of Independent Registered Public Accounting Firm
24.1+	Power of Attorney (included on the signature pages hereto)
31.1+	Certification of Chief Executive Officer, as required by Rule 13a-14(a) or Rule 15d-14(a)
31.2+	Certification of Chief Financial Officer, as required by Rule 13a-14(a) or Rule 15d-14(a)
32.1+	Certification of Chief Executive Officer and Chief Financial Officer, as required by Rule 13a-14(b) or Rule 15d-14(b) and Section 1350 of Chapter 63 of

	Title 18 of the United States Code (18 U.S.C. §1350)[1]
101.INS+	XBRL Instance Document
101.SCH+	XBRL Taxonomy Extension Schema Document
101.CAL+	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF+	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB+	XBRL Taxonomy Extension Labels Linkbase Document
101.PRE+	XBRL Taxonomy Extension Presentation Linkbase Document

† Confidential treatment has been granted with respect to certain portions of this exhibit. This exhibit omits the information subject to this confidentiality request. Omitted portions have been filed separately with the SEC.
* Indicates a management contract or compensation plan or arrangement.
+ Filed herewith
# Portions of this exhibit (indicated by asterisks) have been omitted pursuant to a request for confidential treatment and this exhibit has been submitted separately to the SEC. Omitted portions have been filed separately with the SEC.
(1) This certification accompanies the Form 10-K to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Registrant under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-K), irrespective of any general incorporation language contained in such filing.

The exhibits listed in the accompanying index to exhibits are filed or incorporated by reference as part of this Annual Report on Form 10-K.

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 registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on this 7th day of March 2018.

XOMA Corporation

By: /s/ JAMES R. NEAL
James R. Neal

Chief Executive Officer and Director

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints James Neal and Thomas Burns, and each of them, as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution for him or her and in his or her name, place, and stead, in any and all capacities, to sign any and all 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 SEC, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, and any of them or their substitute or substitutes, may lawfully 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 registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ James R. Neal (James R. Neal)	Chief Executive Officer (Principal Executive Officer) and Director	March 7, 2018
/s/ Thomas Burns (Thomas Burns)	Senior Vice President, Finance and Chief Financial Officer (Principal Financial and Principal Accounting Officer)	March 7, 2018
/s/ W. Denman Van Ness (W. Denman Van Ness)	Chairman of the Board of Directors	March 7, 2018
/s/ Joseph M. Limber	Director	March 7, 2018

(Joseph M. Limber)		
/s/ Jack L. Wyszomierski (Jack L. Wyszomierski)	Director	March 7, 2018
/s/ Matthew Perry (Matthew Perry)	Director	March 7, 2018

Index to Consolidated Financial Statements

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of XOMA Corporation

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of XOMA Corporation (the “Company”) as of December 31, 2017 and 2016, the related consolidated statements of comprehensive income (loss), stockholders’ equity (deficit), and cash flows for each of the three years in the period ended December 31, 2017, and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company at December 31, 2017 and 2016, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles.

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 Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the 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 audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

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.

/s/ Ernst & Young LLP

We have served as the Company’s auditor since 1998.

Redwood City, California

March 7, 2018

XOMA Corporation

CONSOLIDATED BALANCE SHEETS

(in thousands, except share data)

	December 31, 2017	2016
ASSETS		
Current assets:		
Cash and cash equivalents	$43,471	$25,742
Trade and other receivables, net	397	566
Prepaid expenses and other current assets	327	852
Total current assets	44,195	27,160
Property and equipment, net	83	1,036
Other assets	657	481
Total assets	$44,935	$28,677
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)		
Current liabilities:		
Accounts payable	$1,679	$5,689
Accrued and other liabilities	2,545	4,215
Accrued restructuring costs	130	3,594
Income taxes payable	1,637	—
Deferred revenue – current	1,413	899
Interest bearing obligations – current	—	17,855
Accrued interest on interest bearing obligations – current	18	254
Total current liabilities	7,422	32,506
Deferred revenue – non-current	17,123	18,000
Interest bearing obligations – non-current	14,572	25,312
Other liabilities – non-current	32	69
Total liabilities	39,149	75,887
Commitments and Contingencies (Note 13)		
Stockholders' equity (deficit):		
Convertible preferred stock, $0.05 par value, 1,000,000 shares authorized, 5,003 and 0 shares issued and outstanding at December 31, 2017 and 2016, respectively	—	—
Common stock, $0.0075 par value, 277,333,332 shares authorized, 8,249,158 and 6,114,145 shares issued and outstanding at December 31, 2017 and 2016, respectively	62	46
Additional paid-in capital	1,184,783	1,146,357
Accumulated deficit	(1,179,059)	(1,193,613)

Total stockholders' equity (deficit)	5,786	(47,210)
Total liabilities and stockholders' equity (deficit)	$44,935	$28,677

The accompanying notes are an integral part of these consolidated financial statements.

XOMA Corporation

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

(in thousands, except per share amounts)

	Year Ended December 31,		
	2017	2016	2015
Revenues:			
License fees	$52,311	$3,296	$49,064
Contract and other	379	2,268	6,383
Total revenues	52,690	5,564	55,447
Operating expenses:			
Research and development	7,875	44,234	70,852
General and administrative	24,337	18,322	20,620
Restructuring	3,447	4,566	3,699
Total operating expenses	35,659	67,122	95,171
Income (loss) from operations	17,031	(61,558)	(39,724)
Other income (expense):			
Interest expense	(1,238)	(3,946)	(3,765)
Loss on extinguishment of debt	(650)	—	(429)
Other income, net	1,115	1,510	5,500
Revaluation of contingent warrant liabilities	—	10,464	17,812
Income (loss) before income tax	16,258	(53,530)	(20,606)
Provision for income taxes	(1,662)	—	—
Net income (loss) and comprehensive income (loss)	$14,596	$(53,530)	$(20,606)
Net income (loss) and comprehensive income (loss) available to common stockholders, basic	$5,714	$(53,530)	$(20,606)
Net income (loss) and comprehensive income (loss) available to common stockholders, diluted	$5,810	$(53,530)	$(20,606)
Basic net income (loss) per share available to common stockholders	$0.75	$(8.89)	$(3.50)
Diluted net income (loss) per share available to common stockholders	$0.73	$(8.89)	$(3.50)
Weighted average shares used in computing basic net income (loss) per share available to common stockholders	7,619	6,021	5,890
Weighted average shares used in computing diluted net income (loss) per share available to common stockholders	7,980	6,021	5,890

The accompanying notes are an integral part of these consolidated financial statements.

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XOMA Corporation

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)

(in thousands)

	Convertible Preferred Stock Shares	Amount	Common Stock Shares	Amount	Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Equity (Deficit)
Balance, December 31, 2014	—	$ —	5,795	$ 44	$1,122,532	$(1,119,477)	$ 3,099
Exercise of stock options, contributions to 401(k) and ESPP	—	—	27	—	1,467	—	1,467
Vesting of restricted stock units	—	—	60	—	—	—	—
Stock-based compensation expense	—	—	—	—	9,727	—	9,727
Issuance of warrants	—	—	—	—	450	—	450
Exercise of warrants	—	—	70	1	3,553	—	3,554
Net loss and comprehensive loss	—	—	—	—	—	(20,606)	(20,606)
Balance, December 31, 2015	—	—	5,952	45	1,137,729	(1,140,083)	(2,309)
Contributions to 401(k) and incentive plans	—	—	36	—	844	—	844
Vesting of restricted stock units	—	—	113	1	(1)	—	—
Stock-based compensation expense	—	—	—	—	7,645	—	7,645
Issuance of warrants	—	—	—	—	97	—	97
Issuance of common stock	—	—	13	—	43	—	43
Net loss and comprehensive loss	—	—	—	—	—	(53,530)	(53,530)
Balance, December 31, 2016	—	—	6,114	46	1,146,357	(1,193,613)	(47,210)
Cumulative effect adjustment to accumulated deficit due to adoption of ASU 2016-09	—	—	—	—	42	(42)	—
Exercise of stock options	—	—	110	1	657	—	658
Issuance of common stock related to 401(k) contribution and ESPP	—	—	102	1	531	—	532
Vesting of restricted stock units	—	—	74	1	(1)	—	—
Stock-based compensation expense	—	—	—	—	7,301	—	7,301
Issuance of convertible preferred stock	5	—	—	—	20,019	—	20,019
Issuance of common stock	—	—	1,849	13	9,877	—	9,890
Net income and comprehensive income	—	—	—	—	—	14,596	14,596
Balance, December 31, 2017	5	$ —	8,249	$ 62	$1,184,783	$(1,179,059)	$ 5,786

The accompanying notes are an integral part of these consolidated financial statements.

XOMA Corporation

CONSOLIDATED STATEMENTS OF CASH FLOWS

(in thousands)

	Year Ended December 31,		
	2017	2016	2015
Cash flows used in operating activities:			
Net income (loss)	$14,596	$(53,530)	$(20,606)
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:			
License fee recognized related to repayment of principal and accrued interest under the Servier Loan	(14,346)	—	—
Stock-based compensation expense	7,301	7,645	9,727
Common stock contribution to 401(k)	506	785	986
Depreciation and amortization	304	769	1,532
Amortization of debt issuance costs, debt discount and final payment on debt	444	1,451	1,413
Loss on sublease	800	—	—
Loss on extinguishment of debt	650	—	429
Unrealized gain on foreign currency exchange	—	(489)	(1,870)
Realized loss (gain) on foreign currency exchange	1,635	(4)	(69)
Net gain on sale, disposal and impairment of equipment	(1,068)	—	—
Revaluation of contingent warrant liabilities	—	(10,464)	(17,812)
Gain on sale of marketable securities	—	(126)	—
Impairment of non-marketable cost method investment	—	370	—
Gain on sale of business in connection with Agenus asset purchase agreement	—	—	(3,505)
Other	61	116	57
Changes in assets and liabilities:			
Trade and other receivables, net	169	3,532	(761)
Prepaid expenses and other current assets	106	1,034	(28)
Accounts payable and accrued liabilities	(6,554)	(3,938)	(2,080)
Accrued restructuring costs	(3,464)	3,135	459
Accrued interest on interest bearing obligations	272	331	380
Deferred revenue	(363)	15,694	356
Income taxes payable	1,637	—	—
Other liabilities	—	—	500
Net cash provided by (used in) operating activities	2,686	(33,689)	(30,892)
Cash flows from investing activities:			
Purchases of property and equipment	(8)	(59)	(430)
Proceeds from sale of property and equipment	1,614	49	18
Proceeds from sale of marketable securities	—	622	—
Proceeds from sale of business in connection with Agenus asset purchase agreement	—	—	4,862
Net cash provided by investing activities	1,606	612	4,450
Cash flows from financing activities:			

Proceeds from issuance of convertible preferred stock, net of issuance costs	20,019	—	—
Proceeds from issuance of common stock, net of issuance costs	10,160	57	171
Proceeds from exercise of options	1,550	—	363
Proceeds from exercise of warrants	—	—	1
Proceeds from issuance of long term debt	—	—	20,000
Debt issuance costs and loan fees	—	—	(512)
Principal payments – debt	(16,380)	(6,890)	(6,128)
Payment of final fee related to loan extinguishment	(1,150)	—	—
Principal payments – capital lease	(51)	(109)	(41)
Taxes paid related to net share settlement of equity awards	(890)	—	(53)
Net cash provided by (used in) financing activities	13,258	(6,942)	13,801
Effect of exchange rate changes on cash	179	(6)	(37)
Net increase (decrease) in cash and cash equivalents	17,729	(40,025)	(12,678)
Cash and cash equivalents at the beginning of the year	25,742	65,767	78,445
Cash and cash equivalents at the end of the year	$43,471	$25,742	$65,767

The accompanying notes are an integral part of these consolidated financial statements.

Supplemental Cash Flow Information:			
Cash paid for interest	$545	$2,142	$1,927
Non-cash investing and financing activities:			
Marketable securities received in conjunction with the disposal of business	$—	$—	$496
Equipment acquired through capital lease	$45	$—	$323
Reclassification of contingent warrant liability to equity upon exercise of warrants	$—	$—	$(3,552)
Issuance of warrants	$—	$—	$450
Interest added to principal balances on long-term debt	$487	$402	$327
Exchange of loan payable for license agreement	$14,346	$—	$—

The accompanying notes are an integral part of these consolidated financial statements.

XOMA Corporation

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Description of Business

XOMA Corporation (referred to as “XOMA” or the “Company”), a Delaware corporation, has a long history of discovering and developing innovative therapeutics derived from its unique platform of antibody technologies. Over the Company’s 37 year history, it built an extensive portfolio of fully-funded programs by advancing product candidates into the earlier stages of development and then licensing them to licensees who assumed the responsibilities of later stage development, approval and commercialization. Fully-funded programs are those for which the Company’s partners pay all of the development and commercialization costs. As licensees advance these programs, the Company is eligible for potential milestone and royalty payments.

In March 2017, the Company transformed its strategy to become a royalty aggregator with a focus on expanding its portfolio of fully-funded programs by out-licensing internally developed product candidates and acquiring potential milestone and royalty revenue streams on additional product candidates. The Company combined its royalty-aggregator model with a significantly reduced corporate cost structure to further build value for its shareholders. The Company expects that a significant portion of future revenue will be based on payments it may receive for milestones and royalties related to these programs.

2. Basis of Presentation and Significant Accounting Policies

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All intercompany accounts and transactions among consolidated entities were eliminated upon consolidation.

