Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K

(Mark One)

☒ **Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**
For the fiscal year ended December 31, 2018
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. 0-23047

Table of Contents

SIGA Technologies, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**13-3864870**
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification. No.)
31 East 62nd Street **New York, NY** (Address of principal executive offices)	**10065** (zip code)

Registrant's telephone number, including area code: (212) 672-9100

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

Title of each class	**Name of each exchange on which registered**
common stock, $.0001 par value	The Nasdaq Global Market

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 ☒.

Note—Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Exchange Act from their obligations under those Sections.

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 Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ 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, smaller reporting company or an emerging growth company. See definition 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 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) Yes ☐ No ☒.

Indicate by check mark whether the registrant has filed all documents and reports required by section 12,13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. Yes ☐ No ☐.

The aggregate market value of the voting and non-voting common stock held by non-affiliates of the registrant, based upon the closing sale price of the common stock on June 30, 2018 as reported on The Nasdaq Global Market was approximately $314,197,559.

As of February 15, 2019 the registrant had outstanding 80,941,524 shares of common stock.

DOCUMENTS INCORPORATED BY REFERENCE

The following document is incorporated herein by reference:

Table of Contents

Document	Parts Into Which Incorporated
Proxy Statement for the Company's 2019 Annual Meeting of Stockholders	Part III

Table of Contents

SIGA TECHNOLOGIES, INC.
FORM 10-K

Table of Contents

Part I

Forward-Looking Statements

Certain statements in this Annual Report on Form 10-K, including certain statements contained in “Business” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” constitute “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, including statements relating to the progress of SIGA’s development programs and timelines for bringing products to market, delivering products to the U.S Strategic National Stockpile and the enforceability of the 2011 BARDA Contract and the 2018 BARDA Contract (each as defined below, and collectively, the "BARDA Contracts") with the U.S. Biomedical Advanced Research and Development Authority (“BARDA”). The words or phrases “can be,” “expects,” “may affect,” “may depend,” “believes,” “estimate,” “project” and similar words and phrases are intended to identify such forward-looking statements. Such forward-looking statements are subject to various known and unknown risks and uncertainties and SIGA cautions you that any forward-looking information provided by or on behalf of SIGA is not a guarantee of future performance. SIGA’s actual results could differ materially from those anticipated by such forward-looking statements due to a number of factors, some of which are beyond SIGA’s control, including, but not limited to, (i) the risk that BARDA elects, in its sole discretion as permitted under the BARDA Contracts, not to exercise all, or any, of the options under those contracts, (ii) the risk that SIGA may not complete performance under the BARDA Contracts on schedule or in accordance with contractual terms, (iii) the risk that the BARDA Contracts are modified or canceled at the request or requirement of the U.S. government, (iv) the risk that the nascent international biodefense market does not develop to a degree that allows SIGA to successfully market TPOXX® internationally, (v) the risk that potential products, including the IV formulation of TPOXX®, or potential alternative uses of TPOXX® that appear promising to SIGA or its collaborators, cannot be shown to be efficacious or safe in subsequent pre-clinical or clinical trials, (vi) the risk that SIGA or its collaborators will not obtain appropriate or necessary governmental approvals to market these or other potential products or uses, (vii) the risk that SIGA may not be able to secure or enforce sufficient legal rights in its products, including intellectual property protection, (viii) the risk that any challenge to SIGA’s patent and other property rights, if adversely determined, could affect SIGA’s business and, even if determined favorably, could be costly, (ix) the risk that regulatory requirements applicable to SIGA’s products may result in the need for further or additional testing or documentation that will delay or prevent seeking or obtaining needed approvals to market these products, (x) the risk that one or more protests could be filed and upheld in whole or in part or other governmental action taken, in either case leading to a delay of performance under the 2018 BARDA Contract or other governmental contracts, (xi) the risk that the volatile and competitive nature of the biotechnology industry may hamper SIGA’s efforts to develop or market its products, (xii) the risk that changes in domestic or foreign economic and market conditions may affect SIGA’s ability to advance its research or may affect its products adversely, (xiii) the effect of federal, state, and foreign regulation, including drug regulation and international trade regulation, on SIGA’s businesses, (xiv) the risk that the U.S. government’s responses (including inaction) to the national or global economic situation may affect SIGA’s business adversely and (xv) the risk that SIGA’s internal controls will not be effective in detecting or preventing a misstatement in SIGA’s financial statements, as well as the risks and uncertainties included in Item 1A “Risk Factors” of this Form 10-K. All such forward-looking statements are current only as of the date on which such statements were made. SIGA does not undertake any obligation to update publicly any forward-looking statement to reflect events or circumstances after the date on which any such statement is made or to reflect the occurrence of unanticipated events.

Item 1. Business

Overview

SIGA Technologies, Inc. is referred to throughout this report as “SIGA,” “the Company,” “we” or “us.”

We are a commercial-stage pharmaceutical company focused on the health security market. Health security comprises countermeasures for biological, chemical, radiological and nuclear attacks (biodefense market), vaccines and therapies for emerging infectious diseases, and health preparedness. Our lead product is an oral formulation of TPOXX® (“oral TPOXX®”), an antiviral drug for the treatment of human smallpox disease caused by variola virus.

On July 13, 2018 the United States Food & Drug Administration (“FDA”) approved oral TPOXX® for the treatment of smallpox. Oral TPOXX® is a novel small-molecule drug that has been delivered to the U.S. Strategic National Stockpile (“Strategic Stockpile”) under the Project BioShield Act of 2004 (“Project BioShield”). Concurrent with the approval, the FDA granted the Company's request for a Priority Review Voucher (“PRV”). A PRV is a voucher that may be used to obtain an accelerated FDA review of a product candidate. On October 31, 2018, the Company sold its PRV for cash consideration of $80.0 million.

BARDA Contracts-TPOXX®

2018 BARDA Contract

On September 10, 2018, the Company entered into a contract with BARDA pursuant to which SIGA agreed to deliver up to 1,488,000 courses of oral TPOXX® to the Strategic Stockpile, and to manufacture and deliver to the Strategic Stockpile, or store as vendor-managed inventory, up to 212,000 courses of the intravenous (IV) formulation of TPOXX® ("IV TPOXX®"). Additionally, the contract includes funding from BARDA for advanced development of IV TPOXX®; post-marketing activities for oral and IV TPOXX®, and supportive procurement activities. The contract with BARDA (as amended, modified, or supplemented from time to time, the "2018 BARDA Contract") currently contemplates, as of February 28, 2019, up to approximately $600.1 million of payments, of which approximately $51.7 million of payments are included within the base period of performance of five years, approximately $12.2 million of payments are related to exercised options and up to approximately $536.2 million of payments are currently specified as unexercised options. BARDA may choose in its sole discretion when, or whether, to exercise any of the unexercised options. The period of performance for options is up to ten years from the date of entry into the 2018 BARDA Contract and such options could be exercised at any time during the contract term, including during the base period of performance. Initially, the 2018 BARDA Contract specified payments of up to approximately $628.7 million; on February 21, 2019, a cost-reimbursement plus fixed fee option for post-marketing, and other activities for oral TPOXX® was modified to $12.2 million (from $40.8 million) based on updated planning. As such, total potential payments currently specified under the 2018 BARDA Contract are $600.1 million.

The base period of performance specifies potential payments of approximately $51.7 million for the following activities: payments of approximately $11.1 million for the delivery of approximately 35,700 courses of oral TPOXX® to the Strategic Stockpile; payments of $8.0 million for the manufacture of 20,000 courses of final drug product of IV TPOXX® ("IV FDP"), of which $3.2 million of payments are related to the manufacture of bulk drug substance ("IV BDS") to be used in the manufacture of IV FDP; payments of approximately $32.0 million to fund advanced development of IV TPOXX®; and payments of approximately $0.6 million for supportive procurement activities. As of December 31, 2018, the Company has received $3.2 million for the manufacture of IV BDS; such bulk drug substance is expected to be used for the manufacture of 20,000 courses of IV FDP.

Exercised options specify potential payments up to approximately $12.2 million for funding of post-marketing activities for oral TPOXX®.

Unexercised options specify potential payments up to approximately $536.2 million in total (if all options are exercised). There are options for the following activities: payments of up to $450.2 million for the delivery of up to approximately 1,452,300 courses of oral TPOXX® to the Strategic Stockpile; payments of up to $76.8 million for the manufacture of up to 192,000 courses of IV FDP, of which up to $30.7 million of payments would be paid upon the manufacture of IV BDS to be used in the manufacture of IV FDP; payments of up to approximately $3.6 million to fund post-marketing activities for IV TPOXX®; and payments of up to approximately $5.6 million for supportive procurement activities.

The options related to IV TPOXX® are divided into two primary manufacturing steps. There are options related to the manufacture of bulk drug substance ("IV BDS Options"), and there are corresponding options (for the same number of IV courses) for the manufacture of final drug product ("IV FDP Options"). BARDA may choose to exercise any, all, or none of these options in its sole discretion. The 2018 BARDA Contract includes: three separate IV BDS Options, each providing for the bulk drug substance equivalent of 64,000 courses of IV TPOXX®; and three separate IV FDP Options, each providing for 64,000 courses of final drug product of IV TPOXX®. BARDA has the sole discretion as to whether to simultaneously exercise IV BDS Options and IV FDP Options, or whether to make independent exercise decisions. If BARDA decides to only exercise IV BDS Options, then the Company would receive payments up to $30.7 million; alternatively, if BARDA decides to exercise both IV BDS Options and IV FDP Options, then the Company would receive payments up to $76.8 million. For each set of options relating to a specific group of courses (for instance, the IV BDS and IV FDP options that reference the same 64,000 courses), BARDA has the option to independently purchase IV BDS or IV FDP.

2011 BARDA Contract

On May 13, 2011, the Company signed a contract with BARDA pursuant to which BARDA agreed to buy from the Company 1.7 million courses of oral TPOXX®. Additionally, the Company agreed to contribute to BARDA 300,000 courses at no additional cost to BARDA.

The contract with BARDA (as amended, modified, or supplemented from time to time the "2011 BARDA Contract") includes a base contract, as modified, ("2011 Base Contract") as well as options. The 2011 Base Contract specifies approximately $508.7 million of payments (including exercised options), of which, as of December 31, 2018, $459.8 million has been received

by the Company for the manufacture and delivery of 1.7 million courses of oral TPOXX® and $43.9 million has been received for certain reimbursements in connection with development and supportive activities. Approximately $5.0 million remains eligible to be received in the future for reimbursements of development and supportive activities.

For courses of oral TPOXX® that have been physically delivered to the Strategic Stockpile under the 2011 BARDA Contract, there are product replacement obligations, including: (i) a product replacement obligation in the event that the final version of oral TPOXX® approved by the FDA was different from any courses of oral TPOXX® that had been delivered to the Strategic Stockpile (the "FDA Approval Replacement Obligation"); (ii) a product replacement obligation, at no cost to BARDA, in the event that oral TPOXX® is recalled or deemed to be recalled for any reason; and (iii) a product replacement obligation in the event that oral TPOXX® does not meet any specified label claims. On July, 13, 2018, the FDA approved oral TPOXX® for the treatment of smallpox and there is no difference between the approved product and courses in the Strategic Stockpile. As such, the possibility of the FDA Approval Replacement Obligation resulting in any future replacements of product within the Strategic Stockpile is remote.

The 2011 BARDA Contract includes options. On July 30, 2018, the 2011 BARDA Contract was modified and BARDA exercised its option relating to FDA approval of 84-month expiry for oral TPOXX® for which the Company was paid $50.0 million in August 2018. With the option exercise, the 2011 BARDA Contract was modified so that the 2011 Base Contract increased by $50.0 million. Remaining options, if all would be exercised by BARDA, would result in aggregate payments to the Company of $72.7 million, including up to $58.3 million of funding for development and supportive activities such as work on a post-exposure prophylaxis ("PEP") indication for TPOXX® and/or $14.4 million of funding for production-related activities related to warm-base manufacturing. BARDA may choose in its sole discretion not to exercise any or all of the unexercised options. In 2015, BARDA exercised two options related to extending the indication of the drug to the geriatric and pediatric populations. The stated value of those exercises was minimal.

The 2011 BARDA Contract expires in September 2020.

Lead Product-TPOXX®

SIGA believes that TPOXX® is among the first new small-molecule drugs delivered to the Strategic Stockpile under Project BioShield. Oral TPOXX® is a novel, patented drug that is easy to store, transport and administer. On July 13, 2018, the FDA approved oral TPOXX® for the treatment of smallpox. Oral TPOXX® labeling, approved by the FDA, limits sales of oral TPOXX® in the U.S. to those for the Strategic Stockpile. Under the 2011 BARDA Contract, 1.7 million courses of oral TPOXX® were sold to BARDA and delivered to the Strategic Stockpile between 2013 and 2017. Courses delivered under the 2011 BARDA Contract have an FDA-approved shelf life of seven years. Under the 2018 BARDA Contract, SIGA can deliver up to 1.7 million courses of TPOXX® (of which 1,488,000 courses would be oral TPOXX® and 212,000 courses would be IV TPOXX®) to the Strategic Stockpile, at the option of BARDA.