Liquidity and Financial Condition

With the exception of the year ended December 31, 2017, the Company has typically incurred significant operating losses and negative cash flows from operations since its inception. As of December 31, 2017, the Company had cash and cash equivalents of $43.5 million. The Company has evaluated and concluded there are no conditions or events, considered in the aggregate, that raise substantial doubt about its ability to continue as a going concern for a period of one year following the date that these financial statements are issued.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles in the United States requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosures. On an ongoing basis, management evaluates its estimates including, but not limited to, those related to contingent warrant liabilities, revenue recognition, debt amendments, long-lived assets, restructuring liabilities, legal contingencies, and stock-based compensation. The Company bases its estimates on historical experience and on various other market-specific and other relevant assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ significantly from these estimates, such as the Company's billing under government contracts and the Company's accrual for clinical trial expenses. Under the Company's contracts with the National Institute of Allergy and Infectious Diseases ("NIAID"), a part of the National Institutes of Health ("NIH"), the Company bills using NIH provisional rates and thus is subject to future audits at the discretion of NIAID's contracting office. These audits can result in an adjustment to revenue previously reported which potentially could be significant. In March 2016, the Company effected the novation of its remaining active contract with NIAID to Ology Bioservices, Inc. ("Ology Bioservices") (formerly known as Nanotherapeutics, Inc.) (see Note 6). The billings made prior to the effective date of the novation of such contract are still subject to future audits, which may result in significant adjustments to reported revenues.

Revenue Recognition

Revenue is recognized when the four basic criteria of revenue recognition are met: (1) persuasive evidence of an arrangement exists; (2) delivery has occurred or services have been rendered; (3) the fee is fixed or determinable; and (4) collectability is reasonably assured. The determination of criteria (2) is based on management's judgments regarding whether a continuing performance obligation exists. The determination of criteria (3) and (4) are based on management's judgments regarding the nature of the fee charged for products or services delivered and the collectability of those fees.

The Company recognizes revenue from its license arrangements, and royalties. In prior years, the Company had also recognized revenues for reimbursements of research and development costs under collaboration agreements as the services were performed. Revenue arrangements with multiple elements are divided into separate units of accounting if certain criteria are met, including whether the delivered element has stand-alone value to the partner and whether there is objective and reliable evidence of the fair value of the undelivered items. Each deliverable in the arrangement is evaluated to determine whether it meets the criteria to be accounted for as a separate unit of accounting or whether it should be combined with other deliverables. In order to account for the multiple-element arrangements, the Company identifies the deliverables included within the arrangement and evaluates which deliverables represent separate units of accounting. Analyzing the arrangement to identify deliverables requires the use of judgment, and each deliverable may be an obligation to deliver services, a right or license to use an asset, or another performance obligation. The consideration received is allocated among the separate units of accounting based on their respective fair values and the applicable revenue recognition criteria are applied to each of the separate units. Advance payments received in excess of amounts earned are classified as deferred revenue until earned.

License Fees

Revenue from non-refundable license, technology access or other payments under license agreements are recognized over the estimated period when the transfer of related materials, process and know-how should be delivered to the licensee. After the delivery of the materials, process and know-how to the licensee, the Company has no continuing obligation to perform under the license agreements.

License agreements with certain third parties also provide for contingent payments to be paid to the Company based solely upon the performance of the partner. For such contingent payments revenue is recognized upon completion of the milestone event, once confirmation is received from the third party, provided that collection is reasonably assured and the other revenue recognition criteria have been satisfied.

Contract and Other Revenues

Contract revenue for research and development involved the Company providing research and development services to collaborative parties or others. Cost reimbursement revenue under collaborative agreements was recorded as contract and other revenues and was recognized as the related research and development costs were incurred, as provided for under the terms of these agreements. Revenue for certain contracts was accounted for by a proportional performance, or output-based, method where performance was based on estimated progress toward elements defined in the contract. The amount of contract revenue and related costs recognized in each accounting period were based on management’s estimates of the proportional performance during the period. Adjustments to estimates based on actual performance were recognized on a prospective basis and did not result in reversal of revenue should the estimate to complete had been extended.

Up-front fees associated with contract revenue were recorded as license fees and were recognized in the same manner as the final deliverable, which was generally ratably over the period of the continuing performance obligation. Given the uncertainties of research and development collaborations, significant judgment was required to determine the duration of the arrangement.

Royalty revenue and royalty receivables are recorded in the periods these royalty amounts are earned, if estimable and collectability is reasonably assured. The royalty revenue and receivables recorded in these instances are based upon communication with the Company’s licensees, historical information and forecasted sales trends.

Sale of Future Revenue Streams

The Company has sold its rights to receive certain milestones and royalties on product sales. In the circumstance where the Company has sold its rights to future milestones and royalties under a license agreement and also maintains limited continuing involvement in the arrangement (but not significant continuing involvement in the generation of the cash flows that are due to the purchaser), the Company defers recognition of the proceeds it receives for the milestone or royalty stream and recognizes such deferred revenue as contract and other revenue over the life of the underlying license agreement. The Company recognizes this revenue under the "units-of-revenue" method. Under this method, amortization for a reporting period is calculated by computing a ratio of the proceeds received from the purchaser to the total payments expected to be made to the purchaser over the term of the agreement, and then applying that ratio to the period’s cash payment.

Estimating the total payments expected to be received by the purchaser over the term of such arrangements requires management to use subjective estimates and assumptions. Changes to the Company's estimate of the payments expected to be made to the purchaser over the term of such arrangements could have a material effect on the amount of revenues recognized in any particular period.

Research and Development Expenses

The Company expenses research and development costs as incurred. Research and development expenses consist of direct costs such as salaries and related personnel costs, material and supply costs, and research-related allocated overhead costs, such as facilities costs. In addition, research and development expenses have included costs related to clinical trials. Such amounts are expensed as incurred.

Stock-Based Compensation

The Company recognizes compensation expense for all stock-based payment awards made to the Company's employees, consultants and directors that are expected to vest based on estimated fair values. The valuation of stock option awards is determined at the date of grant using the Black-Scholes Option Pricing Model (the "Black-Scholes Model"). The Black-Scholes Model requires inputs such as the expected term of the option, expected volatility and risk-free interest rate. To establish an estimate of expected term, the Company considers the vesting period and contractual period of the award and its historical experience of stock option exercises, post-vesting cancellations and volatility. The estimate of expected volatility is based on the Company's historical volatility. The risk-free rate is based on the yield available on United States Treasury zero-coupon issues corresponding to the expected term of the award.

The Company records compensation expense for service-based awards over the vesting period of the award on a straight-line basis. For awards with performance-based conditions, the Company records the expense over the remaining service period when management determines that achievement of the milestone is probable. Management evaluates when the achievement of a performance-based condition is probable based on the expected satisfaction of the performance conditions as of the reporting date. The amount of stock-based compensation expense recognized during a period is based on the value of the portion of the awards that are ultimately expected to vest.

The valuation of restricted stock units ("RSUs") is determined at the date of grant using the Company's closing stock price.

In January 2017, the Company adopted Accounting Standards Update ("ASU") No. 2016-09, Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting, ("ASU 2016-09"). ASU 2016-09 is aimed at the simplification of several aspects of the accounting for employee share-based payment transactions, including accounting for forfeitures, income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. Pursuant to the adoption of ASU 2016-09, the Company has made an election to record forfeitures when they occur. Previously, stock-based compensation was based on the number of awards expected to vest after considering estimated forfeitures. The change in accounting principle with regards to forfeitures was adopted using a modified retrospective approach. The adoption of ASU 2016-09 did not have a material impact on the Company's consolidated financial statements.

Restructuring and Impairment Charges

Restructuring costs are primarily comprised of severance costs related to workforce reductions, contract termination costs and asset impairments. The Company recognizes restructuring charges when the liability has been incurred,

except for employee termination benefits that are incurred over time. Generally, employee termination benefits (i.e., severance costs) are accrued at the date management has committed to a plan of termination and employees have been notified of their termination dates and expected severance payments. Key assumptions in determining the restructuring costs include the terms and payments that may be negotiated to terminate certain contractual obligations and the timing of employees leaving the Company. Other costs, including contract termination costs, are recorded when the arrangement is terminated. Asset impairment charges have been, and will be, recognized when management has concluded that the assets have been impaired.

Cash and Cash Equivalents

The Company considers all highly liquid debt instruments with maturities of three months or less at the time the Company acquires them and that can be liquidated without prior notice or penalty to be cash equivalents.

Property and Equipment

Property and equipment is stated at cost less depreciation. Equipment depreciation is calculated using the straight-line method over the estimated useful lives of the assets (three years). Leasehold improvements were depreciated using the straight-line method over the shorter of the lease terms or the useful lives. Amortization expense for assets acquired through capital leases was included in depreciation expense in the consolidated statements of comprehensive income (loss). Upon the sale, retirement or disposal of assets, the cost and related accumulated depreciation and amortization are removed from the consolidated balance sheets, and the resulting gain or loss, if any, is reflected in other income (expense), net in the consolidated statements of comprehensive income (loss). Repairs and maintenance costs are charged to expense as incurred.

The carrying value of the property and equipment is reviewed for impairment whenever events or changes in circumstances indicate that the asset may not be recoverable. An impairment loss would be recognized when estimated future cash flows expected to result from the use of the asset and its eventual disposition is less than its carrying amount. During the years ended December 31, 2017 and 2016, the Company recognized impairment charges of $0.2 million and $0.2 million, respectively.

Warrants

The Company had issued warrants to purchase shares of its common stock in connection with financing activities. The Company accounted for some of these warrants as a liability at fair value and others as equity at fair value. The fair value of the outstanding warrants was estimated using the Black-Scholes Model. The Black-Scholes Model required inputs such as the expected term of the warrants, expected volatility and risk-free interest rate. These inputs were subjective and required significant analysis and judgment to develop. For the estimate of the expected term, the Company used the full remaining contractual term of the warrant. The Company determined the expected volatility assumption in the Black-Scholes Model based on historical stock price volatility observed on the Company’s underlying stock. The assumptions associated with contingent warrant liabilities were reviewed each reporting period and changes in the estimated fair value of these contingent warrant liabilities were recognized in revaluation of contingent warrant liabilities within the consolidated statements of comprehensive income (loss).

Income Taxes

The Company accounts for income taxes using the liability method under which deferred tax assets and liabilities are determined based on differences between financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. Valuation allowances are established when necessary to reduce deferred tax assets to the amount which is more likely than not to be realizable.

The recognition, derecognition and measurement of a tax position is based on management’s best judgment given the facts, circumstances and information available at each reporting date. The Company’s policy is to recognize interest and penalties related to the underpayment of income taxes as a component of income tax expense. To date, there have been no interest or penalties charged in relation to the unrecognized tax benefits.

Net Income (Loss) per Share Available to Common Stockholders

Basic net income (loss) per share available to common stockholders is based on the weighted average number of shares of common stock outstanding during the period. During periods of income, the Company allocates participating

securities a proportional share of net income, after deduction of a deemed dividend on preferred stock, determined by dividing total weighted average participating securities by the sum of the total weighted average number of common stock and participating securities (the “two-class method”). The Company’s convertible preferred stock participates in any dividends declared by the Company on its common stock and are therefore considered to be participating securities. For the year ended December 31, 2017, the convertible preferred stock had a deemed dividend which represented the accretion of a beneficial conversion feature. As such, the net income for the year ended December 31, 2017 was adjusted for the convertible preferred stock deemed dividend related to the beneficial conversion feature on these shares at issuance. During periods of loss, the Company allocates no loss to participating securities because they have no contractual obligation to share in the losses of the Company. Diluted net income (loss) per share available to common stockholders is based on the weighted average number of shares outstanding during the period, adjusted to include the assumed conversion of preferred stock, and the exercise of certain stock options, RSUs, and warrants for common stock. The calculation of diluted income (loss) per share available to common stockholders requires that, to the extent the average market price of the underlying shares for the reporting period exceeds the exercise price of any outstanding options, RSUs or warrants and the presumed exercise of such securities are dilutive to earnings (loss) per share available to common stockholders for the period, adjustments to net income (loss) used in the calculation are required to remove the change in fair value of the warrants for the period. Likewise, adjustments to the denominator are required to reflect the related dilutive shares. (See Note 11).

Comprehensive Income (Loss)

Comprehensive income (loss) is comprised of two components: net income (loss) and other comprehensive income (loss). Other comprehensive income (loss) refers to gains and losses that under U.S. GAAP are recorded as an element of stockholders' equity, but are excluded from net income (loss). The Company did not record any transactions within other comprehensive income (loss) in the periods presented and, therefore, the net income (loss) and comprehensive income (loss) were the same for all periods presented.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board ("FASB") issued guidance codified in Accounting Standards Codification ("ASC") 606, Revenue Recognition — Revenue from Contracts with Customers, which amends the guidance in ASC 605, Revenue Recognition. The standard's core principle is that a company will recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. In August 2015, the FASB issued an accounting update to defer the effective date by one year for public entities such that it is now applicable for annual and interim periods beginning after December 15, 2017. Early adoption is permitted for periods beginning after December 15, 2016. ASC 606 also permits two methods of adoption: retrospectively to each prior reporting period presented (full retrospective method), or retrospectively with the cumulative effect of initially applying the guidance recognized at the date of initial application (the modified retrospective method). The Company is required to adopt the standard on January 1, 2018. To date, the Company has primarily derived its revenues from various license and collaboration arrangements and sale of future royalties. The consideration the Company is eligible to receive under these agreements includes upfront payments, milestone payments and royalties. Each of the Company's agreements has unique terms that will need to be evaluated separately under ASC 606. The Company has completed its assessment of its active license and collaboration agreements and sale of future royalty arrangements, the impact of the new guidance on its consolidated financial statements, as well as the evaluation of the disclosure requirements under the new standard. The Company will adopt the new standard using the modified retrospective method. The Company has evaluated the accounting, transition and disclosure requirements of the new standard and does not expect it to have a material impact on the Company's consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842), ("ASU 2016-02"). Under ASU 2016-02, a lessee will be required to recognize assets and liabilities for leases with lease terms of more than 12 months. Recognition, measurement, and presentation of expenses and cash flows arising from a lease by a lessee primarily will depend on its classification as a finance or operating lease. ASU 2016-02 will require both types of leases to be recognized on the balance sheet. The ASU also will require disclosures to help investors and other financial statement users better understand the amount, timing, and uncertainty of cash flows arising from leases. These disclosures include qualitative and quantitative requirements, providing additional information about the amounts recorded in the financial statements. ASU 2016-02 is effective for the Company for all interim and annual reporting periods beginning after December 15, 2018. Early adoption is permitted. The Company is in the process of assessing the impact of ASU No. 2016-02 on its consolidated financial statements.

In August 2016, the FASB issued ASU No. 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments (a consensus of the FASB Emerging Issues Task Force), ("ASU 2016-15"). ASU 2016-15 addresses eight specific cash flow issues including debt prepayment or debt extinguishment costs, settlement of zero-coupon debt instruments or other debt instruments with coupon interest rates that are insignificant in relation to the effective interest rate of the borrowing and contingent consideration payments made after a business combination. ASU 2016-15 is effective for all interim and annual reporting periods beginning after December 15,

2017. Early adoption is permitted. The Company does not expect the adoption of ASU 2016-15 to have a material impact on its consolidated statements of cash flows.

In May 2017, the FASB issued ASU No. 2017-09, Compensation - Stock Compensation (Topic 718): Scope of Modification Accounting, ("ASU 2017-04"). ASU 2017-09 streamlines the application of modification accounting by stating that when making a change to the terms or conditions of a share-based payment award, a company should apply modification accounting to the award, unless each of the following conditions is met: 1. The fair value (or calculated value or intrinsic value, if such an alternative measurement method is used) of the modified award is the same as the fair value (or calculated value or intrinsic value, if such an alternative measurement method is used) of the original award immediately before the original award is modified. If the modification does not affect any of the inputs to the valuation technique that the entity uses to value the award, the entity is not required to estimate the value immediately before and after the modification, and 2. The vesting conditions of the modified award are the same as the vesting conditions of the original award immediately before the original award is modified, and 3. The classification of the modified award as an equity instrument or a liability instrument is the same as the classification of the original award immediately before the original award is modified. ASU 2017-09 is effective for all interim and annual reporting periods beginning after December 15, 2017. Early adoption is permitted. The Company does not expect the adoption of ASU 2017-09 to have a material impact on its consolidated financial statements.

3. Consolidated Financial Statement Detail

Cash and Cash Equivalents

At December 31, 2017, cash and cash equivalents consisted of demand deposits of $34.9 million and money market funds of $8.6 million with maturities of less than 90 days at the date of purchase. At December 31, 2016, cash and cash equivalents consisted of demand deposits of $21.5 million and money market funds of $4.2 million with maturities of less than 90 days at the date of purchase.

Property and Equipment, net

Property and equipment, net consisted of the following (in thousands):

	December 31,	
	2017	2016
Equipment and furniture	$124	$14,023
Leasehold improvements	—	554
	124	14,577
Less: Accumulated depreciation and amortization	(41)	(13,541)
Property and equipment, net	$83	$1,036

As of December 31, 2016, property and equipment held under capital leases, included under equipment and furniture above, amounted to $0.3 million, with accumulated amortization of $0.1 million. The Company terminated these capital lease equipment agreements in March 2017. Depreciation and amortization expense was $0.3 million, $0.8 million, and $1.5 million for the years ended December 31, 2017, 2016, and 2015, respectively.

During the year ended December 31, 2017, the Company completed the sale of equipment and disposal of other certain equipment located in one of its leased facilities for total proceeds of $1.6 million. The total carrying value of the equipment sold and disposed of was $0.4 million. Accordingly, the Company recorded a gain of $1.2 million on the sale and disposal of equipment on the other income (expense), net line of the Company’s consolidated statement of comprehensive income (loss).

In connection with the restructuring activities implemented in December 2016, the Company determined that the leasehold improvements located in one of its leased facilities are no longer expected to be used by the Company. The Company determined that an impairment charge equal to the net book value of the leasehold improvements of $0.2 million should be recorded as the future economic value, if any, that may be realized from the leasehold improvements would be negligible in a sublease transaction. The impairment charge is reflected within the restructuring charge in the consolidated statement of comprehensive income (loss) for the year ended December 31, 2016. During the year ended December 31, 2017, the Company recognized an impairment charge of $0.2 million related to one of its leased facilities. There were no significant impairment charges recognized during the year ended

December 31, 2015.

Accrued and Other Liabilities

Accrued and other liabilities consisted of the following (in thousands):

	December 31,	
	2017	2016
Accrued payroll and other benefits	$141	$1,582
Accrued clinical trial costs	—	458
Accrued incentive compensation	229	—
Accrued legal and accounting fees	431	385
Deferred rent	765	707
Liability related to sublease	800	—
Other	179	1,083
Total	$2,545	$4,215

4. Collaborative, Licensing and Other Arrangements

Collaborative and Other Agreements

Novartis – Gevokizumab and IL-1 Beta

On August 24, 2017, the Company and Novartis Pharma AG ("Novartis") entered into a license agreement (the "XOMA-052 License Agreement") under which the Company granted to Novartis an exclusive, worldwide, royalty-bearing license to gevokizumab, a novel anti-Interleukin-1 ("IL-1") beta allosteric monoclonal antibody (the "Antibody") and related know-how and patents (altogether, the "XOMA IP"). Under the terms of the XOMA-052 License Agreement, Novartis will be solely responsible for the development and commercialization of the Antibody and products containing the Antibody. The Company completed the transfer of the required proprietary know-how, process, materials and inventory relating to the XOMA IP to Novartis as of December 31, 2017.

On August 24, 2017, pursuant to a separate agreement (the "IL-1 Target License Agreement"), the Company granted to Novartis non-exclusive licenses to its intellectual property covering the use of IL-1 beta targeting antibodies in the treatment and prevention of cardiovascular disease and other diseases and conditions, and an option to obtain an exclusive license (the "Exclusivity Option") to such intellectual property for the treatment and prevention of cardiovascular disease. The Company also granted Novartis the right of first negotiation with respect to certain transactions relating to the licensed intellectual property.

Under the XOMA-052 License Agreement, the Company received total consideration of $30.0 million for the license and rights granted to Novartis. Of the total consideration, $15.7 million was paid in cash and $14.3 million (equal to €12.0 million) was paid by Novartis Institutes for BioMedical Research, Inc. ("NIBR"), on behalf of the Company, to settle the Company's outstanding debt with Les Laboratories Servier (the "Servier Loan"). In addition, NIBR extended the maturity date on the Company's debt to Novartis (see Note 8). The Company also received $5.0 million cash related to the sale of 539,131 shares of the Company's common stock, at a purchase price of $9.2742 per share. The fair market value of the common stock issued to Novartis was $4.8 million, based on the closing stock price of $8.93 per share on August 24, 2017, resulting in a $0.2 million premium paid to the Company (see Note 12). Based on the achievement of pre-specified criteria, the Company is eligible to receive up to $438.0 million in development, regulatory and commercial milestones. The Company is also eligible to receive royalties on sales of licensed products, which are tiered based on sales levels and range from the high single digits to mid-teens. Under the IL-1 Target License Agreement, the Company received an upfront cash payment of $10.0 million and is eligible to receive low single-digit royalties on canakinumab sales in cardiovascular indications. Should Novartis exercise the Exclusivity Option, the royalties on canakinumab sales will increase to the mid-single digits.

The XOMA-052 License Agreement and IL-1 Target License Agreement were accounted for as one arrangement because they were entered into at the same time in contemplation of each other. The Company concluded that there are multiple deliverables under the combined arrangement which consisted of (i) the licenses to IL-1 beta targeting antibodies, (ii) the license to gevokizumab antibody and (iii) the transfer of know-how, process, materials and inventory related the gevokizumab antibody. The Company concluded that the license to the gevokizumab antibody and the related transfer of know-how process, materials and inventory each do not have stand-alone value. Accordingly, the Company combined these two deliverables into a single unit of accounting. The Company determined that the Exclusivity Option is a substantive option and not priced at a significant and incremental discount. Therefore, the Company concluded that the Exclusivity Option is not a deliverable. The agreements were evaluated pursuant to the provisions of the multiple-element arrangement guidance in determining how to recognize the revenue associated with each unit of account. The total arrangement consideration received from Novartis is $40.2 million and consists of the $25.7 million upfront cash payments, the $14.3 million Servier Loan payoff and the $0.2 million premium on the sale of the common stock. The total arrangement consideration was allocated to each unit of account

based on their relative selling prices. Revenue was recognized as the revenue recognition criteria were met for each identified unit of account. During the year ended December 31, 2017, the Company recognized revenue of $31.9 million related to the licenses to IL-1 beta targeting antibodies and the consideration allocated to the gevokizumab antibody of $8.3 million upon completing the transfer of certain proprietary know-how, process, materials and inventory relating to the XOMA IP.

The Company determined that future contingent payments that may be received related to development, regulatory and sales milestones under the XOMA-052 License Agreement are based on the performance of Novartis and do not meet the definition of substantive milestones under the accounting guidance. Accordingly, revenue for the achievement of these milestones will be recognized in the period when the milestone is achieved. As of December 31, 2017, the Company has not recognized any milestone payments under the XOMA-052 License Agreement. The Company expects to recognize royalty revenue in the period of sale of the related products, based on the underlying contract terms. No such amounts were recognized during the year ended December 31, 2017.

Novartis – Anti-TGF Antibody

On September 30, 2015, the Company and Novartis International Pharmaceutical Ltd. ("Novartis International") entered into a license agreement (the "License Agreement") under which the Company granted Novartis International an exclusive, world-wide, royalty-bearing license to the Company's anti-transforming growth factor beta (TGF) antibody program (the "anti-TGF Program"). Under the terms of the License Agreement, Novartis International has worldwide rights to the anti-TGF Program and is responsible for the development and commercialization of antibodies and products containing antibodies arising from the anti-TGF Program.

Under the License Agreement, the Company received a $37.0 million upfront fee. The Company is also eligible to receive up to a total of $480.0 million in development, regulatory and commercial milestones. Any such payments will be treated as contingent consideration and recognized as revenue when they are achieved, as the Company has no performance obligations under the License Agreement beyond the initial 90-day period. The Company is also eligible to receive royalties on sales of licensed products, which are tiered based on sales levels and range from a mid-single digit percentage rate to up to a low double-digit percentage rate. Novartis International's obligation to pay royalties with respect to a particular product and country will continue for the longer of the date of expiration of the last valid patent claim covering the product in that country, or ten years from the date of the first commercial sale of the product in that country.

The License Agreement contains customary termination rights relating to material breach by either party. Novartis International also has a unilateral right to terminate the License Agreement on an antibody-by-antibody and country-by-country basis or in its entirety on one hundred eighty days' notice.

The Company identified the following performance deliverables under the License Agreement: (i) the license, (ii) regulatory services to be delivered within 90 days from the Effective Date and (iii) transfer of materials, process and know-how, also to be delivered within 90 days from the Effective Date. The Company considered the provisions of the multiple-element arrangement guidance in determining how to recognize the revenue associated with these deliverables. The Company determined that none of the deliverables have standalone value and therefore has accounted for them as a single unit of account. The Company recognized the entire upfront payment as revenue in the consolidated statement of comprehensive income (loss) in 2015 as it had completed its performance obligations as of December 31, 2015. During the year ended December 31, 2017, Novartis International achieved a clinical development milestone pursuant to the License Agreement and, as a result, the Company earned a $10.0 million milestone payment which was recognized as license and collaborative fees in the consolidated statement of comprehensive income (loss). As of December 31, 2017, the Company is eligible to receive up to a total of $470.0 million in development, regulatory and commercial milestones.

In connection with the execution of the License Agreement, XOMA and Novartis Vaccines Diagnostics, Inc. ("NVDI") executed an amendment to their Amended and Restated Research, Development and Commercialization Agreement dated July 1, 2008, as amended, relating to anti-CD40 antibodies (the "Collaboration Agreement Amendment"). Pursuant to the Collaboration Agreement Amendment, the parties agreed to reduce the royalty rates and period that XOMA is eligible to receive on sales of NVDI's clinical stage anti-CD40 antibodies. These royalties are tiered based on sales levels and now range from a mid-single digit percentage rate to up to a low double-digit percentage rate and royalties are payable until the later of any licensed patent covering each product or ten years from the launch of each product. All other terms of the Amended and Restated Research, Development and Commercialization Agreement remained unchanged (see Note 8).

Rezolute

On December 6, 2017, the Company entered into a license agreement with Rezolute, Inc. (formerly AntriaBio, Inc.) ("Rezolute") pursuant to which the Company granted an exclusive global license to Rezolute to develop and commercialize X358 (now "RZ358") for all indications. The Company and Rezolute also entered into a common stock purchase agreement.

Under the terms of the license agreement, Rezolute is responsible for all development, regulatory, manufacturing and commercialization activities associated with RZ358 and is required to make certain clinical, regulatory and commercial milestone payments to the Company of up to $232.0 million in the aggregate based on the achievement of pre-specified criteria. Under the license agreement, the Company is also eligible to receive royalties ranging from the high single digits to the mid-teens based upon annual net sales of any commercial product incorporating RZ358. Rezolute is obligated to take customary steps to advance RZ358, including using diligent efforts to commence the next clinical study for RZ358 by a certain deadline and to meet certain spending requirements on an annual basis for the program until a marketing approval application for RZ358 is accepted by the FDA. Rezolute's obligation to pay royalties with respect to a particular RZ358 product and country will continue for the longer of the date of expiration of the last valid patent claim covering the product in that country, or twelve years from the date of the first commercial sale of the product in that country. Rezolute has an option through June 1, 2019 to obtain an exclusive license for their choice of one of the Company's preclinical monoclonal antibody fragments, including X129, in exchange for a $1.0 million upfront option fee and additional clinical, regulatory and commercial milestone payments to the Company of up to $237.0 million in the aggregate based on the achievement of pre-specified criteria as well as royalties ranging from the high single digits to the mid-teens based on annual net sales.