For IV TPOXX®, SIGA initiated a phase I single ascending dose safety and pharmacokinetic study in the first quarter of 2016 and completed the enrollment and dosing of the final cohort of the study in March 2017. The Company initiated a phase I multiple ascending dose safety and pharmaceutical study in the 3rd quarter of 2018 and completed enrollment and dosing of the final cohort in December 2018.

Manufacturing

SIGA does not have a manufacturing infrastructure and does not intend to develop one for the manufacture of TPOXX®. SIGA relies on and uses third parties known as Contract Manufacturing Organizations (“CMOs”) to procure commercial raw materials and supplies, and to manufacture TPOXX®. SIGA's CMOs apply methods and controls in facilities that are used for manufacturing, processing, packaging, testing, analyzing and holding pharmaceuticals which conform to current good manufacturing practices (“cGMP”), the standard set by the FDA for manufacture of pharmaceuticals intended for human use.

Oral TPOXX®:

For the manufacture of oral TPOXX® under the BARDA contracts, the Company uses the following CMOs: Albemarle Corporation (“Albemarle”); Powdersize, LLC (“Powdersize”); Catalent Pharma Solutions LLC (“Catalent”); and Packaging Coordinators, LLC ("PCI").

In August 2011, SIGA entered into an agreement with Albemarle. Such agreement was amended in April 2015 and expired in April 2018. On October 1, 2018, SIGA entered into a new agreement with Albemarle. Albemarle manufactures, tests and supplies

active pharmaceutical ingredient ("API") for use in TPOXX®. SIGA agreed that, during the term of the new agreement, SIGA will purchase 100% of its internal and external API requirements for TPOXX® from Albemarle until the later of (i) September 30, 2021 and (ii) such time as SIGA has purchased twelve metric tons of API from Albemarle under the new agreement. From and after the later of: (i) September 30, 2021, or (ii) such time as SIGA has purchased twelve metric tons of API from Albemarle, SIGA will purchase at least 70% of its internal and external API requirements for TPOXX® from Albemarle until the end of the term of the new agreement (as described below), unless the Company receives an offer to purchase API at a price that Albemarle is unable to match, in which event SIGA will purchase at least 30% of its internal and external API requirements for TPOXX® from Albemarle until September 30, 2023. There is no minimum amount of API kilograms that must be used or acquired by SIGA. The following events are excluded from the "100% API" requirement: (i) if a contract entered into by SIGA for the sale of final drug product ("FDP") requires that the product used as the API for such FDP be manufactured outside the U.S. and Albemarle is unwilling or unable to subcontract such manufacture to a party or parties that meet the terms of the agreement; (ii) if a contract entered into by SIGA for the sale of FDP in an intravenous formulation requires different specifications than those provided for under the agreement and the parties are not able to reach agreement on the necessary changes to the specifications or on pricing; or (iii) if Albemarle fails to perform any of its obligations under the agreement and does not cure such failure within 30 days of written notice from SIGA. SIGA is required to pay Albemarle within 45 days of its invoice date. Pricing for API is at a fixed price per kilogram, subject to adjustment for increases in raw material costs and/or general manufacturing costs. Albemarle is required to deliver API that conforms with specifications outlined in the agreement; the Company is not required to pay for API that does not meet specifications. The Company has 120 days to reject any shipments that do not meet such specifications or are damaged. In addition to receiving payments for API deliveries, Albemarle is also paid for related services, such as stability testing. The Company's agreement with Albemarle is currently scheduled to expire upon the earlier of: (i) September 30, 2023, or (ii) the fulfillment of delivery obligations under the 2018 BARDA Contract. Thereafter, the agreement shall renew for successive one-year renewal terms until either the Company or Albemarle provide notice of non-renewal at least 90 days prior to the expiration date of a term.

Powdersize micronizes and tests API for use in oral TPOXX®. The Company's agreement with Powdersize was amended on January 11, 2019. The amended term ends on the tenth anniversary of the amendment date.

Catalent granulates, encapsulates, and tests oral TPOXX®. In addition, Catalent provides services related to commercial stability testing of drug product and preparation for tabulated stability and trend analysis for each time point. The Company's agreement with Catalent has an initial term that ends on June 28, 2021. Thereafter, this agreement automatically renews for three years unless either party provides six months' notice of its desire to terminate the agreement prior to the expiration of the term. During the term of the agreement, SIGA will purchase all of its requirements for bulk product under the 2018 BARDA contract from Catalent.

PCI provides packaging services in connection with oral TPOXX®. The Company's agreement with PCI has an initial term that ends on March 1, 2022. Thereafter, this agreement automatically renews for successive one-year periods unless either party provides 120 days' notice of its desire to terminate the agreement prior to the expiration of the term. The agreement can be terminated earlier than March 1, 2022 under certain conditions.

Intravenous (IV) formulation of TPOXX®:

The Company is currently negotiating with CMOs with respect to raw material procurement and services in connection with the manufacture of IV TPOXX®. There is no assurance that the Company will be able to enter into agreements with service providers in connection with the manufacture of IV TPOXX® or the procurement of raw materials.

Market for Biological Defense Programs

The market for biodefense countermeasures reflects continued awareness of the threat of global terror and biowarfare activity. The U.S. government is the largest source of development and procurement funding for academic institutions and biopharmaceutical companies conducting biodefense research or developing vaccines, anti-infectives and immunotherapies directed at potential agents of bioterror or biowarfare. U.S. government spending on biodefense programs includes development funding awarded by the National Institute of Allergy and Infectious Diseases, BARDA and the Department of Defense ("DoD"), and procurement of countermeasures by BARDA, the Centers for Disease Control and Prevention ("CDC") and the DoD. For the fiscal year ending September 30, 2019, the budget for the U.S. Department of Health and Human Services provides an annual appropriation of more than $1.9 billion for activities related to advanced development and procurement of medical countermeasures for biological and other threats to civilian populations.

In addition to the U.S. government, we believe that potential additional markets for the sale of biodefense countermeasures include:

- foreign governments, including both defense and public health agencies;
- non-governmental organizations and multinational companies, including transportation and security companies
- healthcare providers, including hospitals and clinics; and
- state and local governments, which may be interested in these products to protect, among others, emergency responders, such as police, fire and emergency medical personnel.

At present, oral TPOXX® is not approved for sale beyond the Strategic Stockpile. The Company would need to meet regulatory requirements before sales were made in the U.S. beyond the Strategic Stockpile.

Research Agreements and Grants

The Company has an R&D program for IV TPOXX®. This program is funded by the 2018 BARDA Contract and a separate development contract with BARDA ("IV Formulation R&D Contract"). The IV Formulation R&D Contract has a period of performance that terminates on December 30, 2020. As of December 31, 2018, the IV Formulation R&D Contract provides for future aggregate research and development funding of approximately $15.1 million. See Note 3 in the consolidated financial statements regarding the 2018 BARDA Contract.

Contracts and grants include, among other things, options that may or may not be exercised at BARDA's discretion. Moreover, contracts and grants contain customary terms and conditions including BARDA's right to terminate or restructure a contract or grant for convenience at any time. As such, we may not receive all available funds.

General

We receive cash payments from BARDA on a monthly basis, as services are performed or goods are purchased. Amounts under contract and grant agreements are not guaranteed and can be canceled at any time for reasons such as non-performance or convenience of the U.S. government and, if canceled, we will not receive funds for additional work under the agreements.

Competition

The biotechnology and pharmaceutical industries are characterized by rapidly evolving technology and intense competition. Our competitors include many major pharmaceutical companies, each of which has financial, technical and marketing resources significantly greater than ours. Biotechnology and other pharmaceutical competitors in the biodefense space include, but are not limited to, Emergent BioSolutions, Bavarian Nordic AS, and Chimerix Inc. Academic institutions, governmental agencies and other public and private research organizations are also conducting research activities and seeking patent protection and may commercialize products on their own or through joint ventures.

TPOXX® faces significant competition for U.S. government funding for both development and procurement of medical countermeasures for biological, chemical, radiological and nuclear threats, diagnostic testing systems, and other emergency preparedness countermeasures.

Our commercial opportunities could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer side effects, are more convenient or are less expensive than products that we may develop. In addition, we may not be able to compete effectively if our product candidates do not satisfy governmental procurement requirements, particularly requirements of the U.S. government with respect to biodefense products.

Human Resources and Research Facilities

As of February 15, 2019, we had 41 full-time employees. None of our employees are covered by a collective bargaining agreement, and we consider our employee relations to be satisfactory. Our research and development facilities are located in Corvallis, Oregon, where we lease approximately 10,276 square feet under a lease agreement that commenced on January 1, 2018 and which expires in December 2019. This lease has two successive renewal options - the first for two years and the second for three years.

Intellectual Property and Proprietary Rights

SIGA's commercial success will depend in part on its ability to obtain and maintain patent protection in the U.S. and the rest of the world for its proprietary technologies, drug targets, and potential products and to preserve its trade secrets. Because of the substantial length of time and expense associated with bringing potential products through the development and regulatory clearance processes to reach the marketplace, the pharmaceutical industry places considerable importance on obtaining patent and trade secret protection. The patent positions of pharmaceutical and biotechnology companies can be highly uncertain and involve complex legal and factual questions. No consistent policy regarding the breadth of claims allowed in biotechnology patents across various jurisdictions has emerged to date. Accordingly, SIGA cannot predict the type and extent of claims that will be allowed in pending patent applications.

SIGA also relies upon trade secret protection for its confidential and proprietary information. No assurance can be given that other companies will not independently develop substantially equivalent proprietary information and techniques or otherwise gain access to SIGA's trade secrets or that SIGA can meaningfully protect its trade secrets.

SIGA exclusively owns its key patent portfolios, which relate to its leading drug candidate TPOXX® (also known as ST-246, tecovirimat). As of February 28, 2019, the TPOXX® patent portfolio has seven patent families consisting of 21 U.S. utility patents, 57 issued foreign patents, five U.S. utility patent applications, and 41 foreign patent applications.

The principal and material issued patents covering TPOXX® are described in the table below.

Patent Number	Country	Protection Conferred	Issue Date	Expiration Date
US 7737168	United States	Method of treating orthopoxvirus infection with ST-246	June 15, 2010	May 3, 2027^
US 8039504	United States	Pharmaceutical compositions and unit dosage forms containing ST-246	October 18, 2011	July 23, 2027
US 7687641	United States	Method of manufacturing ST-246	March 30, 2010	September 27, 2024
US 8124643	United States	Composition of matter for the ST-246 compound and Pharmaceutical compositions containing ST-246	February 28, 2012	June 18, 2024^
US 7956197	United States	Method of manufacturing ST-246	June 7, 2011	June 18, 2024
US 8530509	United States	Pharmaceutical compositions containing a mixture of compounds including ST-246	September 10, 2013	June 18, 2024
US 8802714	United States	Method of treating orthopoxvirus infection with a mixture of compounds including ST-246	August 12, 2014	June 18, 2024
US 9045418	United States	Method of manufacturing ST-246	June 2, 2015	June 18, 2024
US 9233097	United States	Liquid Pharmaceutical formulations containing ST-246	January 12, 2016	August 2, 2031
US 9339466	United States	Certain polymorph of ST-246, method of preparation of the polymorph and pharmaceutical compositions containing the polymorph	May 17, 2016	March 23, 2031
US 9546137	United States	Methods of preparing ST-246	January 17, 2017	August 14, 2033
US 9744154	United States	Polymorphic forms of ST-246 and methods of preparation	August 29, 2017	March 23, 2031
US 9862683	United States	Methods of preparing Tecovirimat	January 9, 2018	August 14, 2033
US 9670158	United States	Amorphous Tecovirimat preparation	June 6, 2017	July 11, 2034
US 9889119	United States	Amorphous Tecovirimat preparation	February 13, 2018	July 11, 2034
US 9907859	United States	ST-246 liquid formulations and methods	March 6, 2018	August 2, 2031
US 10029985	United States	Methods of preparing Tecovirimat	July 24, 2018	August 14, 2033
US 10045963	United States	Amorphous Tecovirimat preparation	August 14, 2018	July 11, 2034
US 10045964	United States	Certain polymorphs of ST-246, method of preparation of the polymorphs and pharmaceutical compositions containing the polymorphs	August 14, 2018	March 23, 2031
US 10124071	United States	ST-246 liquid formulations and methods	November 13, 2018	August 2, 2031
US 10155723	United States	Methods of preparing Tecovirimat	December 18, 2018	August 14, 2033
SG 184201	Singapore	Certain polymorphs of ST-246, method of preparation of the polymorphs and pharmaceutical compositions containing the polymorphs	June 22, 2015	March 23, 2031
RU 2578606	Russia	Certain polymorphs of ST-246, method of preparation of the polymorphs and their use in treating orthopoxvirus	March 27, 2016	March 23, 2031
OA 16109	OAPI/Africa	Certain polymorphs of ST-246, method of preparation of the polymorphs and their use in treating orthopoxvirus	October 31, 2013	March 23, 2031
NZ 602578	New Zealand	Certain polymorphs of ST-246, method of preparation of the polymorphs and their use in treating orthopoxvirus	December 2, 2014	March 23, 2031