Pursuant to the license agreement and common stock purchase agreement, the Company is eligible to receive $6.0 million in cash and $12.0 million worth of Rezolute's common stock contingent on the completion of its financing activities. Further, in the event that Rezolute does not complete a financing that raises at least $20.0 million in aggregate gross proceeds ("Qualified Financing") by March 31, 2019, the Company will receive an additional number of shares of Rezolute's common stock equal to $7.0 million divided by the weighted average of the closing bid and ask prices or the average closing prices of Rezolute's common stock on the ten-day trading period prior to March 31, 2019. Finally, in the event that Rezolute is unable to complete a Qualified Financing by March 31, 2020, the Company is eligible to receive $15.0 million in cash in order to maintain the license. Under the common stock purchase agreement, Rezolute granted the Company the right and option to sell the greater of (i) 5,000,000 shares of common stock or (ii) one third of the aggregate shares held by the Company upon failure by Rezolute to list its shares of its common stock on the Nasdaq Stock Market or a similar national exchange on or prior to December 31, 2018.

In addition, under the terms of the license agreement, the Company is eligible to receive a low single digit royalty on sales of Rezolute's other products from its current programs. Rezolute's obligation to pay royalties with respect to a particular Rezolute product and country will continue for the longer of twelve years from the date of the first commercial sale of the product in that country or for so long as Rezolute or its licensee is selling such product in such country, provided that such royalty will terminate upon the termination of the licensee's obligation to make payments to Rezolute based on sales of such product in such country.

The license agreement contains customary termination rights relating to material breach by either party. Rezolute also has a unilateral right to terminate the license agreement in its entirety on ninety days' notice at any time. The Company has the right to terminate the license agreement if Rezolute challenges the licensed patents.

The Company concluded that there are multiple deliverables under the license agreement which consist of (i) the license to RZ358, (ii) the transfer of RZ358 materials and product data/filing, and (iii) the transfer of process and know-how related to RZ358. The Company concluded that the license to RZ358 and the related transfer of materials, product data/filing, process and know-how each do not have stand-alone value. Accordingly, the Company combined these three deliverables into a single unit of accounting. The Company determined that the option to obtain an exclusive license for one of the Company's preclinical monoclonal antibody fragments, including X129, is a substantive option and not priced at a significant and incremental discount. Therefore, the Company concluded that the option is not a deliverable. Under the agreements, no consideration was exchanged upon execution of the

arrangement. Rezolute agreed to issue shares of its common stock and pay cash to the Company upon the occurrence of Rezolute's financing activities and related timing of those activities. At December 31, 2017, Rezolute has not completed any of its financing activities and therefore, the Company has not recognized any revenue under the arrangement.

Servier

In December 2010, the Company entered into a license and collaboration agreement ("Collaboration Agreement") with Servier, to jointly develop and commercialize gevokizumab in multiple indications, which provided for a non-refundable upfront payment of $15.0 million that was received by the Company in January 2011. In addition, the Company received a loan of €15.0 million, which was fully funded in January 2011, with the proceeds converting to $19.5 million at the date of funding (see Note 8). Under the terms of the Collaboration Agreement, Servier had worldwide rights to cardiovascular disease and diabetes indications and had rights outside the United States and Japan to all other indications, including non-infectious intermediate, posterior or pan-uveitis, Behçet's disease uveitis, pyoderma gangrenosum, and other inflammatory and oncology indications. XOMA retained development and commercialization rights in the United States and Japan for all indications other than cardiovascular disease and diabetes.

On September 28, 2015, Servier notified XOMA of its intention to terminate the Collaboration Agreement, as amended, and return the gevokizumab rights to XOMA. The termination, which became effective on March 25, 2016, did not result in a change to the maturity date of the Company's loan with Servier (see Note 8). As the Company is no longer required to provide services to Servier under the Collaboration Agreement, the Company recognized all remaining deferred revenue of $0.6 million from the date of notification to March 25, 2016. The Company and Servier completed the final reconciliation of cost sharing under the collaboration and all related adjustments are reflected in the consolidated statement of comprehensive income (loss) for the year ended December 31, 2016. For the years ended December 31, 2016 and 2015, the Company recorded revenue of $0.6 million and $1.2 million, respectively, from this Collaboration Agreement.

NIAID

In September 2008, the Company announced that it had been awarded a $64.8 million multiple-year contract funded with federal funds from NIAID (Contract No. HHSN272200800028C), to continue the development of anti-botulinum antibody product candidates. The contract work was being performed on a cost plus fixed fee basis over a three-year period. The Company recognizes revenue under the arrangement as the services are performed on a proportional performance basis. Consistent with the Company's other contracts with the U.S. government, invoices are provisional until finalized. The Company operated under provisional rates from 2010 through 2014, subject to adjustment based on actual rates upon agreement with the government. In 2014, upon completion of a NIAID review of hours and external expenses, XOMA agreed to exclude certain hours and external expenses resulting in a $1.8 million adjustment to decrease previously invoiced balances. The adjustment was offset by a $1.9 million deferred revenue balance that was recorded in 2012 as a result of a rate adjustment for the period 2007 to 2009. This adjustment reduced accounts receivable and deferred revenue by $1.8 million to reflect the final settlement of the 2008 to 2013 hours and external review. NIAID has deferred payment of the remaining $0.4 million in accounts receivable pending the final agreement on the ongoing 2010 to 2013 final rate submission. The remaining $0.1 million in deferred revenue in connection with the 2011 NIH rate audit would be recognized upon completion of negotiations with and approval by the NIH. The Company recognized revenue of $0.1 million and $0.2 million under this contract, for the years ended December 31, 2017 and 2015. There was no revenue recognized during the year ended December 31, 2016. As of December 31, 2017, the Company wrote off the $0.4 million receivable from NIAID as the likelihood of collection is remote.

In October 2011, the Company announced that NIAID had awarded the Company a new contract under Contract No. HHSN272201100031C ("NIAID 4") for up to $28.0 million over five years to develop broad-spectrum antitoxins for the treatment of human botulism poisoning. The contract work was being performed on a cost plus fixed fee basis over the life of the contract and the Company recognized revenue under the arrangement as the services were performed on a proportional performance basis. The Company recognized revenue of $1.1 million and $4.9 million under this contract, for the years ended December 31, 2016 and 2015, respectively. There was no revenue recognized during the year ended December 31, 2017. In March 2016, the Company effected a novation of the NIAID 4 to Ology Bioservices. The novation was effected upon obtaining government approval to transfer the contract to Ology Bioservices pursuant to the asset purchase agreement executed in November 2015 (see Note 6).

Pfizer

In August 2007, the Company entered into a license agreement (the "2007 Agreement") with Pfizer Inc. ("Pfizer") for non-exclusive, worldwide rights for XOMA's patented bacterial cell expression technology for research, development

and manufacturing of antibody products. From 2011 through 2015, the Company received milestone payments aggregating $4.2 million.

On December 3, 2015, the Company and Pfizer entered into a settlement and amended license agreement pursuant to which XOMA granted Pfizer a fully-paid, royalty-free, worldwide, irrevocable, non-exclusive license right to XOMA's patented bacterial cell expression technology for phage display and other research, development and manufacturing of antibody products. Under the amended license agreement, the Company received a cash payment of $3.8 million in full satisfaction of all obligations to XOMA under the 2007 Agreement, including but not limited to potential milestone, royalty and other fees under the 2007 Agreement. The Company recognized the entire payment from Pfizer as revenue upon delivery of the license in 2015.

In August 2005, the Company entered into a license agreement with Wyeth (subsequently acquired by Pfizer) for non-exclusive, worldwide rights for certain of XOMA's patented bacterial cell expression technology for vaccine manufacturing. Under the terms of this agreement, the Company received a milestone payment in November 2012 relating to TRUMENBA®, a meningococcal group B vaccine marketed by Pfizer. The Company's right to royalties expires on a country-by-country basis upon the expiration of the last-to-expire licensed patent. The Company recognized zero and $0.4 million of royalties earned from the sales of TRUMENBA during the years ended December 31, 2017 and 2016. The royalties on sales of TRUMENBA for the years ended December 31, 2015 were not material. As discussed below under Sale of Future Revenue Streams, the Company sold its right to receive all future milestones and royalties on future sales of products to HCRP in connection with the Royalty Interest Acquisition Agreement entered into in December 2016.

Novo Nordisk

On December 1, 2015, the Company and Novo Nordisk A/S ("Novo Nordisk") entered into a license agreement under which XOMA granted to Novo Nordisk an exclusive, world-wide, royalty-bearing license to XOMA's XMetA program of allosteric monoclonal antibodies that positively modulate the insulin receptor (the "XMetA Program"), subject to XOMA's retained commercialization rights for rare disease indications. Novo Nordisk had an option to add these retained rights to its license upon payment of an option fee.

Novo Nordisk obtained worldwide rights to the XMetA Program and was solely responsible at its expense for the development and commercialization of antibodies and products containing antibodies arising from the XMetA Program, subject to the Company's retained rights described above. The Company had transferred certain proprietary know-how and materials relating to the XMetA Program to Novo Nordisk. Under the agreement, the Company received a $5.0 million, non-creditable, non-refundable, upfront payment. Based on the achievement of pre-specified criteria, the Company was eligible to receive up to $290.0 million in development, regulatory and commercial milestones. The Company was also eligible to receive royalties on sales of licensed products, which would be tiered based on sales levels and range from a mid-single digit percentage rate to up to a high single digit percentage rate. Novo Nordisk's obligation to pay development and commercialization milestones would continue for so long as Novo Nordisk was developing or selling products under the agreement, subject to the maximum milestone payment amounts set forth above. Novo Nordisk's obligation to pay royalties with respect to a particular product and country would continue for the longer of the date of expiration of the last valid patent claim covering the product in that country, or ten years from the date of the first commercial sale of the product in that country.

The Company identified the following performance deliverables under the agreement: (i) the license, and (ii) the transfer of technology and know-how to be delivered within 60 days from December 1, 2015. The Company delivered the majority of the technology and know-how to Novo Nordisk as of December 31, 2015 and determined that any remaining items are perfunctory to the arrangement. Accordingly, the Company recognized the entire $5.0 million upfront fee as revenue in 2015.

On April 20, 2017, the Company received notice from Novo Nordisk regarding the termination of the license agreement due to strategic and business reasons. The termination of the license agreement became effective on July 20, 2017.

Sale of Future Revenue Streams

On December 21, 2016, the Company entered into two Royalty Interest Acquisition Agreements (together, the "Acquisition Agreements") with HCRP. Under the first Acquisition Agreement, the Company sold its right to receive milestone payments and royalties on future sales of products subject to a License Agreement, dated August 18, 2005, between XOMA and Wyeth Pharmaceuticals (now Pfizer, Inc.) for an upfront cash payment of $6.5 million, plus

potential additional payments totaling $4.0 million in the event three specified net sales milestones are met in 2017, 2018 and 2019. Based on estimated sales for 2017, the 2017 sales milestone was not achieved. The Company remains eligible to receive up to $3.0 million if specified net sales milestones are achieved in 2018 and 2019. Under the second Acquisition Agreement, the Company sold all rights to royalties under an Amended and Restated License Agreement dated October 27, 2006 between XOMA and Dyax Corp. for a cash payment of $11.5 million.

The Company classified the proceeds received from HCRP as deferred revenue, to be recognized as contract and other revenue over the life of the license agreements because of the Company's limited continuing involvement in the Acquisition Agreements. Such limited continuing involvement is related to the Company’s undertaking to cooperate with HCRP in the event of a litigation or dispute related to the license agreements. Because the transaction was structured as a non-cancellable sale, the Company does not have significant continuing involvement in the generation of the cash flows due to HCRP and there are no guaranteed rates of return to HCRP, the Company recorded the total proceeds of $18.0 million as deferred revenue. The deferred revenue is being recognized as contract and other revenue over the life of the underlying license agreements under the "units-of-revenue" method. Under this method, amortization for a reporting period is calculated by computing a ratio of the proceeds received from HCRP to the payments expected to be made to HCRP over the term of the Acquisition Agreements, and then applying that ratio to the period’s cash payment. The Company recognized $0.3 million as contract and other revenue under these arrangements during the year ended December 31, 2017. As of December 31, 2017, the current and non-current portion of the remaining deferred revenue was $0.6 million and $17.1 million, respectively. As of December 31, 2016, the Company classified the $18.0 million as non-current deferred revenue. As of December 31, 2017, the net sales milestone related to 2017 was not met and therefore, the Company did not recognize any revenue for milestones under the first Acquisition Agreement.

5. Fair Value Measurements

The Company records its financial assets and liabilities at fair value. The carrying amounts of certain of the Company’s financial instruments, including cash equivalents, trade receivable and accounts payable, approximate their fair value due to their short maturities. Fair value is defined as the exchange price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The accounting guidance for fair value establishes a framework for measuring fair value and a fair value hierarchy that prioritizes the inputs used in valuation techniques. The accounting standard describes a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable, that may be used to measure fair value which are the following:

Level 1 – Observable inputs, such as quoted prices in active markets for identical assets or liabilities.

Level 2 – Observable inputs, either directly or indirectly, other than quoted prices in active markets for similar assets or liabilities, that are not active or other inputs that are not observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities; therefore, requiring an entity to develop its own valuation techniques and assumptions.

The following tables set forth the Company’s fair value hierarchy for its financial assets and liabilities measured at fair value on a recurring basis as follows (in thousands):

	Fair Value Measurements at December 31, 2017 Using		
		Significant Other	Significant

	Quoted Prices in Active Markets for Identical Assets (Level 1)	Observable Inputs (Level 2)	Unobservable Inputs (Level 3)	Total
Assets:				
Money market funds [1]	$34,907	$ —	$ —	$34,907

	Fair Value Measurements at December 31, 2016 Using Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Assets:				
Money market funds [1]	$4,161	$ —	$ —	$4,161

(1) Included in cash and cash equivalents

During the years ended December 31, 2017 and 2016, there were no transfers between Level 1, Level 2, or Level 3 and the valuation techniques used did not change compared to the Company’s established practice.