MX 326231	Mexico	Pharmaceutical compositions containing ST-246 and one or more additional ingredients and dosage unit forms containing ST-246	December 11, 2014	April 23, 2027
MX 348481	Mexico	Compounds, compositions and methods for treatment and prevention of orthopoxvirus infections and associated diseases	June 15, 2017	April 23, 2027
MX 347795	Mexico	ST-246 liquid formulations and methods	May 15, 2017	August 2, 2031
MX 361428	Mexico	Polymorphic forms of ST-246 and methods of preparation	December 6, 2018	March 23, 2031
KR 101868117	Korea	ST-246 liquid formulations and methods	June 8, 2018	August 2, 2031
JP 4884216	Japan	Therapeutic agent for treating orthopoxvirus including ST-246, pharmaceutical composition of matter for the ST-246 compound and method of manufacturing ST-246	December 16, 2011	June 18, 2024
JP 5657489	Japan	Method of manufacturing ST-246	December 5, 2014	June 18, 2024
JP 5898196	Japan	Liquid Pharmaceutical formulations containing ST-246	March 11, 2016	August 2, 2031
JP 6018041	Japan	Certain polymorphs of ST-246, method of preparation of the polymorphs and pharmaceutical compositions containing the polymorphs	October 7, 2016	March 23, 2031
JP 6188802	Japan	Methods of preparing Tecovirimat	August 10, 2017	August 14, 2033
JP 6444460	Japan	Methods of preparing Tecovirimat	December 7, 2018	August 14, 2033
CN 2011800245893	China	Certain polymorphs of ST-246, method of preparation of the polymorphs and pharmaceutical compositions containing the polymorphs	August 26, 2015	March 23, 2031
CN 2013800429237	China	Methods of preparing Tecovirimat	June 20, 2017	August 14, 2033
CA 2529761	Canada	Use of ST-246 to treat orthopoxvirus infection, pharmaceutical compositions containing ST-246 and composition of matter for the ST-246 compound	August 13, 2013	June 18, 2024
CA 2685153	Canada	Pharmaceutical compositions containing ST-246 and one or more additional ingredients and dosage unit forms containing ST-246	December 16, 2014	April 23, 2027
CA 2866037	Canada	Chemicals, compositions and methods for treatment and prevention of orthopoxvirus infections and associated diseases	May 16, 2017	April 23, 2027
CA 2807528	Canada	Liquid Pharmaceutical formulations containing ST-246	September 25, 2018	August 2, 2031
AU 2004249250	Australia	Method of treating orthopoxvirus infection, pharmaceutical composition containing ST-246 and composition of matter for the ST-246 compound	March 29, 2012	June 18, 2024
AU 2007351866	Australia	Pharmaceutical compositions containing ST-246 and one or more additional ingredients and dosage unit forms containing ST-246	January 10, 2013	June 18, 2024
AU 2011232551	Australia	Certain polymorphs of ST-246, method of preparation of the polymorphs and their use in treating orthopoxvirus	February 26, 2015	March 23, 2031
AU 2011285871	Australia	Liquid Pharmaceutical formulations containing ST-246	August 6, 2015	August 2, 2031
AU 2013302764	Australia	Methods of preparing Tecovirimat	April 5, 2018	August 14, 2033
AU 2012268859	Australia	Pharmaceutical compositions containing ST-246 and one or more additional ingredients and dosage unit forms containing ST-246	August 18, 2016	June 18, 2024
AU 2014290333	Australia	Amorphous Tecovirimat preparation	February 21, 2019	July 11, 2034
AP 3221	ARIPO*/Africa	Certain polymorphs of ST-246, method of preparation of the polymorphs and their use in treating orthopoxvirus	April 3, 2015	March 23, 2031
ZA 2012/07141	South Africa	Certain polymorphs of ST-246, method of preparation of the polymorphs and pharmaceutical compositions containing the polymorphs	June 29, 2016	March 23, 2031

ZA 2013/00930	South Africa	Liquid Pharmaceutical formulations containing ST-246	November 25, 2015	August 2, 2031
IL 201736	Israel	Pharmaceutical compositions containing ST-246 and one or more additional ingredients and dosage unit forms containing ST-246	October 1, 2016	April 23, 2027
IL 236944	Israel	Methods of preparing Tecovirimat	February 1, 2017	August 14, 2033
IL 242666	Israel	Compounds, compositions and methods for treatment and prevention of orthopoxvirus infections and associated diseases	December 1, 2018	April 23, 2027
AT 1638938	Austria	Compounds, compositions and methods for treatment and prevention of orthopoxvirus infections and associated diseases	April 12, 2017	June 18, 2024
BE 1638938	Belgium	Compounds, compositions and methods for treatment and prevention of orthopoxvirus infections and associated diseases	April 12, 2017	June 18, 2024
BE 2549871	Belgium	Polymorphic forms of ST-246	August 22, 2018	March 23, 2031
CH 1638938	Switzerland	Compounds, compositions and methods for treatment and prevention of orthopoxvirus infections and associated diseases	April 12, 2017	June 18, 2024
CH 2549871	Switzerland	Polymorphic forms of ST-246	August 22, 2018	March 23, 2031
DE 1638938	Germany	Compounds, compositions and methods for treatment and prevention of orthopoxvirus infections and associated diseases	April 12, 2017	June 18, 2024
DE 2549871	Germany	Polymorphic forms of ST-246	August 22, 2018	March 23, 2031
DE 2887938	Germany	Methods of preparing Tecovirimat	January 10, 2018	August 14, 2033
DK 1638938	Denmark	Compounds, compositions and methods for treatment and prevention of orthopoxvirus infections and associated diseases	April 12, 2017	June 18, 2024
DK 2549871	Denmark	Polymorphic forms of ST-246	August 22, 2018	March 23, 2031
ES 1638938	Spain	Compounds, compositions and methods for treatment and prevention of orthopoxvirus infections and associated diseases	April 12, 2017	June 18, 2024
FI 1638938	Finland	Compounds, compositions and methods for treatment and prevention of orthopoxvirus infections and associated diseases	April 12, 2017	June 18, 2024
FR 1638938	France	Compounds, compositions and methods for treatment and prevention of orthopoxvirus infections and associated diseases	April 12, 2017	June 18, 2024
FR 2887938	France	Methods of preparing Tecovirimat	January 10, 2018	August 14, 2033
FR 2549871	France	Polymorphic forms of ST-246	August 22, 2018	March 23, 2031
GB 1638938	United Kingdom	Compounds, compositions and methods for treatment and prevention of orthopoxvirus infections and associated diseases	April 12, 2017	June 18, 2024
GB 2887938	United Kingdom	Methods of preparing Tecovirimat	January 10, 2018	August 14, 2033
GB 2549871	United Kingdom	Polymorphic forms of ST-246	August 22, 2018	March 23, 2031
IE 1638938	Ireland	Compounds, compositions and methods for treatment and prevention of orthopoxvirus infections and associated diseases	April 12, 2017	June 18, 2024
IT 502017000078377	Italy	Compounds, compositions and methods for treatment and prevention of orthopoxvirus infections and associated diseases	April 12, 2017	June 18, 2024

NL 1638938	Netherlands	Compounds, compositions and methods for treatment and prevention of orthopoxvirus infections and associated diseases	April 12, 2017	June 18, 2024
PL 1638938	Poland	Compounds, compositions and methods for treatment and prevention of orthopoxvirus infections and associated diseases	April 12, 2017	June 18, 2024
SE 1638938	Sweden	Compounds, compositions and methods for treatment and prevention of orthopoxvirus infections and associated diseases	April 12, 2017	June 18, 2024

^ A Patent Term Extension Application is pending for US 7737168, which would change the expiration date from May 3, 2027 to September 4, 2031. A Patent Term Extension Application is also pending for US 8124643, which would change the expiration date from June 18, 2024 to December 13, 2027. In the event that both US 7737168 and US 8124643 are found to be eligible for a patent term extension, SIGA would only be able to elect one of the two patents for which the extension is sought and would elect to extend US 7737168.

* ARIPO has 19 member African States as follows: Botswana, The Gambia, Ghana, Kenya, Lesotho, Malawi, Mozambique, Namibia, Sierra Leone, Liberia, Rwanda, Sao Tome and Principe, Somalia, Sudan, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe.

In addition to the patents listed in the above chart, the principal and material patent applications covering TPOXX® include patent filings in multiple jurisdictions, including the United States, Europe, Asia, Africa, Australia, and other commercially significant markets. We hold 46 patent applications currently pending with respect to various compositions of TPOXX®, methods of manufacturing, methods of treatment, and dosage forms. Expiration dates for pending patent applications, if granted, will fall between 2024 and 2037.

FDA regulations require that patented drugs be sold under brand names that comply with various regulations. SIGA must develop and make efforts to protect these brand names for each of its products in order to avoid product piracy and to secure exclusive rights to these brand names. SIGA may expend substantial funds in developing and securing rights to adequate brand names for our products. SIGA currently has proprietary trademark rights in SIGA®, TPOXX® and other brands used by us in the United States and certain foreign countries, but we may have to develop additional trademark rights in order to comply with regulatory requirements. SIGA considers securing adequate trademark rights to be important to its business.

Government Regulation

Regulatory Approval Process

Regulation by governmental authorities in the United States and other countries is a significant factor in the manufacture and marketing of any biopharmaceutical product that we may develop. The nature and the extent to which such regulations may apply to us will vary depending on the nature of any particular product. Virtually all of our potential pharmaceutical products will require regulatory approval by governmental agencies prior to non-governmental commercialization. In particular, human therapeutic products are subject to rigorous pre-clinical and clinical testing and other approval procedures by the FDA and similar health authorities in foreign countries. Various federal statutes and regulations also govern or regulate the manufacturing, safety, labeling, storage, record keeping and marketing of such products. The process of obtaining these approvals and the subsequent compliance with appropriate federal and foreign statutes and regulations is complex and requires the expenditure of substantial resources.

In order to test clinically, and to manufacture and market products for diagnostic or therapeutic use, a company must comply with mandatory procedures and safety standards established by the FDA and comparable agencies in foreign countries. Before beginning human clinical testing of a potential new drug in the United States, a company must file an IND application and receive clearance from the FDA. An IND application is a summary of the pre-clinical studies that were conducted to characterize the drug, including toxicity and safety studies, information on the drug's composition and the manufacturing and quality control procedures used to produce the drug, as well as a discussion of the human clinical studies that are being proposed to evaluate the safety and efficacy of the product.

The pre-marketing clinical program required for approval by the FDA for a new drug typically involves a time-consuming and costly three-phase process. In Phase I, trials are conducted with a small number of healthy subjects to determine the early safety profile, the pattern of drug distribution, metabolism and elimination. In Phase II, trials are conducted with small groups of

patients afflicted with a target disease in order to determine preliminary efficacy, optimal dosages and expanded evidence of safety. In Phase III, large scale, multi-center comparative trials, which may include both controlled and uncontrolled studies, are conducted with patients afflicted with a target disease in order to provide enough data for statistical proof of efficacy and safety required by the FDA and other authorities. Additional trials may be required to evaluate how a new drug interacts with other drugs as well as if the drug has any impact on cardio-vascular or other potential risks.

The FDA closely monitors the progress of each of the three phases of clinical testing and may, in its discretion, reevaluate, alter, suspend or terminate the testing based on the data that have been accumulated to that point and its assessment of the risk/benefit ratio to the patients involved in the testing. Estimates of the total time typically required for carrying out such clinical testing vary between two and 10 years. Upon completion of such clinical testing, a company typically submits a new drug application ("NDA") to the FDA that summarizes the results and observations of the drug during the clinical testing. Based on its review of the NDA, the FDA will decide whether to approve the drug and whether to impose any marketing restrictions or require additional post-approval clinical studies. This review process can be quite lengthy, and approval for the production and marketing of a new pharmaceutical product can require a number of years and substantial funding. There can be no assurance that any approval will be granted on a timely basis, if at all.