The estimated fair value of the contingent warrant liabilities was determined using the Black-Scholes Model, which required inputs such as the expected term of the warrants, volatility and risk-free interest rate. These inputs were subjective and generally required significant analysis and judgment to develop. The Company's common stock price represented a significant input that affected the valuation of the warrants. The change in the fair value was recorded as a gain or loss in the revaluation of contingent warrant liabilities line of the consolidated statements of comprehensive income (loss). As of December 31, 2017, all the warrants accounted for as liability expired.

The estimated fair value of the contingent warrant liabilities was estimated using the following range of assumptions at December 31, 2016:

	December 31, 2016
Expected volatility	64%
Risk-free interest rate	0.51%
Expected term (in years)	0.19

The following table provides a summary of changes in the fair value of the Company's Level 3 financial liabilities for the year ended December 31, 2016 (in thousands):

Balance at December 31, 2015	10,464
Decrease in estimated fair value of contingent warrant liabilities upon revaluation	(10,464)
Balance at December 31, 2016	$—

The fair value of the Company's outstanding interest-bearing obligations is estimated using the net present value of the payments, discounted at an interest rate that is consistent with market interest rates, which is a Level 2 input. The carrying amount and the estimated fair value of the Company's outstanding interest-bearing obligations at December 31, 2017 and 2016 are as follows (in thousands):

	December 31, 2017		December 31, 2016	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Hercules term loan	$—	$ —	$16,850	$16,453
Servier loan	—	—	12,231	12,242
Novartis note	14,572	14,178	14,086	13,836
Total interest bearing obligations	$14,572	$ 14,178	$43,167	$42,531

6. Dispositions

Biodefense Assets

On November 4, 2015, the Company and Ology Bioservices entered into an asset purchase agreement under which Ology Bioservices agreed to acquire XOMA's biodefense business and related assets (including, subject to government approval, certain contracts with the U.S. government), and to assume certain liabilities of XOMA. As part of that transaction, the parties entered into an intellectual property license agreement (the "Ology Bioservices License Agreement"), under which XOMA agreed to license to Ology Bioservices certain intellectual property rights related to the purchased assets. Under the Ology Bioservices License Agreement, the Company was eligible to receive contingent consideration up to a maximum of $4.5 million in cash and 23,008 shares of common stock of Ology Bioservices, based upon Ology Bioservices achieving certain specified future operational objectives. In addition, the Company is eligible to receive 15% royalties on net sales of any future Ology Bioservices products covered by or involving the related patents or know-how.

On March 17, 2016, the Company effected a novation of its NIAID 4 contract to Ology Bioservices. On March 23, 2016, the Company completed the transfer of NIAID 4 and certain related third-party service contracts and materials, and the grant of exclusive and non-exclusive licenses for certain of its patents and general know-how to Ology Bioservices. The Company believes that NIAID 4 and certain related third-party service contracts and materials related to the biodefense program transferred to Ology Bioservices include a sufficient number of key inputs and processes necessary to generate output from a market participant's perspective. Accordingly, the Company has determined that such assets qualified as a business. The transaction had no impact on the Company's consolidated financial statements as of, and for the year ended, December 31, 2016.

In February 2017, the Company executed an Amendment and Restatement to both the asset purchase agreement and Ology Bioservices License Agreement primarily to (i) remove Ology Bioservices' obligation to issue 23,008 shares to the Company of its common stock under the asset purchase agreement, and (ii) revise the payment schedule related to the timing of the $4.5 million cash payments due to the Company under the Ology Bioservices License Agreement. Of the $4.5 million, $3.0 million was contingent upon Ology Bioservices achieving certain specified future operating objectives, which Ology Bioservices achieved in 2017. Based on the payment terms pursuant to the amended Ology Bioservices License Agreement, the Company is entitled to receive an aggregate of $4.6 million. The Company received $2.2 million during the year ended December 31, 2017, which was recognized as other income in the consolidated statement of comprehensive income (loss). As the amended Ology Bioservices License Agreement involves extended payment terms, the remaining $2.4 million, of which $1.7 million is due in monthly installments through July 2018 and $0.7 million is due in quarterly installments through September 2018, will be recognized as other income as the payments are received.

Manufacturing Facility

On November 5, 2015, the Company and Agenus West, LLC, a wholly-owned subsidiary of Agenus Inc. ("Agenus"), entered into an asset purchase agreement under which Agenus agreed to acquire XOMA's manufacturing facility in Berkeley, California, together with certain related assets, including certain intellectual property related to the purchased assets under an intellectual property license agreement, and to assume certain liabilities of XOMA, in consideration for the payment to XOMA of up to $5.0 million in cash and the issuance to XOMA of shares of Agenus' common stock having an aggregate value of up to $1.0 million.

On December 31, 2015, XOMA completed the sale of the manufacturing facility, including certain related equipment and furniture, and the grant of non-exclusive licenses for certain of its patents and general know-how to Agenus for cash consideration of $4.7 million, net of the assumed liabilities of $0.3 million at closing. In addition to the cash consideration, XOMA received 109,211 shares of common stock of Agenus with an aggregate value of $0.5 million, which the Company subsequently sold in August 2016. The remaining $0.5 million of Agenus common stock will only be received upon the Company's satisfaction of certain organizational matters, which XOMA is unlikely to satisfy. Agenus also paid $0.2 million to the Company as consideration for the employees who would not have otherwise been retained by the Company had the manufacturing facility closed on October 31, 2015. At closing, the carrying value of the assets sold was $2.2 million. The Company believes that the assets related to the manufacturing facility and certain other assets sold to Agenus include all key inputs and processes necessary to generate output from a market participant's perspective. Accordingly, the Company determined that such assets qualified as a business. The Company recorded the gain on the sale of a business of $3.5 million in the other income (expense), net line of the consolidated statement of comprehensive income (loss) for the year ended December 31, 2015.

7. Restructuring Charges

On December 19, 2016, the Board of Directors approved a restructuring of its business based on its decision to focus the Company's efforts on clinical development, with an initial focus on the X358 clinical programs. The restructuring included a reduction-in-force in which the Company terminated 57 employees (the "2016 Restructuring"). In addition, effective December 21, 2016, the Company's Chief Executive Officer retired from his position. In early 2017, the Company further revised its business model to prioritize out-licensing activities, further curtail research and development spending, and terminated five additional employees (the "2017 Restructuring").

During the year ended December 31, 2017, the Company recorded charges of $3.4 million related to severance, other termination benefits and outplacement services in connection with the workforce reduction resulting from the 2017 Restructuring and 2016 Restructuring activities. During the year ended December 31, 2016, the Company recorded charges of $3.8 million related to severance, other termination benefits and outplacement services in connection with the workforce reduction resulting from the 2016 Restructuring. The Company recognized $0.6 million of non-cash stock-based compensation as a result of the acceleration of a former executive's options and RSUs under his retention benefit agreement in 2016. In addition, in 2016, the Company recognized an asset impairment charge of $0.2 million related to leasehold improvements.

On July 22, 2015, the Company announced the Phase 3 EYEGUARD-B study of gevokizumab in patients with Behçet's disease uveitis, run by Servier, did not meet the primary endpoint of increased time to first acute ocular exacerbation. Due to the results and the Company's belief they would be predictive of results in its other EYEGUARD studies, in August 2015, the Company announced its intention to end the EYEGUARD global Phase 3 program. On August 21, 2015, the Company, in connection with its efforts to lower operating expenses and preserve capital while continuing to focus on its endocrine product pipeline, implemented a restructuring plan (the "2015 Restructuring") that included a workforce reduction resulting in the termination of 52 employees during the second half of 2015.

During the years ended December 31, 2016 and 2015, the Company recorded a credit of $32,000 and a charge of $2.9 million, respectively, related to severance, other termination benefits and outplacement services in connection with the workforce reduction resulting from the 2015 Restructuring. In addition, the Company recognized additional restructuring charges of $29,000 and $0.8 million in contract termination costs in 2016 and 2015, respectively, which primarily include costs in connection with the discontinuation of the EYEGUARD studies.

The outstanding restructuring liabilities are included in accrued and other liabilities on the consolidated balance sheets. As of December 31, 2017 and 2016, the components of these liabilities are shown below (in thousands):

	Employee Severance and Other Benefits	Contract Termination Costs	Stock-based Compensation	Asset Impairment	Total
Balance at December 31, 2015	$ 343	$ 116	$ —	$ —	$459
Restructuring charges	3,720	29	619	198	4,566
Non-cash charges	—	—	(619)	(198)	(817)
Cash payments	(469)	(145)	—	—	(614)
Balance at December 31, 2016	3,594	—	—	—	3,594
Restructuring charges	3,447	—	—	—	3,447
Cash payments	(6,911)	—	—	—	(6,911)
Balance at December 31, 2017	$ 130	$ —	$ —	$ —	$130

The Company expects to pay the remaining $0.1 million in 2018.

8. Long-Term Debt and Other Financings

Novartis Note

In May 2005, the Company executed a secured note agreement (the "Note Agreement") with Novartis, which was due and payable in full in June 2015. Under the Note Agreement, the Company borrowed semi-annually to fund up to 75% of the Company's research and development and commercialization costs under its collaboration arrangement with Novartis, not to exceed $50.0 million in aggregate principal amount. Interest on the principal amount of the loan accrues at six-month London Interbank Offered Rate plus 2%, which was equal to 3.81% at December 31, 2017, and is payable semi-annually in June and December of each year. Additionally, the interest rate resets in June and

December of each year. At the Company's election, the semi-annual interest payments could be added to the outstanding principal amount, in lieu of a cash payment, as long as the aggregate principal amount does not exceed $50.0 million. The Company made this election for all interest payments. Accrued interest of $0.3 million, $0.4 million and $0.3 million was added to the principal balance of the note for the years ended December 31, 2017, 2016, and 2015, respectively. Loans under the Note Agreement were secured by the Company's interest in its collaboration with Novartis, including any payments owed to it thereunder.

On September 30, 2015, concurrent with the execution of the License Agreement with Novartis International as discussed in Note 4, XOMA and NIBR, who assumed the rights to the note from NVDI, executed an amendment to the Note Agreement (the "Secured Note Amendment") under which the parties extended the maturity date of the note from September 30, 2015 to September 30, 2020, and eliminated the mandatory prepayment previously required to be made with certain proceeds of pre-tax profits and royalties. In addition, upon achievement of a specified development and regulatory milestone, the then-outstanding principal amount of the note will be reduced by $7.3 million rather than the Company receiving such amount as a cash payment.

On September 22, 2017, in connection with the XOMA-052 License Agreement with Novartis, the Company and NIBR executed an amendment to the Secured Note Amendment under which the parties further extended the maturity date of the Secured Note Amendment from September 30, 2020 to September 30, 2022. All other terms of the Secured Note Amendment and original Note Agreement remain unchanged. The Company determined that the amendment resulted in a debt modification. As a result, the Secured Note Amendment will continue to be accounted for using the effective interest method, with a new effective interest rate based on revised cash flows calculated on a prospective basis upon the execution of the amendment. As of December 31, 2017 and 2016, the outstanding principal balance under this Secured Note Amendment was $14.6 million and $14.1 million, respectively, and was included in interest bearing obligations – non-current in the accompanying consolidated balance sheets.

Servier Loan Agreement

In December 2010, in connection with the Collaboration Agreement entered into with Servier, the Company executed a loan agreement with Servier (the "Servier Loan Agreement"), which provided for an advance of €15.0 million, which converted to approximately $19.5 million at that time. The loan was secured by an interest in the Company's intellectual property rights to all gevokizumab indications worldwide, excluding certain rights in the U.S. and Japan. Interest was calculated at a floating rate based on a Euro Inter-Bank Offered Rate and subject to a cap. The interest rate was reset semi-annually in January and July of each year.

On January 9, 2015, Servier and the Company entered into Amendment No. 2 ("Loan Amendment") to the Servier Loan Agreement to extend the maturity date of the loan from January 13, 2016 to three tranches of principal to be repaid as follows: €3.0 million on January 15, 2016, €5.0 million on January 15, 2017, and €7.0 million on January 15, 2018. All other terms of the Servier Loan Agreement remained unchanged. The loan would be immediately due and payable upon certain customary events of default. In January 2016, the Company made payments of €3.0 million in principal and €0.2 million in accrued interest to Servier.

In January 2017, the Company entered into Amendment No. 3 to the Servier Loan Agreement (the "Amendment No. 3") which extended the maturity date of the portion of the loan equal to €5.0 million due on January 15, 2017 to July 15, 2017. The other terms of the Servier Loan Agreement remained unchanged. The Company determined that Amendment No. 3 resulted in a debt modification. As a result, the Company continued to account for the loan using the effective interest method, with a new effective interest rate based on revised cash flows calculated on a prospective basis upon the execution of the Amendment No. 3.

Upon initial issuance, the loan had a stated interest rate lower than the market rate based on comparable loans held by similar companies, which represented additional value to the Company. The Company recorded this additional value as a discount to the carrying value of the loan amount, at its fair value of $8.9 million.

The loan discount was amortized to interest expense under the effective interest method over the remaining life of the loan. The Company recorded non-cash interest expense resulting from the amortization of the loan discount of $0.4 million, $0.6 million and $0.7 million for the years ended December 31, 2017, 2016, and 2015, respectively. At December 31, 2016, the net carrying value of the loan was $12.2 million. For the years ended December 31, 2016 and 2015, the Company recorded an unrealized foreign exchange gain of $5,000 and an unrealized foreign exchange loss of $0.2 million, respectively, related to the re-measurement of the loan discount.

The outstanding principal balance under this loan was $12.6 million using a euro to US dollar exchange rate of 1.052, as of December 31, 2016. The Company recognized unrealized foreign exchange gains of $0.5 million and $1.9 million for the years ended December 31, 2016, and 2015, related to the re-measurement of the loan.