The FDA amended its regulations, effective June 30, 2002, to include the “Animal Rule” in circumstances that would permit the typical clinical testing regime to approve certain new drug and biological products used to reduce or prevent the toxicity of chemical, biological, radiological, or nuclear agents not otherwise naturally present for use in humans based on evidence of safety in healthy subjects and evidence of effectiveness derived only from appropriate animal studies and any additional supporting data. The FDA has indicated that approval for therapeutic use of TPOXX® was determined under the “Animal Rule.”

Once the product is approved for sale, FDA regulations govern the manufacturing and marketing activities, and a post-marketing testing and surveillance program may be required to monitor a product’s usage and effects. Product approvals may be withdrawn if compliance with regulatory standards is not maintained. Many other countries in which products developed by us may be marketed impose similar regulatory processes.

FDA regulations also make available an alternative regulatory mechanism that may lead to use of the product under limited circumstances. The Emergency Use Authorization (“EUA”) authority allows the FDA Commissioner to strengthen the public health protections against biological, chemical, radiological and nuclear agents that may be used to attack the American people or the U.S. armed forces. Under this authority, the FDA Commissioner may allow medical countermeasures to be used in an emergency to diagnose, treat or prevent serious or life-threatening diseases or conditions caused by such agents when appropriate findings are made concerning the nature of the emergency, the availability of adequate and approved alternatives, and the quality of available data concerning the drug candidate under consideration for emergency use.

Legislation and Regulation Related to Bioterrorism Counteragents and Pandemic Preparedness

Because some of our drug candidates are intended for the treatment of diseases that may result from acts of bioterrorism or biowarfare or for pandemic preparedness, they may be subject to the specific legislation and regulation described below and elsewhere in this Annual Report on Form 10-K.

Project BioShield

Project BioShield and related 2006 federal legislation provide procedures for biodefense-related procurement and awarding of research grants, making it easier for the U.S. Department of Health and Human Services (“HHS”) to commit funds to countermeasure projects. Project BioShield provides alternative procedures under the Federal Acquisition Regulation, the general rubric for acquisition of goods and services by the U.S. government, for procuring property or services used in performing, administering or supporting biomedical countermeasure research and development. In addition, if the Secretary of HHS deems that there is a pressing need, Project BioShield authorizes the Secretary of HHS to use an expedited award process, rather than the normal peer review process, for grants, contracts and cooperative agreements related to biomedical countermeasure research and development activity.

Under Project BioShield, the Secretary of HHS, with the concurrence of the Secretary of the U.S. Department of Homeland Security and upon the approval of the President, can contract to purchase unapproved countermeasures for the Strategic Stockpile in specified circumstances. The U.S. Congress is notified of a recommendation for a Strategic Stockpile purchase after Presidential approval. Project BioShield specifies that a company supplying the countermeasure to the Strategic Stockpile is paid on delivery of a substantial portion of the countermeasure. To be eligible for purchase under these provisions, the Secretary of HHS must determine that there are sufficient and satisfactory clinical results or research data, including data, if available, from pre-clinical

and clinical trials, to support a reasonable conclusion that the countermeasure will qualify for approval or licensing within eight years. Project BioShield also allows the Secretary of HHS to authorize the emergency use of medical products that have not yet been approved by the FDA. To exercise this authority, the Secretary of HHS must conclude that:

- the agent for which the countermeasure is designed can cause serious or life-threatening disease;
- the product may reasonably be believed to be effective in detecting, diagnosing, treating or preventing the disease;
- the known and potential benefits of the product outweigh its known and potential risks; and
- there is no adequate alternative to a product that is approved and available.

Although this provision permits the Secretary of HHS to circumvent FDA approval (entirely, or in part) for procurement and use, its use in this manner would likely be limited to rare circumstances. Prior to the award of the BARDA Contract in May 2011, the Secretary of HHS concluded that TPOXX® would qualify within eight years for approval by the FDA for therapeutic use against smallpox.

Public Readiness and Emergency Preparedness Act

The Public Readiness and Emergency Preparedness Act (the "PREP Act"), provides immunity for manufacturers from claims under state or federal law for “loss” arising out of the administration or use of a “covered countermeasure” in the United States. However, injured persons may still bring a suit for “willful misconduct” against the manufacturer under some circumstances. “Covered countermeasures” include security countermeasures and “qualified pandemic or epidemic products,” including products intended to diagnose or treat pandemic or epidemic disease, as well as treatments intended to address conditions caused by such products. For these immunities to apply, the Secretary of HHS must issue a declaration in cases of public health emergency or “credible risk” of a future public health emergency. Since 2007, the Secretary of HHS has issued eight declarations under the PREP Act to protect from liability countermeasures that are necessary to prepare the nation for potential pandemics or epidemics, including a declaration on October 10, 2008 that provides immunity from tort liability as it relates to smallpox. The PREP Act was amended in 2015 to extend protection for smallpox and other countermeasures from December 31, 2015 to December 31, 2022.

Foreign Regulation

As noted above, in addition to regulations in the United States, we might be subject to a variety of foreign regulations governing clinical trials and commercial sales and distribution of our drug candidates. Even if we obtain FDA approval for a product, we may have to obtain approval of that product by the comparable regulatory authorities of foreign countries before we can commence clinical trials or marketing of the product in those countries. The actual time required to obtain clearance to market a product in a particular foreign jurisdiction varies substantially, based upon the type, complexity and novelty of the pharmaceutical drug candidate, the specific requirements of that jurisdiction, and in some countries whether the FDA has previously approved the drug for marketing. The requirements governing the conduct of clinical trials, marketing authorization, pricing and reimbursement vary from country to country. Certain foreign jurisdictions, including the European Union, have adopted certain biodefense-specific regulations akin to that available in the United States such as a procedure similar to the “Animal Rule” promulgated by the FDA for review and potential approval of biodefense products.

Regulations Regarding Government Contracting

The status of an organization as a government contractor in the United States and elsewhere means that the organization is also subject to various statutes and regulations, including the Federal Acquisition Regulation, which governs the procurement of goods and services by agencies of the United States. These governing statutes and regulations can impose stricter penalties than those normally applicable to commercial contracts, such as criminal and civil damages liability and suspension and debarment from future government contracting. In addition, pursuant to various statutes and regulations, government contracts can be subject to unilateral termination or modification by the government for convenience in the United States and elsewhere, detailed auditing requirements, statutorily controlled pricing, sourcing and subcontracting restrictions and statutorily mandated processes for adjudicating contract disputes.

Availability of Reports and Other Information

We file annual, quarterly, and current reports, proxy statements, and other documents with the SEC under the Securities Exchange Act of 1934. The public may read and copy any material that we file with the SEC at the SEC’s Public Reference Room

at 100 F Street, NE, Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at (800) SEC-0330. Also, the SEC maintains an Internet website that contains reports, proxy and information statements, and other information regarding issuers, including us, that file electronically with the SEC. The public can obtain any document that we file with or furnish to the SEC at www.sec.gov.

In addition, our website can be found on the internet at www.siga.com. The website contains information about us and our operations. Copies of each of our filings with the SEC on Form 10-K, Form 10-Q, and Form 8-K, and all amendments to those reports, can be viewed and downloaded free of charge as soon as reasonably practicable after the reports and amendments are electronically filed with or furnished to the SEC. To view the reports, access www.siga.com, click on "Investor Relations" and "Financial Information."

The following corporate governance related documents are also available on our website:

- Audit Committee Charter;
- Compensation Committee Charter;
- Nominating and Corporate Governance Committee Charter;
- Code of Ethics and Business Conduct;
- Procedure for Sending Communications to the Board of Directors;
- Procedures for Security Holder Submission of Nominating Recommendations;
- Policy on Confidentiality of Information and Securities Trading; and
- Conflict of Interest Policy.

To review these documents, access www.siga.com and click on "Investor Relations" and "Corporate Governance."

Any of the above documents can also be obtained in print by any shareholder upon request to the Secretary, SIGA Technologies, Inc., 31 E 62nd Street, 5th floor, New York, New York 10065.

Item 1A. Risk Factors

This report contains forward-looking statements and other prospective information relating to future events. These forward-looking statements and other information are subject to risks and uncertainties that could cause our actual results to differ materially from our historical results or currently anticipated results including the following:

Risks Related to Our Dependence on U.S. Government Contracts

U.S. government contracts require ongoing funding decisions by the government, and the majority of the potential revenue under the 2018 BARDA Contract is tied to options which may or may not be exercised, at the sole discretion of BARDA. Reduced or discontinued BARDA funding, or the non-exercise of contract options under the 2018 BARDA contract, could cause our business, financial condition and operating results, to suffer materially.

The funding of government programs, which fund BARDA's purchases under the 2018 BARDA Contract, is subject to Congressional appropriations, generally made on a fiscal year basis even though a program may continue for several years. Our government customers are subject to political considerations and budgetary constraints. Our government customers are also subject to uncertainties as to continued funding of their budgets.

Additionally, government-funded contracts typically consist of a base period of performance and options for the performance of certain future activities. The value of goods and services subject to options may constitute the majority of the total value of the underlying contract, as in the case of the 2018 BARDA Contract.

The 2018 BARDA Contract is primarily option-based, with more than 80% of contract value tied to options which are exercisable in the sole discretion of BARDA. There is no guarantee that any options will be exercised, or how many options will be exercised. If some or all of the options under the 2018 BARDA Contract are not exercised, whether because levels of government expenditures and authorizations for biodefense decrease or shift to programs other than those under which BARDA purchases are funded for any reason, our business, financial condition and operating results, our business development efforts or our product development efforts may suffer materially.

Government procurement contracts are mostly set at fixed prices and such pricing is based on estimates of the time, resources and expenses required to perform these contracts. If our estimates are not accurate, we may not be able to earn an adequate return or may incur a loss under these arrangements.

The remaining unexercised options under the 2018 BARDA Contract are predominately fixed-price. We expect that our future contracts with the U.S. government for TPOXX® as well as contracts for other biodefense product candidates would also be fixed-price arrangements. Under a fixed-price contract, we are required to deliver our products at a fixed price regardless of the actual costs we incur and to absorb any costs incurred in satisfaction of our obligations. Estimating costs that are related to performance in accordance with contract specifications can be difficult, particularly where the period of performance is over several years. Our failure to anticipate technical problems, estimate costs accurately or control costs during performance of a fixed-price contract could reduce the profitability of such contract or cause a loss, which could in turn negatively affect our operating results.

We expect future operating revenues to come primarily from contracts with BARDA for the provision and maintenance of the U.S. Government's stockpile of TPOXX®. If BARDA does not enter into additional contracts after the 2018 BARDA Contract to maintain or expand the stockpile of TPOXX®, our long-term business, financial condition and operating results could be materially harmed.

The success of our business and our operating results for the foreseeable future will be substantially dependent on the U.S. government's commitment to maintaining or expanding its stockpile of TPOXX®. Failure to secure and perform additional contracts after the 2018 BARDA Contract to maintain or expand the stockpile of TPOXX® could have a material adverse effect on our long-term business, financial condition and operating results. Additionally, the 2018 BARDA Contract does not necessarily increase the likelihood that we will secure future comparable contracts with the U.S. government.

The success of our business with the U.S. government depends on our compliance with laws, regulations and obligations under our U.S. government contracts and various federal statutes and authorities.

Our business with the U.S. government is subject to specific procurement regulations and a variety of other legal and compliance obligations. These laws and rules include those related to:

- procurement integrity;

- rates and pricing of services and goods to be reimbursed by the U.S. government;
- export control;
- government security regulations;
- employment practices;
- protection of the environment;
- accuracy of records and the recording and reporting of costs; and
- foreign corrupt practices.

Compliance with these obligations increases our performance and compliance costs. A finding that we have failed to comply with these regulations and requirements could lead to suspension or debarment, for cause, from government contracting or subcontracting for a period of time. The termination of a government contract or grant or relationship as a result of our failure to satisfy any of these obligations would have a material negative impact on our operations and harm our reputation and ability to procure other government contracts or grants in the future.

Unfavorable provisions in government contracts and grants, some of which may be customary, may harm our future business, financial condition and potential operating results.

Government contracts and grants customarily contain provisions that give the government substantial rights and remedies, many of which are not typically found in commercial contracts, including (but not limited to) provisions that allow the government to:

- terminate existing contracts or grants, in whole or in part, for any reason or no reason;
- unilaterally reduce or modify grants, contracts or subcontracts, including through the use of equitable price adjustments;
- cancel multi-year contracts or grants and related orders if funds for performance for any subsequent year become unavailable;
- decline to exercise an option to renew a contract or grant;
- exercise an option to purchase only the minimum amount specified in a contract or grant;
- decline to exercise an option to purchase the maximum amount specified in a contract or grant;
- claim rights to products, including intellectual property, developed under a contract or grant;
- take actions that result in a longer development timeline or higher costs than expected;
- suspend or debar the contractor from doing business with the government or a specific government agency due to regulatory or compliance failures;
- pursue criminal or civil remedies under the False Claims Act and the False Statements Accountability Act; and
- control or prohibit the export of products.