On August 25, 2017, NIBR settled the Servier Loan in cash by paying directly to Servier $14.3 million, which represented the outstanding balance of the loan based on a euro to dollar exchange rate of 1.1932. The funds that NIBR paid directly to Servier were a portion of the upfront payment due to XOMA under the XOMA-052 License Agreement (see Note 4). As a result of the debt being fully paid, the intellectual property securing the Servier Loan Agreement was released back to the Company. A loss on extinguishment of $0.1 million from the payoff of the loan was recognized in the consolidated statement of comprehensive income (loss) during the year ended December 31, 2017.

Hercules Term Loan

On February 27, 2015 (“Closing Date”), the Company entered into a loan and security agreement with Hercules Technology Growth Capital, Inc. (the “Hercules Term Loan”). The Hercules Term Loan had a variable interest rate that is the greater of either (i) 9.40% plus the prime rate as reported from time to time in The Wall Street Journal minus 7.25%, or (ii) 9.40%. The payments under the Hercules Term Loan were interest only until June 1, 2016 . The interest-only period was followed by equal monthly payments of principal and interest amortized over a 30-month schedule through the scheduled maturity date of September 1, 2018. As security for its obligations under the Hercules Term Loan, the Company granted a security interest in substantially all of its existing and after-acquired assets, excluding its intellectual property assets.

The Hercules Term Loan included certain affirmative and restrictive covenants, but did not include any financial covenants, and also included standard events of default, including payment defaults. Upon the occurrence of an event of default, a default interest rate of an additional 5% may have been applied to the outstanding loan balances, and Hercules may have declared all outstanding obligations immediately due and payable, and taken such other actions as set forth in the Hercules Term Loan.

The Company incurred debt issuance costs of $0.5 million in connection with the Hercules Term Loan. The Company was required to pay a final payment fee equal to $1.2 million on the maturity date, or such earlier date as the term loan was paid in full. The debt issuance costs and final payment fee were being amortized and accreted, respectively, to interest expense over the term of the term loan using the effective interest method. The Company recorded non-cash interest expense resulting from the amortization of the debt issuance costs and accretion of the final payment of $0.2 million, $0.7 million and $0.5 million for the years ended December 31, 2017, 2016 and 2015, respectively.

As of December 31, 2016, the outstanding principal balance of the Hercules Term Loan was $17.5 million, and the net carrying value was $16.9 million. On December 21, 2016, the Company entered into Amendment No. 1 (the “Amendment”) to the Hercules Term Loan. Under the Amendment, Hercules agreed to release its security interest in the assets subject to the Acquisition Agreements described in Note 4 above. In turn, in January 2017, the Company paid $10.0 million of the outstanding principal balance owed to Hercules. This amount was included in current interest-bearing obligations as of December 31, 2016. All other terms of the Hercules Term Loan remained unchanged.

On March 21, 2017, the remaining balance of the Hercules Term Loan was paid in full and the Company was not required to pay the 1% prepayment charge due pursuant to the terms of the loan. A loss on extinguishment of $0.5 million from the payoff of the Hercules Term Loan was recognized in the consolidated statement of comprehensive income (loss) during the year ended December 31, 2017.

In connection with the Hercules Term Loan, the Company issued unregistered warrants that entitle Hercules to purchase up to an aggregate of 9,063 unregistered shares of the Company’s common stock at an exercise price equal to $66.20 per share. These warrants are exercisable immediately and have a five-year term expiring in February 2020. The Company allocated the aggregate proceeds of the Hercules Term Loan between the warrants and the debt obligation. The fair value of the warrants of $0.5 million, which was determined using the Black-Scholes Model, was recorded as a discount to the debt obligation. The debt discount was amortized over the term of the loan using the effective interest method. The warrants are classified in stockholders’ equity (deficit) on the consolidated balance sheets. As of December 31, 2017, all of these warrants were outstanding.

Interest Expense

Amortization of debt issuance costs and discounts are included in interest expense. Interest expense in the consolidated statements of comprehensive income (loss) for the years ended December 31, 2017, 2016, and 2015, relates to the following debt instruments (in thousands):

	Year Ended December 31,		
	2017	2016	2015
Novartis note	$490	$405	$329
Servier loan	431	892	1,083
Hercules loan	311	2,628	2,223
Other	6	21	130
Total interest expense	$1,238	$3,946	$3,765

9. Income Taxes

The Company is subject to an ownership change pursuant to IRC Section 382, which occurred in February 2017, which significantly limits its ability to use its net operating loss carryforwards and tax credits against its 2017 taxable income. Due to historical losses, there was no income tax expense for the years ended December 31, 2016, and 2015.

The provision for income taxes (all current) consists of the following (in thousands):

	Year Ended December 31,		
	2017	2016	2015
Federal	$1,649	$ —	$ —
State	13	—	—
Total	$1,662	$ —	$ —

Reconciliation between the tax provision computed at the federal statutory income tax rate of 34% and the Company's actual effective income tax rate is as follows:

	Year Ended December 31,		
	2017	2016	2015
Federal tax at statutory rate	34 %	34 %	34 %
Warrant valuation	—	7 %	29 %
Stock compensation and other permanent differences	6 %	—	(1) %
Tax credits	(4) %	2 %	(14) %
Impact of 2017 Tax Act on change in deferred	128 %	—	—
Section 382 limitations	868 %	—	—
Valuation allowance	(1,022) %	(43) %	(48) %
Total	10 %	0 %	0 %

The significant components of net deferred tax assets at December 31, 2017 and 2016 were as follows (in thousands):

	December 31,	
	2017	2016
Capitalized research and development expenses	$26,367	$53,557
Net operating loss carryforwards	4,701	123,672
Research and development and other credit carryforwards	12,225	25,297
Stock compensation	3,680	7,099
Deferred revenue	3,928	6,577
Other	883	1,724
Total deferred tax assets	51,784	217,926

Valuation allowance	(51,784)	(217,926)
Net deferred tax assets	$—	$—

The net (decrease) increase in the valuation allowance was $(166.1) million, $8.2 million, and $19.6 million for the years ended December 31, 2017, 2016, and 2015, respectively.

Accounting standards provide for the recognition of deferred tax assets if realization of such assets is more likely than not. Based upon the weight of available evidence, which includes the Company’s four sources of taxable income including historical operating performance and the repeal of net operating loss carryback, the Company has determined that total deferred tax assets should be fully offset by a valuation allowance.

On December 22, 2017, the Tax Cuts and Jobs Act of 2017 (the “Tax Act”) was signed into law making significant changes to the Internal Revenue Code. Changes include, but are not limited to, a corporate tax rate decrease from 35% to 21% effective for tax years beginning after December 31, 2017. The Company has calculated the impact of the Tax Act in its year end income tax provision in accordance with its understanding of the Tax Act and guidance available as of the date of this filing. In December 2017, SAB 118 was issued to address the application of U.S. GAAP in situations when a registrant does not have all the necessary information available, prepared, or analyzed in reasonable detail to complete the accounting for certain income tax effects of the Tax Act. In accordance with SAB 118, additional work may be necessary for a more detailed analysis of the Company's deferred tax assets and liabilities. Any subsequent adjustment to the provisional amounts will be recorded in 2018 when the analysis is complete.

Under ASC 740, Accounting for Income Taxes, the enactment of the Tax Act also requires companies to recognize the effects of changes in tax laws and rates on deferred tax assets and liabilities and the retroactive effects of changes in tax laws in the period in which the new legislation is enacted. Consequently, the Company accounted for a provisional estimated reduction of the deferred tax assets from $72.7 million to $51.8 million with a corresponding decrease to the Company's valuation allowance. The Company expects the new law to significantly reduce its tax rate in future periods, and its tax footnote reflects the effects of a federal tax rate reduction net of its valuation allowance.

As of January 1, 2017, the Company adopted ASU 2016-09 and as a result recognized a stock compensation excess windfall, net of operating loss carryforwards that were converted into deferred tax net operating losses of $1.8 million, with a corresponding increase in valuation allowance of $1.8 million.

Based on an analysis under Section 382 of the Internal Revenue Code (which subjects the amount of pre-change NOLs and certain other pre-change tax attributes that can be utilized to annual limitations), the Company experienced an ownership change in February 2017 which substantially limits the future use of its pre-change Net Operating Losses ("NOLs") and certain other pre-change tax attributes per year. The Company has excluded NOLs of $119.8 million and tax credit carryforwards of $15.4 million that will expire as a result of the annual limitations in these deferred tax assets as of December 31, 2017. To the extent that the Company does not utilize its carry-forwards within the applicable statutory carryforward periods, either because of Section 382 limitations or the lack of sufficient taxable income, the carryforwards will expire unused.

As of December 31, 2017, the Company had federal net operating loss carry-forwards of approximately $13.6 million and state net operating loss carry-forwards of approximately $27.3 million to offset future taxable income. The net operating loss carryforwards begin to expire in 2036 for federal and 2028 for state purposes. California net operating losses of $24.3 million, $41.2 million, and $22.4 million, expired in the years 2017, 2016, and 2015, respectively. The Company had federal orphan credit of $1.0 million which if not utilized will expire in 2037. The Company also had $19.8 million of California research and development tax credits which have no expiration date.

The Company files income tax returns in the U.S. federal jurisdiction, California, Maryland and Texas. The Company's federal income tax returns for tax years 2014 and beyond remain subject to examination by the Internal Revenue Service. The Company's state income tax returns for tax years 2013 and beyond remain subject to examination by state tax authorities. In addition, all of the net operating losses and research and development credit carry-forwards that may be used in future years are still subject to adjustment.

The following table summarizes the Company's activity related to its unrecognized tax benefits (in thousands):

	Year Ended December 31,		
	2017	2016	2015
Balance at January 1	$8,625	$9,666	$5,503
Increase related to current year tax position	581	592	2,687
(Decrease) increase related to prior year tax position	(3,705)	(1,633)	1,476
Balance at December 31	$5,501	$8,625	$9,666

As of December 31, 2017, the Company had a total of $4.5 million of net unrecognized tax benefits, none of which would affect the effective tax rate upon realization. The Company currently has a full valuation allowance against its U.S. net deferred tax assets which would impact the timing of the effective tax rate benefit should any of these uncertain tax positions be favorably settled in the future.

The Company does not expect its unrecognized tax benefits to change significantly over the next twelve months. The Company will recognize interest and penalties accrued on any unrecognized tax benefits as a component of income tax expense. Through December 31, 2017, the Company has not accrued interest or penalties related to uncertain tax positions.

10. Compensation and Other Benefit Plans

The Company grants qualified and non-qualified stock options, RSUs, common stock and other stock-based awards under various plans to directors, officers, employees and other individuals. Stock options are granted at exercise prices of not less than the fair market value of the Company's common stock on the date of grant. Additionally, the Company has an Employee Stock Purchase Plan ("ESPP") that allows employees to purchase Company shares at a purchase price equal to 85% of the lower of the fair market value of the Company's common stock on the first trading day of the offering period or on the last day of the offering period.

Employee Stock Purchase Plan

In May 2015, the Company's stockholders approved the 2015 Employee Stock Purchase Plan (the "2015 ESPP") which replaced the Company's legacy 1998 ESPP. Under the 2015 ESPP, the Company reserved 15,000 shares of common stock for issuance as of its effective date of July 1, 2015, subject to adjustment in the event of a stock split, stock dividend, combination or reclassification or similar event. The 2015 ESPP allows eligible employees to purchase shares of the Company's common stock at a discount through payroll deductions of up to 10% of their eligible compensation, subject to any plan limitations. The 2015 ESPP provides for six-month offering periods ending on May 31 and November 30 of each year, with the exception of the first offering period, which ran from July 1, 2015 through November 30, 2015, as the Company transitioned from the 1998 ESPP. At the end of each offering period, employees are able to purchase shares at 85% of the lower of the fair market value of the Company's common stock on the first trading day of the offering period or on the last day of the offering period.

In February 2017, the Compensation Committee and the Board of Directors adopted, and in May 2017, the Company's stockholders approved, an amendment to the Company's 2015 ESPP. The amendment (a) increased by 250,000 the shares of common stock (from 15,000 shares to a total of 265,000 shares) available for issuance under the 2015 ESPP; and (b) increased the maximum number of shares of common stock an employee may purchase in any offering period to 2,500.

During the years ended December 31, 2017, 2016, and 2015, employees purchased 5,314, 7,070, and 6,029 shares of common stock, respectively, under the 2015 ESPP.

Deferred Savings Plan

Under section 401(k) of the Internal Revenue Code of 1986, the Board of Directors adopted, effective June 1, 1987, a tax-qualified deferred compensation plan for employees of the Company. Participants may make contributions which defer up to 50% of their eligible compensation per payroll period, up to a maximum for 2017, 2016 and 2015 of $18,000 (or $24,000 for employees over 50 years of age). The Company may, at its sole discretion, make contributions each plan year, in cash or in shares of the Company's common stock, in amounts which match up to 50% of the salary deferred by the participants. The expense related to these contributions was $0.5 million and $0.8 million for the years ended December 31, 2016, and 2015, respectively, and 100% was paid in common stock in each year. The Company applies shares from plan forfeitures of terminated employees toward the Company's matching contribution. For the year ended December 31, 2017, the forfeitures exceeded the total matching contribution from the Company. Therefore, no expense was recognized by the Company.

Stock Option Plans

In May 2010, the Compensation Committee and the full Board adopted, and in July 2010 the Company's stockholders approved, a new equity-based compensation plan, the 2010 Long Term Incentive and Share Award Plan, which has since been amended and restated as the Amended and Restated 2010 Long Term Incentive and Stock Award Plan (the "2010 Plan"). The 2010 Plan replaced the Company's legacy Option Plan, Restricted Plan and 1992 Directors Share Option Plan (the "Directors Plan") and provided a more current set of terms under which to provide this type of compensation.

In February 2016, the Compensation Committee and the Board of Directors adopted, and in May 2016, the Company's stock holders approved an amendment to the 2010 Plan to, among other things, allow for an increase in the number of shares of common stock reserved for issuance by 170,000 shares to an aggregate of 1,108,560 shares.

In February 2017, the Compensation Committee and the Board of Directors adopted, and in May 2017, the Company's stockholders approved, an amendment to the 2010 Plan. The amendment (a) increases the number of shares of common stock issuable over the term of the plan by an additional 1,470,502 to 2,579,062 shares in the aggregate; (b) increases the number of shares of common stock issuable under the plan as incentive stock options by an additional 2,004,087 to 2,579,062 shares; (c) increases the per person award limits for purposes of compliance with Section 162(m) of the Internal Revenue Code to 2,000,000 shares for options and stock appreciation rights and to 2,000,000 shares for other types of stock awards; and (d) for purposes of Section 162(m) (i) confirms existing performance criteria upon which performance goals may be based with respect to performance awards under the 2010 Plan, and (ii) confirms existing means of adjustment when calculating the attainment of performance goals for performance awards granted under the 2010 Plan.

From the 2010 Plan, the Company grants stock options, RSUs, and other stock-based awards to eligible employees, consultants and directors. No further grants or awards will be made under the Option Plan, the Restricted Share Plan or the Directors Plan. Shares underlying options previously issued under the Option Plan, the Restricted Share Plan or the Directors Plan that are currently outstanding will, upon forfeiture, cancellation, surrender or other termination, become available under the 2010 Plan. Stock-based awards granted under the 2010 Plan may be exercised when vested and generally expire ten years from the date of the grant or three to six months from the date of termination of employment (longer in case of death or certain retirements). Vesting periods vary based on awards granted, however, certain stock-based awards may vest immediately or may accelerate based on performance-driven measures.

As of December 31, 2017, the Company had 412,314 shares available for grant under the stock option plan. As of December 31, 2017, options and RSUs covering 1,641,492 shares of common stock were outstanding under the stock option plan.

Stock Options

Stock options generally vest monthly over three to four years for employees and one year for directors. Stock options held by employees who qualify for retirement age (defined as employees that are a minimum of 55 years of age and the sum of their age plus years of full-time employment with the Company exceeds 70 years) vest on the earlier of scheduled vest date or the date of retirement.

Performance-Based Stock Options

In February 2017, the Board of Directors approved a grant of 1,018,000 stock options to members of the Board of Directors, executives, and non-executive employees, subject to approval by the Company’s stockholders of an increase in the available shares under the 2010 Plan at the 2017 Annual Meeting of Stockholders. In May 2017, the shareholders approved the increase in the number of shares available for issuance under the Company’s 2010 Plan and 998,000 stock options were issued upon approval. As such, the stock options approved for grant in February 2017 were not deemed granted for accounting purposes until May 2017. The stock options granted to the non-employee board members and non-executive employees vest monthly over three years from the grant date. The stock options granted to the executives contain a combination of time-based and corporate performance-based vesting conditions.

In December 2017, the Company granted an additional 130,000 stock options to executives with corporate performance-based vesting conditions.

Stock-based compensation expense associated with the corporate performance-based stock options is recognized if the performance condition is considered probable of achievement using management’s best estimates. As of December 31, 2017, certain corporate-based milestones were achieved and therefore the related expense was recognized. During the year ended December 31, 2017, the Company recognized stock-based compensation expense of $1.8 million related to stock options with performance-based vesting criteria.

Stock Option Plans Summary

The following table summarizes the Company’s stock option activity for the year ended December 31, 2017:

	Number of shares	Weighted Average

		Exercise Price Per Share
Outstanding at beginning of year	568,292	$ 77.70
Granted	1,387,820	10.94
Exercised	(110,400)	5.95
Forfeited, expired or cancelled	(223,647)	84.40
Outstanding at end of year	1,622,065	$ 24.54
Exercisable at end of year	849,279	$ 32.79

Of the stock options outstanding as of December 31, 2017, 542,500 were granted subject to performance objectives tied to the achievement of corporate goals set by the Compensation Committee of the Company's Board of Directors and will vest in full or part based on achievement of such goals. As of December 31, 2017, 330,000 of the performance-based stock options have vested upon achievement of the Company's corporate goals for 2017.

The aggregate intrinsic value of stock options exercised in 2017 and 2015 was $2.4 million and $0.4 million, respectively. No stock options were exercised in 2016. The weighted-average grant-date fair value per share of the options granted in 2017, 2016 and 2015 was $10.26, $4.90 and $51.92, respectively.

As of December 31, 2017, there were 1,622,065 stock options outstanding with a weighted average exercise price per share of $24.54, aggregate intrinsic value of $34.3 million, and a weighted average remaining contractual term of 7.91 years. As of December 31, 2017, there were 849,279 stock options exercisable with an aggregate intrinsic value of $18.5 million and a weighted average remaining contractual term of 7.65 years.

As of December 31, 2017, $8.6 million of total unrecognized compensation expense related to stock options is expected to be recognized over a weighted average period of 2.2 years.

Restricted Stock Units

RSUs generally vest over three years for employees and one year for directors. RSUs held by employees who qualify for retirement age (defined as employees that are a minimum of 55 years of age and the sum of their age plus years of full-time employment with the Company exceeds 70 years) vest on the earlier of scheduled vest date or the date of retirement.

Unvested RSU activity for the year ended December 31, 2017 is summarized below:

	Number of Shares	Weighted-Average Grant-Date Fair Value
Unvested balance at January 1, 2017	91,228	$ 39.82
Granted	11,799	4.67
Vested	(62,405)	37.63
Forfeited	(22,142)	45.45
Unvested balance at December 31, 2017	18,480	$ 18.00

The total grant-date fair value of RSUs that vested in 2017, 2016, and 2015, was $2.3 million, $5.3 million and $5.5 million, respectively. As of December 31, 2017, $88,000 of total unrecognized compensation expense related to employee RSUs was expected to be recognized over a weighted average period of 0.26 years.

Stock-based Compensation Expense

The fair value of stock options granted during the years ended December 31, 2017, 2016, and 2015, was estimated based on the following weighted average assumptions for:

	Year Ended December 31,		
	2017	2016	2015
Dividend yield	0 %	0 %	0 %
Expected volatility	100 %	101 %	84 %
Risk-free interest rate	1.90%	1.84 %	1.40 %
Expected term	5.6 years	5.6 years	5.6 years

The following table shows total stock-based compensation expense for stock options, RSUs and ESPP in the consolidated statements of comprehensive income (loss) (in thousands):

	Year Ended December 31,		
	2017	2016	2015
Research and development	$876	$2,805	$5,022
General and administrative	6,425	4,221	4,705
Restructuring	—	619	—
Total stock-based compensation expense	$7,301	$7,645	$9,727

11. Net Income (Loss) per Share Available to Common Stockholders

Potentially dilutive securities are excluded from the calculation of diluted net income (loss) per share available to common stockholders if their inclusion is anti-dilutive.

The following table shows the weighted-average outstanding securities considered anti-dilutive and therefore excluded from the computation of diluted net income (loss) per share available to common stockholders (in thousands):

	Year Ended December 31,		
	2017	2016	2015
Common stock options and RSUs	346	548	550
Warrants for common stock	100	894	960
Convertible preferred stock	4,372	—	—
Total	4,818	1,442	1,510

The following is a reconciliation of the numerators and denominators used in calculating basic and diluted net income (loss) per share available to common stockholders (in thousands):

	Year Ended December 31,		
	2017	2016	2015
Numerator			
Net income (loss)	$14,596	$(53,530)	$(20,606)
Less: Deemed dividend on convertible preferred stock	(5,603)	—	—
Less: Allocation of undistributed earnings to participating securities	(3,279)	—	—
Net income (loss) available to common stockholders, basic	5,714	(53,530)	(20,606)
Adjustments to undistributed earnings allocated to participating securities	96	—	—
Net income (loss) available to common stockholders, diluted	$5,810	$(53,530)	$(20,606)
Denominator			
Weighted average shares outstanding used for basic net income (loss) per share available to common stockholders	7,619	6,021	5,890
Effect of dilutive stock options	360	—	—
Effect of dilutive warrants	1	—	—
Weighted average shares outstanding used for diluted net income (loss) per share available to common stockholders	7,980	6,021	5,890
Basic net income (loss) per share of common stock	$0.75	$(8.89)	$(3.50)
Diluted net income (loss) per share of common stock	$0.73	$(8.89)	$(3.50)

12. Capital Stock

Biotechnology Value Fund Financing

In February 2017, the Company sold 1,200,000 shares of its common stock and 5,003 shares of Series X convertible preferred stock directly to Biotechnology Value Fund, L.P. and certain of its affiliates ("BVF") in a registered direct offering, for aggregate net cash proceeds of $24.8 million.

BVF purchased the shares of common stock from the Company at a price of $4.03 per share, the closing stock price on the date of purchase. Each share of Series X convertible preferred stock has a stated value of $4,030 per share and is convertible into 1,000 shares of registered common stock based on a conversion price of $4.03 per share of common stock. The total number of shares of common stock issued upon conversion of all issued Series X convertible preferred stock will be 5,003,000 shares. Each share is convertible at the option of the holder at any time, provided that the holder will be prohibited from converting into common stock if, as a result of such conversion, the holder, together with its affiliates, would beneficially own a number of shares above a conversion blocker, which is initially set at 19.99% of the total common stock then issued and outstanding immediately following the conversion of such shares. As of December 31, 2017 if the preferred shares were converted, BVF would own 49.1% of the Company's total outstanding common shares. As of December 31, 2017, none of the preferred stock has been converted into shares of the Company's common stock.

The designations, preferences, rights and limitations of the convertible preferred shares are set forth in a Certificate of Designation of Preferences, Rights and Limitations of Series X convertible preferred stock filed with the Delaware Secretary of State. Shares of Series X convertible preferred stock will generally have no voting rights, except as required by law and except that the consent of the holders of the outstanding Series X convertible preferred stock will be required to amend the terms of the Series X preferred stock and to approve certain corporate actions. In the event of the Company's liquidation, dissolution or winding up, holders of Series X convertible preferred stock will participate, on a pro-rata basis, with any distribution of proceeds to holders of common stock. Holders of Series X convertible preferred stock are entitled to receive dividends on shares of Series X convertible preferred stock equal (on an as if converted to common stock basis) to and in the same form as dividends actually paid on the Company's common stock or other junior securities.

The Company evaluated the Series X convertible preferred stock for liability or equity classification under the applicable accounting guidance, and determined that equity treatment was appropriate because the Series X convertible preferred stock did not meet the definition of the liability instruments defined thereunder for convertible instruments. Specifically, the Series X convertible preferred shares are not mandatorily redeemable and do not embody an obligation to buy back the shares outside of the Company's control in a manner that could require the transfer of assets. Additionally, the Company determined that the Series X convertible preferred stock would be recorded as permanent equity, not temporary equity, based on the relevant guidance given that they are not redeemable for cash or other assets (i) on a fixed or determinable date, (ii) at the option of the holder, and (iii) upon the occurrence of an event that is not solely within control of the Company.

The Company has also evaluated the embedded conversion and redemption features within the Series X convertible preferred stock in accordance with the accounting guidance for derivatives. Based on this assessment, the Company determined that the conversion option is clearly and closely related to the equity host, and thus, bifurcation is not required. The contingent redemption feature was determined to not be clearly and closely related to the equity-like host; however, it met the criteria as a scope exception for derivative accounting. Therefore, the contingent redemption feature was also not bifurcated from the Series X convertible preferred stock.

The fair value of the common stock into which the Series X convertible preferred stock is convertible exceeded the allocated purchase price of the Series X convertible preferred stock by $5.6 million on the date of issuance, as such the Company recorded a deemed dividend. The Company recognized the resulting beneficial conversion feature as a deemed dividend equal to the number of shares of Series X convertible preferred stock sold on February 16, 2017 multiplied by the difference between the fair value of the common stock and the Series X convertible preferred stock effective conversion price per share on that date. The dividend was reflected as a one-time, non-cash, deemed dividend to the holders of Series X convertible preferred stock on the date of issuance, which is the date the stock first became convertible.

ATM Agreement

On November 12, 2015, the Company entered into an At The Market Issuance Sales Agreement (the "2015 ATM Agreement") with Cowen and Company, LLC ("Cowen"), under which the Company may offer and sell from time to time at its sole discretion shares of its common stock through Cowen as its sales agent, in an aggregate amount not to exceed the amount that can be sold under the Company's registration statement on Form S-3 (File No. 333-201882) filed with the SEC on the same date. The registration statement under the 2015 ATM Agreement will expire in February 2018. Cowen may sell the shares by any method permitted by law deemed to be an "at the market" offering as defined in Rule 415 of the Securities Act, including without limitation sales made directly on The NASDAQ Global Market, on any other existing trading market for the Company's common stock or to or through a market maker. Cowen also may sell the shares in privately negotiated transactions, subject to the Company's prior approval. The Company will pay Cowen a commission equal to 3% of the gross proceeds of the sales price of all shares sold through

it as sales agent under the 2015 ATM Agreement. Offering costs, consisting of legal, accounting, and filing fees, incurred in connection with the 2015 ATM Agreement are capitalized. The capitalized offering costs will be offset against proceeds from the sale of common stock under this agreement. In the event the offering is terminated, all capitalized offering costs will be expensed. For the year ended December 31, 2017, the Company sold a total of 110,252 shares of common stock under this agreement for aggregate gross proceeds of $0.6 million. Total offering costs of $0.2 million were offset against the proceeds upon sale of common stock. For the year ended December 31, 2016, the Company sold a total of 10,365 shares of common stock under this agreement for aggregate gross proceeds of $56,000. Total offering costs of $56,000 were offset against the proceeds upon sale of common stock. There were no shares of common stock sold under the 2015 ATM Agreement during the year ended December 31, 2015.