Generally, government contracts contain provisions permitting unilateral termination or modification, in whole or in part, at the government's convenience. Under general principles of government contracting law, if the government terminates a contract or grant for convenience, the terminated company may recover only its incurred or committed costs, settlement expenses and profit on work completed prior to the termination. If the government terminates a contract or grant for default, the defaulting company is entitled to recover costs incurred and associated profits on accepted items only and may be liable for excess costs incurred by

the government in procuring undelivered items from another source. Our government contracts and grants, including the 2018 BARDA Contract, could be terminated under these circumstances.

Some government contracts and grants permit the government the right to use, for or on behalf of the U.S. government, any technologies developed by the contractor under a government contract. For any technology we develop under a contract or grant with such a provision, we might not be able to prohibit third parties, including our competitors, from using that technology in providing products and services to the government.

Changing political or social factors and opposition, including protests and potential related litigation, may delay or impair our ability to market TPOXX® and any other biodefense product candidates and may require us to spend time and money to address these issues.

Products developed to treat diseases caused by or to combat the threat of bioterrorism or biowarfare will be subject to changing political and social environments. The political and social responses to bioterrorism and biowarfare have been unpredictable and much debated. Changes in the perception of the risk that military personnel or civilians could be exposed to biological agents as weapons of bioterrorism or biowarfare may delay or cause resistance to bringing investigational products to market or limit pricing or purchases of approved products, any of which could materially harm our business.

Lawsuits, publicity campaigns or other negative publicity may adversely affect the degree of market acceptance of, and thereby limit the demand for, TPOXX® and our biodefense product candidates. In such event, our ability to market and sell such products may be hindered, the commercial success of TPOXX® and other products we develop may be harmed and we may need to expend time, attention and resources addressing such legal or publicity issues, thereby reducing our revenues and having a material adverse impact on us.

A U.S. Government shutdown could negatively impact our business and liquidity

Each year, the U.S. Congress must pass all spending bills in the federal budget. If any such spending bill is not timely passed, a government shutdown may close many federally run operations, and halt work for federal employees unless they are considered essential or such work is separately funded by industry. If a government shutdown were to occur, we could experience a delay in contract funding decisions by the government. Additionally, we could be materially and permanently harmed by any prolonged government shutdown.

Risks Related to Sales of Biodefense Products to the U.S. Government

Our business could be adversely affected by a negative audit by the U.S. government.

U.S. government agencies such as the Defense Contract Audit Agency (the "DCAA"), routinely audit and investigate government contractors. These agencies review a contractor's performance under its contracts and grants, cost structure, and compliance with applicable laws, regulations and standards.

The DCAA also reviews the adequacy of, and a contractor's compliance with, its internal control systems and policies, including the contractor's purchasing, property, estimating, compensation and management information systems. Any cost found to be improperly allocated to a specific contract will not be reimbursed, and such costs already reimbursed must be refunded. If an audit uncovers improper or illegal activities, we may be subject to civil and criminal penalties and administrative sanctions, including:

- termination of contracts;
- forfeiture of profits;
- suspension of payments;
- fines; and
- suspension, debarment or prohibition from doing business with the U.S. government.

Such actions would also negatively affect our reputation.

Laws and regulations affecting government contracts and grants might make it more costly and difficult for us to conduct our business.

We must comply with numerous laws and regulations relating to the formation, administration and performance of government contracts and grants, which can make it more difficult for us to retain our rights under these contracts. These laws and regulations affect how we do business with federal, state and local governmental agencies. Among the most significant government contracting regulations that affect our business are:

- the Federal Acquisition Regulation and other agency-specific regulations supplemental to the Federal Acquisition Regulation, which comprehensively regulate the procurement, formation, administration and performance of government contracts;
- the business ethics and public integrity obligations, which govern conflicts of interest and the hiring of former government employees, restrict the granting of gratuities and funding of lobbying activities and incorporate other requirements such as the Anti-Kickback Act and the Foreign Corrupt Practices Act;
- export and import control laws and regulations; and
- laws, regulations and executive orders restricting the use and dissemination of information classified for national security purposes and the exportation of certain products and technical data.

Risks Related to Regulatory Approvals

If we are not able to obtain regulatory approvals for certain additional indications or formulations of TPOXX® from the FDA, we may not be able to realize the full benefits of any BARDA contracts and may not be able to commercialize such formulations or indications other than through sales to BARDA, and our ability to generate revenue could be materially impaired.

The development and full commercialization of additional indications or formulations of TPOXX® in the U.S., including the testing, manufacture, safety, efficacy, recordkeeping, labeling, storage, approval, advertising, promotion, sale and distribution, are subject to comprehensive regulation by the FDA and other regulatory agencies in the United States and by comparable authorities in other countries and jurisdictions. We could fail to achieve FDA or other regulatory approval of certain indications or formulations of TPOXX®, or there could be delays in such approval of TPOXX®, or the approved version of TPOXX® may differ from expectations. Failure to obtain regulatory approval of certain indications or formulations for TPOXX® may prevent us from fully commercializing TPOXX® in the United States other than through sales to BARDA under Project BioShield or from commercializing TPOXX® in other countries at all, and delays or alterations to regulatory applications could also have a material adverse effect on the Company.

Failure to obtain regulatory approval in international jurisdictions could prevent us from marketing our products abroad.

To market our products in the European Union and many other foreign jurisdictions, we may need to obtain separate regulatory approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and can involve additional testing. The time required to obtain approval may differ from that required to obtain FDA approval.

The foreign regulatory approval process may include all of the risks associated with obtaining FDA approval. We may not obtain foreign regulatory approvals on a timely basis, if at all. Approval by FDA does not ensure approval by regulatory authorities in other countries or jurisdictions, and approval by one foreign regulatory authority does not ensure approval by regulatory authorities in other foreign countries or jurisdictions or by the FDA. In addition, failure to obtain approval in one jurisdiction may impact our ability to obtain approval elsewhere. We may not be able to file for regulatory approvals and may not receive necessary approvals to commercialize our products in any non-U.S. market. If we fail to obtain the non-U.S. approvals required to market our product candidates outside the United States or if we fail to comply with applicable non-U.S. regulatory requirements, our target market may be reduced and our ability to realize the full market potential of our product candidates may be harmed and our business, financial condition, results of operations and prospects may be adversely affected.

Risks Related to Commercial Activities

Because we must obtain regulatory clearance or otherwise operate under strict legal requirements in order to manufacture and market our products in the U.S., we cannot predict whether or when we will be permitted to commercialize our products other than the oral formulation of TPOXX® for smallpox antiviral treatment.

While we have received FDA approval for oral TPOXX® for use in smallpox treatment, we have not received FDA approval for the IV formulation of TPOXX® or any other indications for TPOXX®. FDA approval is limited only to those conditions for which a product is demonstrated through clinical trials to be safe and efficacious as set forth in its approved product label. We cannot ensure that the IV formulation of TPOXX® or any other compound developed by us, alone or with others, will prove to be safe and efficacious in pre-clinical or clinical trials or animal efficacy studies, or that oral TPOXX® will prove to be safe and efficacious in pre-clinical or clinical trials or animal efficacy studies for other indications, nor whether all of the applicable regulatory requirements needed to receive full marketing clearance for other indications or other formulations will be met.

Our ability to grow our business may depend in part on our ability to achieve sales of TPOXX® to customers other than the U.S. government.

An element of our business strategy is to sell TPOXX® to customers other than the U.S. government. These potential customers include foreign governments, as well as state and local governments, non-governmental organizations focused on global health like the World Health Organization, health care institutions like hospitals (domestic and foreign) and certain large business organizations interested in protecting their employees against global threats and protecting first responders in cases of emergencies.

To the extent we seek such non-government sales in the U.S., we will need to meet additional regulatory requirements in light of the current labeling approved by the FDA for the Strategic Stockpile only.

The market for sales of TPOXX® to customers other than the U.S. government is undeveloped, and we may not be successful in generating meaningful sales of TPOXX®, if any, to these potential customers.

If we fail to increase our sales of TPOXX® to customers other than the U.S. government, our business and opportunities for growth could be limited.

If we are unable to expand our internal sales and marketing capabilities or enter into agreements with third parties with expertise in sales and marketing, we may be unable to generate cash flows from product sales to customers other than the U.S. government.

To achieve commercial success for any approved product, we may need to enhance our own sales and marketing capabilities, enter into collaborations with third parties able to perform these services or outsource these functions to third parties.

We currently employ a small, targeted group to support development and business activities related to TPOXX®. We plan to continue to do so and expect that we will use a similar approach for sales to the U.S. government of any other biodefense product candidates that we may successfully develop. If we are unable to adequately support our development and business activities, we may be unable to expand our sales of TPOXX® or other product candidates, which could have an adverse effect on our growth.

We may be required to perform additional clinical trials or change the labeling of TPOXX® if we or others identify side effects after we are on the market, which could harm future sales of such product.

If we or others identify side effects of any approved product, or if manufacturing problems occur:

- regulatory approval may be withdrawn;
- reformulation of our products, additional clinical trials or other testing or changes in labeling of our products may be required;
- changes to or re-approvals of manufacturing facilities used by SIGA may be required;
- sales of the affected products may drop significantly;
- our reputation in the marketplace may suffer; and
- lawsuits, including class action suits, may be brought against us.

Any of the above occurrences could harm or prevent future sales of the affected product or could increase the costs and expenses of commercializing and marketing these products.

The biopharmaceutical market in which we compete and will compete is highly competitive.

The biopharmaceutical industry is characterized by rapid and significant technological change. Our success will depend on our ability to develop and apply our technologies in the design and development of our product candidates and to establish and maintain a market for our product candidates. In addition, there are many companies, both public and private, including major pharmaceutical and chemical companies, specialized biotechnology firms, universities and other research institutions engaged in developing pharmaceutical and biotechnology products. Many of these companies have substantially greater financial, technical, research and development resources, and human resources than us. Competitors may develop products or other technologies that are more effective than any that are being developed by us or may obtain FDA approval for products more rapidly than us. If we commence commercial sales of products, we still must compete in the manufacturing and marketing of such products, areas in which it is very difficult to succeed and in which we have limited experience and in which we are partially dependent on third parties. Many potential competitors have manufacturing facilities and established marketing capabilities that would enable such companies to market competing products through existing channels of distribution which could provide a substantial advantage.

Product liability lawsuits could cause us to incur liabilities, which could be substantial, and require us to limit commercialization of any products that we may develop.

We face an inherent business risk related to the sale of TPOXX® and any other products that we successfully develop and the testing of our product candidates in clinical trials.

TPOXX® is currently identified as a covered countermeasure under the PREP Act declaration issued in October 2008, as amended, which provides us with substantial immunity with respect to the manufacture, administration or use of TPOXX®. Under our BARDA Contracts, the U.S. government should indemnify us against claims by third parties for death, personal injury and other damages related to TPOXX®, including reasonable litigation and settlement costs, to the extent that the claim or loss results from specified risks not covered by insurance or caused by our grossly negligent or criminal behavior. The collection process under the PREP Act can be lengthy and complicated, and there is no guarantee that we will be able to recover these amounts from the U.S. government.

If we cannot successfully defend ourselves against future claims that our product or product candidates caused injuries and we are not entitled to or able to obtain indemnity by the U.S. government with respect to such claims, or if the U.S. government does not honor its indemnification obligations, we may incur liabilities, which could be substantial. Regardless of merit or eventual outcome, product liability claims may result in:

- decreased demand for any product candidate or product that we may develop;
- injury to our reputation;
- withdrawal of a product from the market;
- costs and management time and focus to defend the related litigation;
- substantial monetary awards to trial participants or patients;
- loss of revenue;
- harm to our reputation; and
- the inability to commercialize any products that we may develop.

We currently have product liability insurance with coverage up to a $10 million annual aggregate limit and a $10 million per occurrence limit. The amount of insurance that we currently hold may not be adequate to cover all liabilities that may occur. Product liability insurance is difficult to obtain and increasingly expensive. We may not be able to maintain insurance coverage at a reasonable cost and we may not be able to maintain or obtain insurance coverage that will be adequate to satisfy any liability that may arise.

Additionally, a successful product liability claim or series of claims brought against us could cause our stock price to fall, could decrease our financial resources and materially exhaust our existing insurance or limit our ability to obtain insurance going forward, all of which would materially adversely affect our business.

If we seek to sell TPOXX® to non-government customers, healthcare reform and controls on healthcare spending may limit the price we charge for our products and the amounts that we can sell.