Common Stock Purchase Agreement

In August 2017, in connection with the XOMA-052 License Agreement, the Company and Novartis entered into a Common Stock Purchase Agreement under which Novartis purchased 539,131 shares of the Company's common stock, at a price per share of $9.2742 for an aggregate purchase price of $5.0 million in cash. The fair market value of the common stock issued to Novartis was $4.8 million, based on the closing stock price of $8.93 per share on the effective date of the Common Stock Purchase Agreement of August 24, 2017. The excess of the purchase price over the fair market value of the common stock represents a premium of $0.2 million which was accounted for as additional consideration to the related license agreements (See Note 4 for further discussion). The shares issued to Novartis are unregistered securities and the Company agreed to use commercially reasonable efforts to make and keep public information available and timely file all reports and other documents with the SEC as required of the Company under the Securities Exchange Act of 1934, as amended. Under the Common Stock Purchase Agreement, upon a request by Novartis, the Company will use commercially reasonable efforts to register the shares for resale under the Securities Act on a registration statement on Form S-3, to be filed within 60 days of the written request, and will use commercially reasonable efforts to keep such registration statement continuously effective under the Securities Act until the date all of the shares of common stock covered by such registration statement have been sold or can be sold publicly without restriction or limitation under Rule 144.

Common Stock Warrants

As of December 31, 2017 and 2016, the following common stock warrants were outstanding:

Issuance Date	Expiration Date	Balance Sheet Classification	Exercise Price per Share	Number of Shares at December 31, 2017	2016
March 2012	March 2017	Contingent warrant liabilities	$ 35.20	—	479,277
September 2012	September 2017	Stockholders' equity (deficit)	$ 70.80	—	1,967
February 2015	February 2020	Stockholders' equity (deficit)	$ 66.20	9,063	9,063
February 2016	February 2021	Stockholders' equity (deficit)	$ 15.40	8,249	8,249
				17,312	498,556

In February 2016, in conjunction with services provided by a third-party consultant, the Company issued a warrant to purchase up to an aggregate of 8,249 unregistered shares of the Company's common stock at an exercise price equal to $15.40 per share. These warrants were exercisable immediately and have a five-year term expiring in February 2021. The estimated fair value of the warrants of $0.1 million was calculated using the Black-Scholes Model and was classified in stockholders' equity (deficit) on the consolidated balance sheet. As of December 31, 2017, all of these warrants were outstanding.

In February 2015, the Company issued Hercules five-year warrants in connection with the Hercules Term Loan (see Note 8) that entitle Hercules to purchase up to an aggregate of 9,063 unregistered shares of the Company's common stock at an exercise price equal to $66.20 per share. The warrants are classified in stockholders' equity (deficit) on the consolidated balance sheets. As of December 31, 2017, all of these warrants were outstanding.

In December 2014, in connection with a registered direct offering to select institutional investors, the Company issued two-year warrants to purchase up to an aggregate of 404,833 shares of the Company's common stock at an exercise

price of $158.01 per share. These warrants contained provisions that were contingent on the occurrence of a change in control, which could conditionally obligate the Company to repurchase the warrants for cash in an amount equal to their estimated fair value using the Black-Scholes Model on the date of such change in control. Due to these provisions, the Company accounted for the warrants issued in December 2014 as a liability at estimated fair value. In addition, the estimated fair value of the liability related to the warrants was revalued at each reporting period until the earlier of the exercise of the warrants or their expiration. During the year ended December 31, 2016, the Company revalued the warrants using the Black-Scholes Model, and recorded a $3.0 million reduction in the estimated fair value as a gain on the revaluation of contingent warrant liabilities line of the Company's consolidated statement of comprehensive income (loss). The decrease in the estimated fair value of the warrants was primarily due to the decrease in the market price of the Company's common stock at December 31, 2016 compared to December 31, 2015. In December 2016, all of these warrants expired unexercised.

In September 2012, the Company issued to GECC five-year warrants in connection with the amendment to the GECC Loan Agreement (see Note 8) that entitle GECC to purchase up to an aggregate of 1,967 unregistered shares of the Company's common stock at an exercise price equal to $70.80 per share. The warrants are classified in stockholders' equity (deficit) on the consolidated balance sheets. In September 2017, all of these warrants expired unexercised.

In March 2012, in connection with an underwritten offering, the Company issued five-year warrants to purchase 741,729 shares of the Company's common stock at an exercise price of $35.20 per share. These warrants contain provisions that are contingent on the occurrence of a change in control, which could conditionally obligate the Company to repurchase the warrants for cash in an amount equal to their estimated fair value using the Black-Scholes Model on the date of such change in control. Due to these provisions, the Company accounts for the warrants issued in March 2012 as a liability at estimated fair value. In addition, the estimated fair value of the liability related to the warrants is revalued at each reporting period until the earlier of the exercise of the warrants, at which time the liability would be reclassified to stockholders' equity at its then estimated fair value, or expiration of the warrants. The Company revalued the warrants at December 31, 2016 using the Black-Scholes Model and recorded a $7.5 million reduction in the estimated fair value as a gain on the revaluation of contingent warrant liabilities line of the Company's consolidated statement of comprehensive income (loss). The decrease in the estimated fair value of the warrants was primarily due to the decrease in the market price of the Company's common stock at December 31, 2016 compared to December 31, 2015. As of December 31, 2016, the estimated fair value of these warrants was zero. In March 2017, all of these warrants expired unexercised.

13. Commitments and Contingencies

Collaborative Agreements, Royalties and Milestone Payments

The Company has committed to make potential future milestone payments to third parties as part of licensing and development programs. Payments under these agreements become due and payable only upon the achievement of certain developmental, regulatory and commercial milestones by the Company's licensees. Because it is uncertain if and when these milestones will be achieved, such contingencies, aggregating up to $15.5 million (assuming one product per contract meets all milestones events) have not been recorded on the accompanying consolidated balance sheets. The Company is unable to determine precisely when and if payment obligations under the agreements will become due as these obligations are based on milestone events, the achievement of which is subject to a significant number of risks and uncertainties.

Legal Proceedings

On July 24, 2015, a purported securities class action lawsuit was filed in the United States District Court for the Northern District of California, captioned Markette v. XOMA Corp., et al. (Case No. 3:15-cv-3425) naming as defendants the Company and certain of its officers. The complaint asserted that all defendants violated Section 10(b) of the Exchange Act and SEC Rule 10b-5, by making materially false or misleading statements regarding our EYEGUARD-B study between November 6, 2014 and July 21, 2015. The plaintiff also alleged that Messrs. Varian and Rubin violated Section 20(a) of the Exchange Act. On September 2, 2016, the defendants filed a motion to dismiss. On September 28, 2017, the Court granted defendants' motion to dismiss with leave to amend. All parties subsequently agreed to dismiss the action and on October 25, 2017, the Court issued an Order of Dismissal, dismissing the action with prejudice with respect to the named Plaintiff's individual claims and without prejudice with respect to unnamed class members.

On October 1, 2015, a stockholder purporting to act on the behalf of the Company, filed a derivative lawsuit in the Superior Court of California for the County of Alameda, purportedly asserting claims on behalf of the Company against certain of officers and the members of Board of Directors of the Company, captioned Silva v. Scannon, et al. (Case No. RG15787990). The lawsuit asserted claims for breach of fiduciary duty, corporate waste and unjust

enrichment based on the dissemination of allegedly false and misleading statements related to the Company's EYEGUARD-B study. The plaintiff was seeking unspecified monetary damages and other relief, including reforms and improvements to the Company's corporate governance and internal procedures. On December 6, 2017, the parties filed a joint stipulation, agreeing to dismiss the action. On December 7, 2017, the Court granted the stipulation, issuing an order of dismissal. The order dismissed the action without prejudice.

On November 16 and November 25, 2015, two derivative lawsuits were filed purportedly on the Company's behalf in the United States District Court for the Northern District of California, captioned Fieser v. Van Ness, et al. (Case No. 4:15-CV-05236-HSG) and Csoka v. Varian, et al. (Case No. 3:15-cv-05429-SI), against certain of the Company's officers and the members of its Board of Directors. The lawsuits asserted claims for breach of fiduciary duty and other violations of law based on the dissemination of allegedly false and misleading statements related to the Company's EYEGUARD-B study. The plaintiffs seek unspecified monetary damages and other relief including reforms and improvements to the Company's corporate governance and internal procedures. On December 4, 2017, the parties in each case filed joint stipulations, agreeing to dismiss the actions. On December 6, 2017, the Court granted the stipulations, issuing an order of dismissal in each of the Fieser and Csoka actions. The order dismissed the actions without prejudice.

Operating Leases

The Company leases facilities and office equipment under operating leases expiring on various dates through April 2023. These leases require the Company to pay taxes, insurance, maintenance and minimum lease payments. For each facility lease, the Company has two successive renewal options to extend the lease for five years upon the expiration of the initial lease term.

In September 2017, the Company entered into a lease agreement for an office facility in Emeryville, California. The lease has a term of 63 months and commenced on November 14, 2017. Under the lease agreement the Company will make total lease payments of $0.9 million through February 2023.

Total rental expense, including other costs required under the Company's leases, was approximately $2.4 million, $3.8 million and $3.7 million for the years ended December 31, 2017, 2016, and 2015, respectively. Rental expense based on leases allowing for escalated rent payments are recognized on a straight-line basis. At the expiration of the lease, the Company is required to restore certain of its leased property to certain conditions in place at the time of lease inception. The Company believes these costs will not be material to its operations.

On November 21, 2017, the Company entered into a non-cancellable sublease agreement for a portion of one of its three leased facilities. The term of the sublease agreement commenced on December 26, 2017. Under the term of the sublease agreement, the Company will receive $5.1 million over the term of the sublease, which ends at the same time as the original lease in April 2023. Under the sublease agreement, the Company's future sublease income will be equal to the amount required to be paid to the Company's landlord. In addition, the sublease provides for a tenant improvement allowance of $0.8 million that the Company is to provide to the subtenant; therefore, the Company recognized a loss on the sublease equal to the tenant improvement allowance. Under the sublease agreement, the Company and the sub-lessee executed a standby letter of credit amounting to $1.0 million to be held by the Company as security under the sublease in the event of uncured default by the sub-lessee. As of December 31, 2017, the Company has not drawn any funds from the letter of credit as there was no default by the sub-lessee.

The Company estimates future minimum lease amounts (in thousands):

Year Ending December 31,	Rent Payments	Sublease income
2018	$ 3,848	$ 897
2019	3,969	924
2020	4,117	952
2021	3,332	980
2022	2,774	1,010
Thereafter	906	340
Total minimum lease payments	$ 18,946	$ 5,103

14. Concentration of Risk, Segment and Geographic Information

Concentration of Risk

Cash equivalents and receivables are financial instruments which potentially subject the Company to concentrations of credit risk, as well as liquidity risk for certain cash equivalents such as money market funds. The Company has not encountered such issues during 2017 and 2016. The Company's policy is to focus on investments with high credit quality and liquidity to limit the amount of credit exposure. The Company currently maintains a portfolio of cash equivalents and have not experienced any losses.

The Company has not experienced any significant credit losses and does not require collateral on receivables. For the year ended December 31, 2017, one partner represented 95% of total revenues, and as of December 31, 2017, one partner represented 100% of the accounts receivable balance.

For the year ended December 31, 2016, three partners represented 27%, 22%, and 19% of total revenues, and as of December 31, 2016, one partner represented 85% of the accounts receivable balance.

For the year ended December 31, 2015, one partner represented 67% of total revenues.

Segment Information

The Company has determined that it operates in one business segment as it only reports operating results on an aggregate basis to the chief operating decision maker of the Company.

Geographic Information

Revenue attributed to the following geographic regions was as follows (in thousands) based on the location of the licensees:

	Year Ended December 31,		
	2017	2016	2015
United States	$1,654	$3,822	$10,685
Europe	50,936	1,642	44,662
Asia Pacific	100	100	100
Total	$52,690	$5,564	$55,447

The Company’s property and equipment is held in the United States.

15. Subsequent Event

In January 2018, the Company sold 67,658 shares of common stock under the 2015 ATM Agreement for aggregate net cash proceeds of $2.3 million.

16. Quarterly Financial Information (unaudited)

The following is a summary of the quarterly results of operations for the years ended December 31, 2017 and 2016:

	Consolidated Statements of Operations Data Quarter Ended			
	March 31	June 30	September 30	December 31
	(In thousands, except per share amounts)			
2017				
Total revenues[1]	$260	$10,890	$36,183	$5,357
Restructuring (charge) credit	(2,020)	(1,460)	29	4
Operating costs and expenses	(9,160)	(8,119)	(7,562)	(7,371)
Income (loss) from operations	(10,920)	1,311	28,650	(2,010)
Other income (expense), net	205	(1,026)	(600)	648
Net income (loss) before income tax	(10,715)	285	28,050	(1,362)
Provision for income tax benefit (expense)	—	—	(1,706)	44
Net income (loss)	$(10,715)	$285	$26,344	$(1,318)
Basic net income (loss) per share available to common stockholders	$(2.37)	$0.02	$2.06	$(0.16)
Diluted net income (loss) per share available to common stockholders[3]	$(2.37)	$0.02	$1.98	$(0.16)
2016				
Total revenues	$3,962	$443	$635	$524
Restructuring (charge) credit	(36)	21	—	(4,551)
Operating costs and expenses	(17,915)	(18,482)	(12,727)	(13,432)
Loss from operations	(13,989)	(18,018)	(12,092)	(17,459)
Other income (expense), net[2]	5,624	2,858	(433)	(21)
Net loss	$(8,365)	$(15,160)	$(12,525)	$(17,480)
Basic net loss per share of common stock	$(1.40)	$(2.52)	$(2.08)	$(2.89)
Diluted net loss per share of common stock	$(1.40)	$(2.52)	$(2.08)	$(2.89)

(1) In the third quarter of 2017, total revenues include upfront and milestone payments relating to various out-licensing arrangements, including $35.4 million of license fee revenue recognized in connection with the license agreements with Novartis, and, in the second quarter of 2017, total revenues include a $10.0 million milestone earned under the license agreement with Novartis International.

(2) Fluctuations in 2016 primarily relate to (losses) gains on the revaluation of the contingent warrant liabilities.

(3) For the quarters ended June 30, 2017 and September 30, 2017, the Company’s diluted net income per share of common stock was computed by giving effect to all potentially dilutive common stock equivalents outstanding during each of these periods.