There have been a number of legislative and regulatory proposals in the United States to change the health care system in ways that could affect our ability to sell our products profitably if we seek to sell TPOXX® to non-government customers. One enacted proposal, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010 (collectively, the "Healthcare Reform Act"), substantially changed the way healthcare is financed by both governmental and private insurers and could have a substantial effect on the pharmaceutical industry. The Healthcare Reform Act contains a number of provisions, including those governing enrollment in federal healthcare programs like Medicare, reimbursement changes and rules protecting against fraud and abuse, that will change existing healthcare programs and will result in the development of new programs, including Medicare payment for performance initiatives and improvements to the physician quality reporting system and feedback program. If we obtain marketing approval sale of TPOXX® beyond the Strategic Stockpile, it is possible that some of our revenue may be derived from governmental healthcare programs, including Medicare. Furthermore, beginning in 2011, the Healthcare Reform Act imposed a non-deductible excise tax on pharmaceutical manufacturers or importers who sell "branded prescription drugs," which includes innovator drugs and biologics (excluding orphan drugs or generics) to U.S. government programs. The Healthcare Reform Act and other healthcare reform measures that may be adopted in the future could have an adverse effect on our industry generally and potential future sales and profitability of our current or future products specifically.

Laws and regulations governing international operations may preclude us from developing, manufacturing and selling certain product candidates outside of the United States and require us to revise and implement costly compliance programs.

If we expand our operations outside of the United States, we must comply with numerous laws and regulations relating to business operations in each jurisdiction in which we plan to operate. The creation and implementation of international business practices and compliance programs may be costly and such programs can be difficult to enforce, particularly where reliance on third parties is required.

The Foreign Corrupt Practices Act, or FCPA, prohibits any U.S. individual or business from paying, offering, or authorizing payment or offering of anything of value, directly or indirectly, to any foreign official, political party or candidate for the purpose of influencing any act or decision of the foreign entity in order to assist the individual or business in obtaining or retaining business. The FCPA also obligates companies whose securities are listed in the United States to comply with certain accounting provisions requiring the Company to maintain books and records that accurately and fairly reflect all transactions of the corporation, including international subsidiaries, and to devise and maintain an adequate system of internal accounting controls for international operations. The anti-bribery provisions of the FCPA are enforced primarily by the U.S. Department of Justice. The SEC is involved with enforcement of the books and records provisions of the FCPA.

If we expand our operations outside of the U.S., compliance with the FCPA may be expensive and can be difficult, particularly in countries in which corruption is a recognized problem. In addition, the FCPA presents particular challenges in the pharmaceutical industry, because, in many countries, hospitals are operated by the government, and doctors and other hospital employees are considered foreign officials. Certain payments to hospitals in connection with clinical studies and other work have been deemed to be improper payments to government officials and have led to FCPA enforcement actions. In addition, biodefense companies like SIGA often sell their products directly to foreign governments.

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

The failure to comply with laws governing international business practices may result in substantial penalties, including suspension or debarment from government contracting. Violation of the FCPA can result in significant civil and criminal penalties that can be levied on the Company and its executives.

Indictment alone under the FCPA can lead to suspension of the right to do business with the U.S. government until the pending claims are resolved. Conviction of a violation of the FCPA can result in long-term disqualification as a government contractor. The termination of a government contract or relationship as a result of our failure to satisfy any of our obligations under laws governing international business practices could have a material negative impact on our operations and harm our reputation and ability to procure government contracts. The SEC also may suspend or bar issuers from trading securities on United States exchanges for violations of the FCPA's accounting provisions.

Other countries such as the UK have anti-bribery laws similar to or more expansive in scope than the FCPA which may be applicable to our operations if we expand outside the U.S.

Risks Related to Product Development

Growth of our business may be impacted significantly by our success in completing development and commercialization of drug candidates, or additional indications for TPOXX®. If we are unable to commercialize new drug candidates or additional indications, or experience significant delays in doing so, our business may be materially harmed.

We have invested a substantial amount of our efforts and financial resources in the development of our drug candidates. Our ability to generate near-term cash flows is primarily dependent on the success of our smallpox antiviral drug TPOXX®, which has only been approved by the FDA in oral form. The commercial success of our current and future drug candidates, or additional indications for TPOXX®, will depend on many factors, including:

- successful development, formulation and cGMP scale-up of drug manufacturing that meets FDA requirements;
- successful development of animal models;
- successful completion of non-clinical development, including studies in approved animal models;
- our ability to pay the expense of filing, prosecuting, defending and enforcing patent claims and other intellectual property rights;
- successful completion of clinical trials;
- receipt of marketing approvals from FDA for IV TPOXX® and similar foreign regulatory authorities;
- establishing arrangements on reasonable terms with suppliers and contract manufacturers;
- manufacturing stable commercial supplies of drug candidates, including availability of raw materials;
- launching commercial sales of the product, whether alone or in collaboration with others; and
- acceptance of the product by potential government customers, public health experts, physicians, patients, healthcare payors and others in the medical community.

We may rely on FDA regulations known as the "Animal Rule" to obtain approval for most of our biodefense drug candidates. The Animal Rule permits the use of animal efficacy studies together with human clinical safety trials to support an application for marketing approval. These regulations are relied upon only occasionally. It is possible that results from these animal efficacy studies may not be predictive of the actual efficacy of our drug candidates in humans. If we are not successful in completing the development and commercialization of our drug candidates, whether due to our efforts or due to concerns raised by our governmental regulators or customers, our business could be materially adversely harmed.

We may not be able to fully commercialize the IV formulation of TPOXX®, or other additional indications for TPOXX®, if our clinical trials do not demonstrate adequate safety or our animal studies do not demonstrate adequate efficacy.

Before obtaining regulatory approval for the sale of our drug candidates, extensive development is required. The goal of development is to use clinical studies to demonstrate the safety of our drug candidates and animal trials to demonstrate the efficacy of our drug candidates. Clinical trials and animal studies, and related work, are expensive, difficult to design and implement, can take many years to complete and are uncertain as to outcome. Success in pre-clinical testing and early clinical trials does not ensure that later clinical trials or animal efficacy studies will be successful, and interim results of a clinical trial or animal efficacy study do not necessarily predict final results.

A failure of one or more of our clinical trials or animal efficacy studies can occur at any stage of development. We may experience numerous unforeseen events during, or as a result of, pre-clinical testing and the clinical trial or animal efficacy study process that could delay or prevent our ability to receive regulatory approval or commercialize our drug candidates, including:

- regulators or institutional review boards may not authorize us to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- we may decide, or regulators may require us, to conduct additional pre-clinical testing or clinical trials, or we may abandon projects that we expect to be promising, if our pre-clinical tests, clinical trials or animal efficacy studies produce negative or inconclusive results;
- we might have to suspend or terminate our clinical trials if the participants are being exposed to unacceptable health risks;
- regulators or institutional review boards may require that we hold, suspend or terminate clinical development for various reasons, including noncompliance with regulatory requirements;
- the cost of our clinical trials could escalate and become cost prohibitive;
- our governmental regulators may impose requirements on clinical trials, pre-clinical trials or animal efficacy studies that we cannot meet or that may prohibit or limit our ability to perform or complete the necessary testing in order to obtain regulatory approval;
- any regulatory approval we ultimately obtain may be limited or subject to restrictions or post-approval commitments that render the product not commercially viable;
- we may not be successful in recruiting a sufficient number of qualifying subjects for our clinical trials; or
- the effects of our drug candidates may not be the desired effects or may include undesirable side effects or the drug candidates may have other unexpected characteristics;
- the costs, regulations, or challenges associated with animal studies may increase and make our studies more difficult.

IV TPOXX® is currently in product development and there can be no assurance of successful commercialization beyond the 2018 BARDA contract.

The fact that the FDA has approved the oral formulation of TPOXX® does not guarantee that our approach to drug development will be effective or will result in the successful commercialization of any other drug, the IV formulation of TPOXX® or any new indication of TPOXX®. We cannot predict with certainty whether any other drug candidate or expanded indication resulting from our research and development efforts will be approved by the FDA.

All of our potential drug candidates are prone to the risks of failure inherent in pharmaceutical product development, including the possibility that our drug candidates will not or cannot:

- be shown to be safe, non-toxic and effective;
- otherwise meet applicable regulatory standards;
- receive the necessary regulatory approvals;
- develop into commercially viable drugs;
- be manufactured or produced economically and on a large scale;
- be successfully marketed;
- be paid for by governmental procurers or be reimbursed by governmental or private insurers; or
- achieve customer acceptance.

In addition, third parties may seek to preclude us from marketing our drugs through enforcement of their proprietary or intellectual property rights that we are not aware of, or third parties may succeed in marketing equivalent or superior drug products that do not infringe our intellectual property. Our failure to develop safe, commercially viable future drug candidates or obtain approval

for expanded indications and formulations of TPOXX® would have a material adverse effect on our ability to grow our business, and impair our financial condition and operations.

Risks Related to Our Dependence on Third Parties

If third parties on whom we rely for manufacturing and raw materials of TPOXX®, and managing our inventory, do not perform as contractually required or as we expect, we may not be able to successfully satisfy our obligations under the 2018 BARDA Contract and our business would suffer.

We currently rely on third-party manufacturers and service providers to provide raw materials and manufacture TPOXX®. Under the 2018 BARDA Contract, we are responsible for the performance of these third-party contracts, and our contracts with these third parties give us certain supervisory and quality control rights, but we do not exercise day-to-day control over their activities.

Additionally, we may rely on a third party provider, or multiple providers, to store a portion of the stockpile of IV TPOXX® under the 2018 BARDA Contract, entrusting this vendor with the care and handling of a substantial portion of our inventory of IV TPOXX®.

If a third party provider fails to comply with applicable laws and regulations, fails to meet expected deadlines, experiences shortages or delays, or otherwise does not carry out its contractual duties to us, or encounters physical damage or natural disaster at its facilities, our ability to meet our obligations under the 2018 BARDA Contract could be significantly impaired. We do not currently have the internal capacity to perform these important functions, and we may not be able to maintain commercial arrangements for these services on reasonable terms.

Our reliance on third parties that we do not control does not relieve us of the responsibilities and requirements imposed by the 2018 BARDA Contract. Third parties may not complete activities on schedule, or may not conduct trials in accordance with regulatory requirements or our stated protocols. The failure of these third parties to carry out their obligations could delay or prevent the development, approval and commercialization of IV TPOXX® or other drug candidates.

Risks Related to Manufacturing and Manufacturing Facilities

Problems related to large-scale commercial manufacturing could cause us to delay product launches, an increase in costs or shortages of products.

Manufacturing API and finished drug products, especially in large quantities, is complex. Our drug candidates require several manufacturing steps at multiple facilities, and may involve complex techniques to assure quality and sufficient quantity, especially as the manufacturing scale increases. Our products must be made consistently and in compliance with a clearly defined manufacturing process. Accordingly, it is essential to be able to validate and control the manufacturing process to assure that it is reproducible. Slight deviations anywhere in the manufacturing process, including obtaining materials, filling, labeling, packaging, storage, shipping, quality control and testing, some of which all pharmaceutical companies, including SIGA, experience from time to time, may result in lot failures, delay in the release of lots, product recalls or spoilage. Success rates can vary dramatically at different stages of the manufacturing process, which can lower yields and increase costs. We may experience deviations in the manufacturing process that may take significant time and resources to resolve and, if unresolved, may affect manufacturing output and/or cause us to fail to satisfy contractual commitments, lead to delays in our clinical trials or result in litigation or regulatory action. Such actions would hinder our ability to meet contractual obligations and could cause material adverse consequences for our business.

If third parties do not manufacture our drug candidates or products in sufficient quantities and at an acceptable cost or in compliance with regulatory or contractual requirements and specifications, the fulfillment of contractual requirements under the 2018 BARDA contract, or any other procurement contract, or the development of our drug candidates could be delayed, prevented or impaired.

We currently rely on third parties to manufacture drug candidates, including TPOXX®. Any significant delay in obtaining adequate supplies of our drug candidates could adversely affect our ability to develop drug candidates or perform commercial contracts. If our contract manufacturers are unable to generate enough materials to meet commercial obligations or satisfy clinical needs, the success of drug products may be jeopardized. Our current and anticipated future dependence upon others for the manufacture of our drug candidates may adversely affect our ability to develop drug candidates and perform on commercial contracts on a timely and competitive basis. If our third party manufacturers' production processes malfunction or contaminate

our drug supplies during manufacturing, we may incur significant inventory loss that may not be covered by our contractual provisions or insurance policies.

We currently rely on third parties to demonstrate regulatory compliance, for regulatory and science support and for quality assurance with respect to the drug candidates manufactured for us. We intend to continue to rely on these third parties for these purposes with respect to production of commercial supplies of drugs that we successfully develop. Manufacturers are subject to ongoing, periodic, unannounced inspection by the FDA and corresponding state and foreign agencies or their designees to ensure strict compliance with applicable laws and regulations.

We cannot be certain that our present or future manufacturers will be able to comply with these regulations and other FDA regulatory requirements or similar regulatory requirements outside the U.S. Our contracts and grants call for compliance with all applicable legal and regulatory requirements, however, we do not control third-party manufacturers and their methods for ensuring adherence to regulatory and legal standards. If we or these third parties fail to comply with applicable regulations, sanctions could be imposed on us which could significantly delay and adversely affect supplies of our drug candidates.

Our activities may involve hazardous materials, use of which may subject us to environmental regulatory liabilities.

Our biopharmaceutical research and development sometimes may involve the use of hazardous and radioactive materials and generation of biological waste. We are subject to federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of these materials and certain waste products. Although we believe that our CMO's safety procedures for handling and disposing of these materials comply with legally prescribed standards, the risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of an accident, we could be held liable for damages, and this liability could exceed our resources. We use through third parties, for example, small amounts of radioactive isotopes commonly used in pharmaceutical research, which are stored, used and disposed of in accordance with Nuclear Regulatory Commission regulations. Our general liability policy provides coverage up to annual aggregate limits of $2 million and coverage of $2 million per occurrence.

We believe that we are in compliance in all material respects with applicable environmental laws and regulations and currently do not expect to make material additional capital expenditures for environmental control facilities in the near term. However, we may have to incur significant costs to comply with current or future environmental laws and regulations.

Risks Related to Our Business

We could incur net losses in the future if options are not exercised under the 2018 BARDA Contract.

While our current cash position is strong, our ability to continue to fund future operations will be substantially impacted by cash flows from the 2018 BARDA Contract, which may not be sufficient if BARDA elects, in its sole discretion, not to exercise some or all of the options under the 2018 BARDA Contract. Given the nature of option-based government contracts, we cannot guarantee that we can sustain or enhance our current level of operations. Cash flows could fluctuate significantly and could be delayed from one quarter to another based on several factors. As such, if cash flows from the 2018 BARDA Contract are different from expectations, or if operating expenses or other expenses exceed our expectations or cannot be adjusted accordingly, then our business, results of operations, and financial condition could be materially and adversely affected.

Future acquisitions, strategic investments, partnerships or alliances could be difficult to identify and integrate, divert the attention of management, disrupt our business, dilute stockholder value and adversely affect our operating results and financial condition.

We may in the future seek to acquire or invest in businesses, products or technologies that we believe could complement or expand our services, enhance our technical capabilities or otherwise offer growth opportunities. The pursuit of potential acquisitions may divert the attention of management and cause us to incur various expenses in identifying, investigating and pursuing businesses. In addition, we may not be able to find and identify desirable acquisition targets or be successful in entering into an agreement with any particular target or consummating any such agreement. Even if we do consummate an agreement, we may not be able to integrate successfully the acquired personnel, operations and technologies, or effectively manage the combined business following the acquisitions. Acquisitions could also result in dilutive issuances of equity securities or the issuance of debt, which could adversely affect our operating results. In addition, if an acquired business fails to meet our expectations, our operating results, business and financial condition may suffer.

Our business and operations would suffer in the event of computer system failures, cyber-attacks or a deficiency in our cyber-security.

Despite the implementation of security measures, our internal computer systems, and those of third parties on which we rely, are vulnerable to damage from computer viruses, malware, natural disasters, terrorism, war, telecommunication and electrical failures, cyber-attacks or cyber-intrusions over the Internet, attachments to emails, persons inside our organization or persons with access to systems inside our organization. The risk of a security breach or disruption, particularly through cyber-attacks or cyber-intrusion, including by computer hackers, foreign governments and cyber terrorists, has generally increased as the number, intensity and sophistication of attempted attacks and intrusions from around the world have increased. If such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our drug development programs. For example, the loss of clinical trial data from completed or ongoing or planned clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. Also, confidential patient and other information may be compromised in a cyber-attack or cyber-intrusion. To the extent that any disruption or security breach was to result in a loss of or damage to our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur material legal claims and liability, damage to our reputation, and the further development of our drug candidates could be delayed.

The loss of key personnel or our ability to recruit or retain qualified personnel could adversely affect our results of operations.

We rely upon the ability, expertise, judgment, discretion, integrity and good faith of our senior management team. Our success is dependent upon our personnel and our ability to recruit and train high quality employees. We must continue to recruit, retain and motivate management and other employees sufficient to maintain our current business and support our projected growth. The loss of services of any of our key management could have a material adverse effect on our business.

Our future success depends on our ability to retain our chief executive officer and other key executives and to attract, retain and motivate qualified personnel. The loss of the services of any key executive might impede the achievement of our research, development and commercial objectives. Replacing key employees may be difficult and time-consuming because of the limited number of individuals in our industry with the skills and experiences required to develop, gain regulatory approval of and commercialize our product candidates successfully. We generally do not maintain key person life insurance to cover the loss of any of our employees. Recruiting and retaining qualified scientific personnel, clinical personnel and business development personnel will also be critical to our success. We may not be able to attract and retain these personnel on acceptable terms, if at all, given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. We also experience competition for the hiring of scientific and clinical personnel from other companies, universities and research institutions. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development, regulatory and commercialization strategy. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us.

We may have difficulty managing our growth.

Potential future growth could place a significant strain on our management and operations. Our ability to manage any future growth will depend upon our ability to broaden our management team and our ability to attract, hire and retain skilled employees. Our success will also depend on the ability of our officers and key employees to continue to implement and improve our operational and other systems and to hire, train and manage our employees.

Our ability to use our net operating loss carryforwards may be limited.

As of December 31, 2018, we had federal net operating loss carryforwards, or NOLs, of $40.3 million to offset future taxable income. The remaining NOLs expire in 2036, if not utilized. Under the provisions of the Internal Revenue Code, substantial changes in our ownership, in certain circumstances, will limit the amount of NOLs that can be utilized annually in the future to offset taxable income. In particular, section 382 of the Internal Revenue Code imposes a limitation on a company's ability to use NOLs if the company experiences a more-than-50% ownership change over a three-year period. If we are limited in our ability to use our NOLs in future years in which we have taxable income, we may be required to pay more taxes than if we were able to utilize our NOLs fully.

Risks Related to Our Intellectual Property

Our ability to compete may decrease if we do not adequately protect our intellectual property rights.

Our commercial success will depend in part on our ability to obtain and maintain patent protection for our proprietary technologies, drug targets and potential products and to preserve our trade secrets and trademark rights. Because of the substantial length of time and expense associated with bringing potential products through the development and regulatory clearance processes to reach the marketplace, the pharmaceutical industry places considerable importance on obtaining patent and trade secret protection. The patent positions of pharmaceutical and biotechnology companies can be highly uncertain and involve complex legal and factual questions. No consistent policy regarding the breadth of claims allowed in biotechnology patents worldwide has emerged to date. Accordingly, we cannot predict the type and breadth of claims allowed in patents covering our products.

SIGA exclusively owns its key patent portfolios, which relate to its leading drug candidate TPOXX® (also known as ST-246, tecovirimat). As of February 28, 2019, the TPOXX® patent portfolio has seven patent families consisting of 21 U.S. utility patents, 57 issued foreign patents, five U.S. utility patent applications, and 41 foreign patent applications.

We also rely on trade secrets, know-how, continuing technological innovation and licensing opportunities. In an effort to maintain the confidentiality and ownership of trade secrets and proprietary information, we require our employees, consultants and some collaborators to execute confidentiality and invention assignment agreements upon commencement of a relationship with us. These agreements may not provide meaningful protection for our trade secrets, confidential information or inventions in the event of unauthorized use or disclosure of such information, and adequate remedies may not exist in the event of such unauthorized use or disclosure.

If our technologies are alleged or found to infringe the patents or proprietary rights of others, we may be sued, we may have to pay damages or be barred from pursuing a technology, or we may have to license those rights and pay royalties to or from others on unfavorable terms. If we are sued, even if we prevail, such litigation may be costly.

Our commercial success will depend significantly on our ability to operate without infringing the patents or proprietary rights of third parties. Our technologies, or the technologies of third parties on which we may depend, may infringe the patents or proprietary rights of others. If there is an adverse outcome in any dispute concerning rights to these technologies, then we could be subject to significant liability, required to license disputed rights from or to other parties and/or required to cease using a technology necessary to carry out our research, development and commercialization activities.

If our patents are challenged and found to be invalid or unenforceable, the value of our products could be harmed, and we could be subject to competition earlier than we anticipated.

The costs to establish or defend against claims of infringement or interference with patents or other proprietary rights can be expensive and time-consuming, even if the outcome is favorable. An outcome of any patent or proprietary rights administrative proceeding or litigation that is unfavorable to us may have a material adverse effect on us. We could incur substantial costs if we are required to defend ourselves in suits brought by third parties or if we initiate such suits. We may not have sufficient funds or resources in the event of litigation. Additionally, we may not prevail in any such action and such litigation often takes years to resolve creating business uncertainty if we are not able to resolve it quickly.

Any dispute resulting from claims based on patents and proprietary rights could result in a significant reduction in the coverage of the patents or proprietary rights owned, optioned by or licensed to us and limit our ability to obtain meaningful protection for our rights. If patents are issued to third parties that contain competitive or conflicting claims, we may be legally prohibited from researching, developing or commercializing potential products or be required to obtain licenses to these patents that carry royalty payments or to develop or obtain alternative technology. We may be legally prohibited from using technology owned by others, may not be able to obtain any license to the patents or technologies of third parties on acceptable terms, if at all, or may not be able to obtain or develop alternative technologies.

Furthermore, like many biopharmaceutical companies, we may from time to time hire scientific personnel formerly employed by other companies involved in one or more areas similar to the activities conducted by us. It is possible that we and/or these individuals may be subject to allegations of trade secret misappropriation or other similar claims as a result of their prior affiliations.

Risks Related to Our Financial Position and Need for Additional Financing

We may need additional funding, which may not be available to us, and which may force us to delay, reduce or eliminate any of our product development programs or commercial efforts.

While we have raised funds through credit facilities and the issuance of new equity or the exercise of options or warrants in the past, there is no guarantee that we will continue to be successful in raising such funds should we need to seek to do so. If

we are unable to raise additional funds, we could be forced to discontinue, cease or limit certain operations and equity investors could experience significant or total losses of their investments. Our cash flows may fall short of our projections or be delayed, or our expenses may increase, which could result in our capital being consumed significantly faster than anticipated.

Although our current cash position is strong, we may require additional financing and we may not be able to raise additional funds. If we are able to obtain additional financing through the sale of equity or convertible debt securities, such sales may contain terms, such as liquidation and other preferences that are not favorable to us or our stockholders. If we raise additional funds through collaboration and licensing arrangements with third parties, it may be necessary to relinquish valuable rights to our technologies or product candidates or grant licenses on terms that may not be favorable to us. Debt financing arrangements, if available, may require us to pledge certain assets or enter into covenants that would restrict our business activities or our ability to incur further indebtedness and may be at interest rates and contain other terms that are not favorable to our stockholders.

Indebtedness may make it more difficult to obtain additional financing or reduce our flexibility to act in our best interests, and default on our indebtedness would have a material adverse effect on our business, financial condition and results of operations.

The level of our indebtedness under our $80.0 million loan and security agreement dated September 2, 2016 (as amended from time to time, the "Loan Agreement") with OCM Strategic Credit SIGTEC Holdings, LLC ("Lender), could affect us by: making it more difficult to obtain additional financing for working capital, capital expenditures, debt service requirements or other purposes; shortening the duration of available revolving credit because lenders may seek to avoid conflicting maturity dates; constraining our ability to react quickly in an unfavorable economic climate or to changes in our business or the pharmaceutical industry; or potentially requiring the dedication of substantial amounts to service the repayment of outstanding debt, including periodic interest payments, thereby reducing the amount of cash available for other purposes. In addition, the Loan Agreement contains customary covenants which could impact our ability to obtain additional financing and restrict our flexibility in carrying out our business strategy.

Under the Loan Agreement, we are obligated to make periodic interest payments on the outstanding principal amount. Any accrued and unpaid interest or unpaid principal will be due on the maturity date of the loan (November 16, 2020). If we do not generate sufficient operating cash flows to fund these payments or obtain additional funding from external sources at acceptable terms, we may not have sufficient funds to satisfy our principal and interest payment obligations when those obligations are due, which would place us into default under the terms of the Loan Agreement (as further described below).

The Loan Agreement contains customary representations and warranties and customary affirmative and negative covenants. These covenants, among other things, require a minimum cash balance throughout the term of the loan under the Loan Agreement and the achievement of regulatory milestones by certain dates, and contain certain limitations on the ability of the Company to incur unreimbursed research and development expenditures over a certain threshold, make capital expenditures over a certain threshold, incur indebtedness, dispose of assets outside of the ordinary course of business and enter into certain merger or consolidation transactions. These covenants could impact our ability to obtain additional financing and restrict our flexibility in carrying out our business strategy.

The Loan Agreement includes customary events of default, including, among others: (i) non-payment of amounts due thereunder, (ii) the material inaccuracy of representations or warranties made thereunder, (iii) non-compliance with covenants thereunder, (iv) non-payment of amounts due under, or the acceleration of, other material indebtedness of the Company and (v) bankruptcy or insolvency events. Such default would have a material adverse effect on our business, financial condition and results of operations. Upon the occurrence and during the continuance of an event of default under the Loan Agreement, the interest rate may increase by 2.00% per annum above the rate of interest otherwise in effect, and the Lender would be entitled to accelerate the maturity of the Company's outstanding obligations thereunder. In addition, our indebtedness under the Loan Agreement is secured by a first priority lien on all of our existing and after-acquired property, including intellectual property. If we default on our obligations under the Loan Agreement, the Lender could foreclose on our assets.

We may issue additional debt or incur other types of indebtedness in the future, subject to compliance with the terms of the Loan Agreement, and such additional indebtedness may carry with it similar risks.

Risks Related to Our Common Stock

Our stock price is, and we expect it to remain, volatile, which could limit investors' ability to sell stock at a profit.

The volatile price of our stock makes it difficult for investors to predict the value of their investments, to sell shares at a profit at any given time, or to plan purchases and sales in advance. A variety of factors may affect the market price of our common stock. These include, but are not limited to:

- publicity regarding actual or potential clinical or animal test results relating to products under development by our competitors or us;
- initiating, completing or analyzing, or a delay or failure in initiating, completing or analyzing, pre-clinical or clinical trials or animal trials or the design or results of these trials for products in development;
- achievement or rejection of regulatory approvals for products in development by our competitors or us;
- announcements of technological innovations or new commercial products by our competitors or us;
- developments concerning our collaborations and supply chain;
- regulatory developments in the United States and foreign countries;
- economic or other crises and other external factors;
- period-to-period fluctuations in our revenues and other results of operations;
- changes in financial estimates by securities analysts; or
- publicity or activity involving possible future acquisitions, strategic investments, partnerships or alliances.

Additionally, because the volume of trading in our stock fluctuates significantly at times, any information about us in the media or public domain may result in significant volatility in our stock price.

We will not be able to control many of these factors, and we believe that period-to-period comparisons of our financial results will not necessarily be indicative of our future performance.

In addition, the stock market in general, and the market for biotechnology companies in particular, has experienced extreme price and volume fluctuations that may have been unrelated or disproportionate to the operating performance of individual companies. These broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance.

If securities or industry analysts publish inaccurate or unfavorable research about our business, our stock price could decline.

The trading market for our common stock will depend in part on the research and reports that securities or industry analysts publish about us or our business. If one or more of the analysts who may cover us downgrade our common stock or publish inaccurate or unfavorable research about our business, our common stock price would likely decline.

A future issuance of preferred stock may adversely affect the rights of the holders of our common stock.

Our certificate of incorporation allows our Board of Directors to issue up to 20,000,000 shares of preferred stock and to fix the voting powers, designations, preferences, rights and qualifications, limitations or restrictions of these shares without any further vote or action by the stockholders. The rights of the holders of common stock will be subject to, and could be adversely affected by, the rights of the holders of any preferred stock that we may issue in the future. The issuance of preferred stock, while providing desirable flexibility in connection with our future activities, could also have the effect of making it more difficult for a third party to acquire a majority of our outstanding voting stock, thereby delaying, deferring or preventing a change of control.

Concentration of ownership of our capital stock could delay or prevent a change of control.

Our directors, executive officers and principal stockholders beneficially own a significant percentage of our common stock. As a result, these stockholders, if acting together, have the ability to influence the outcome of corporate actions requiring stockholder approval. Additionally, this concentration of ownership may have the effect of delaying or preventing a change of control of SIGA. As of the most recent available information, directors, executive officers and principal stockholders beneficially owned approximately 33% of our outstanding common stock. In addition to owning common stock of the Company, directors and certain executive officers have the right to acquire additional stock through the exercise or conversion of certain securities.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our headquarters are located in New York, NY and our research and development facilities are located in Corvallis, Oregon. In January 2013, we entered into a sublease for approximately 6,676 square feet with a related party to sublet office space in a New York, NY location to serve as our corporate headquarters. The sublease commenced in April 2013 and was scheduled to expire in 2020. In July 2017, we terminated this sublease. In May 2017, we entered into a new 10-year lease with a related party to let 3,200 square feet in New York, NY to serve as our new corporate headquarters.

In Corvallis, we lease approximately 10,276 square feet. Until its expiration on December 31, 2017, this facility was leased under an amended lease agreement signed in January 2007, and most recently changed through an addendum in April 2015. On November 3, 2017 we entered into a new lease for the same space which expires in December 2019. This lease has two successive renewal options; one for two years and the other for three years.

Item 3. Legal Proceedings

From time to time, we may be involved in a variety of claims, suits, investigations and proceedings arising from the ordinary course of our business,

collections claims, breach of contract claims, labor and employment claims, tax and other matters. Although such claims, suits, investigations and proceedings are inherently uncertain and their results cannot be predicted with certainty, we believe that the resolution of such current pending matters, if any, will not have a material adverse effect on our business, consolidated financial position, results of operations or cash flow. Regardless of the outcome, litigation can have an adverse impact on us because of legal costs, diversion of management resources and other factors (see Note 13 to the consolidated financial statements).

Item 4. Mine Safety Disclosures

No disclosure is required pursuant to this item.

PART II

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

Price Range of Common Stock

On March 22, 2018, the Company's common stock commenced trading on The Nasdaq Global Market under the symbol "SIGA". From March 20, 2015 through March 21, 2018, the Company's common stock had been traded on the OTC Pink Sheets. The Company's common stock traded under the symbol "SIGAQ" from March 20, 2015 until April 17, 2016, and since April 18, 2016, it has traded under the Symbol "SIGA." From September 9, 1997 through September 2, 2009, the Company's common stock was traded on the Nasdaq Capital Market and from September 3, 2009 until March 19, 2015 it was traded on the Nasdaq Global Market under the symbol "SIGA." Prior to September 9, 1997 there was no public market for our common stock.

The following table sets forth, for the periods indicated, the high and low sales prices for our common stock, as reported on The Nasdaq Global Market and OTC Pink Sheets, as applicable:

2018	**High**	**Low**
First Quarter	$ 6.78	$ 4.21
Second Quarter	7.54	5.72
Third Quarter	8.47	5.77
Fourth Quarter	7.94	4.68
2017	**High**	**Low**
First Quarter	$ 3.40	$ 2.80
Second Quarter	3.88	3.00
Third Quarter	3.39	2.85
Fourth Quarter	5.24	3.14

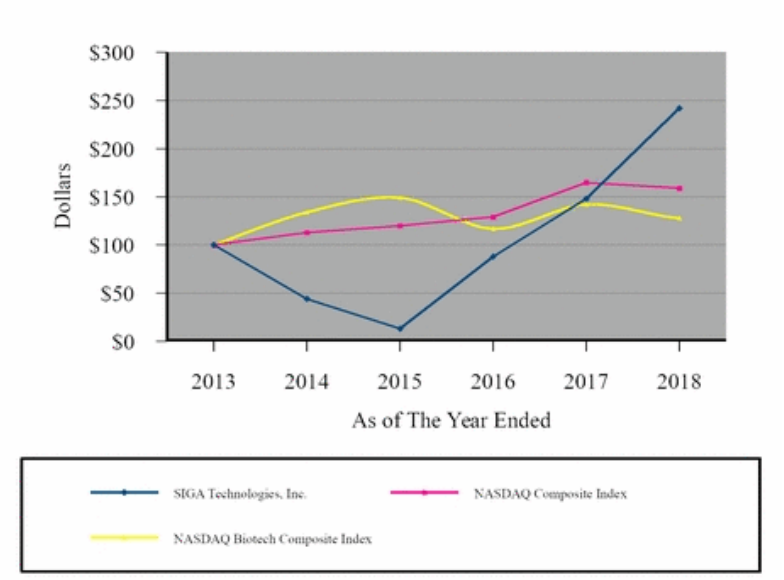
As of February 15, 2019, the closing sale price of our common stock was $6.99 per share. There were 35 holders of record as of February 15, 2019. We believe that the number of beneficial owners of our common stock is substantially greater than the number of record holders, because a large portion of common stock is held in broker "street names."

We have paid no dividends on our common stock and do not expect to pay cash dividends in the foreseeable future. We currently intend to retain any future cash flow in excess of our operating costs to finance the growth and development of our business and to service any debt payments. Dividend payments are not permitted under the Loan Agreement.

Performance Graph

The following line graph compares the cumulative total stockholder return through December 31, 2018, assuming reinvestment of dividends, by an investor who invested $100 on December 31, 2013 in each of (i) our common stock; (ii) the Nasdaq Composite; and (iii) the Nasdaq Biotech Composite.

	2013	2014	2015	2016	2017	2018
SIGA Technologies, Inc.	$ 100	$ 44	$ 13	$ 88	$ 148	$ 242
NASDAQ Composite Index	$ 100	$ 113	$ 120	$ 129	$ 165	$ 159
NASDAQ Biotech Composite Index	$ 100	$ 134	$ 149	$ 117	$ 142	$ 128



Securities Authorized for Issuance Under Equity Compensation Plans

The information required by this item concerning securities authorized for issuance under equity compensation plans is set forth in Item 12, “Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.”

Item 6. Selected Financial Data

The selected consolidated financial operating data for the years ended December 31, 2018, 2017 and 2016 and the consolidated balance sheet data as of December 31, 2018 and 2017 have been derived from our audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K. The selected consolidated financial operating data for the years ended December 31, 2015 and 2014 and the consolidated balance sheet data as of December 31, 2016, 2015 and 2014 have been derived from applicable audited consolidated financial statements not included in this Annual Report on Form 10-K. The following table should be read in conjunction with Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations," and the consolidated financial statements and related notes to those statements included elsewhere in this Annual Report on Form 10-K.

	Year Ended December 31,				
	2018	2017	2016	2015	2014
	(in thousands, except share and per share data)				
Revenues	$ 477,054	$ 12,269	$ 14,988	$ 8,176	$ 3,140
Cost of sales and supportive services	95,269	—	—	—	—
Selling, general and administrative	12,880	12,303	13,714	10,582	12,647
Research and development	13,016	16,680	19,711	13,131	10,707
Patent expenses	789	910	909	1,009	988
Litigation expense	—	—	—	14,407	188,465
Lease termination	—	1,225	—	—	—
Interest on PharmAthene liability	—	—	11,669	—	—
Income (loss) from operations	355,100	(18,849)	(31,015)	(30,953)	(209,667)
(Increase) decrease in fair value of common stock warrants	(6,923)	(4,739)	(895)	—	313
Interest expense, net	(15,478)	(14,758)	(2,396)	(267)	(456)
Backstop fee	—	—	(1,764)	—	—
Other income, net	78,941	17	102	42	1
Reorganization items, net	—	—	(3,717)	(7,811)	(2,127)
Income (loss) before income taxes	411,640	(38,329)	(39,685)	(38,989)	(211,936)
Benefit from (provision for) income taxes	10,168	2,094	(14)	(462)	(53,528)
Net income (loss)	$ 421,808	$ (36,235)	$ (39,699)	$ (39,451)	$ (265,464)
Basic earnings (loss) per common share	$ 5.28	$ (0.46)	$ (0.69)	$ (0.73)	$ (4.97)
Diluted earnings (loss) per common share	$ 5.18	$ (0.46)	$ (0.69)	$ (0.73)	$ (4.97)
Weighted average common shares outstanding: basic	79,923,295	78,874,494	57,188,503	53,777,687	53,419,686
Weighted average common shares outstanding: diluted	82,708,472	78,874,494	57,188,503	53,777,687	53,419,686
Cash and cash equivalents and restricted cash	$ 180,397	$ 37,102	$ 56,174	$ 112,711	$ 99,714
Total assets	203,444	144,670	160,982	185,733	160,729
Long-term obligations	76,811	71,891	66,801	332	405
Stockholders' equity (deficiency)	102,915	(323,138)	(287,418)	(284,429)	(246,502)
Net cash provided by (used in) operating activities	$ 68,871	$ (18,387)	$ (116,813)	$ 11,109	$ 14,177

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

The following discussion should be read in conjunction with our consolidated financial statements and notes to those statements and other financial information appearing elsewhere in this Annual Report on Form 10-K. In addition to historical information, the following discussion and other parts of this Annual Report contain forward-looking information that involves risks and uncertainties.

Overview

We are a commercial-stage pharmaceutical company focused on the health security market. Health security comprises countermeasures for biological, chemical, radiological and nuclear attacks (biodefense market), vaccines and therapies for emerging infectious diseases, and health preparedness. Our lead product is an oral formulation of TPOXX® ("oral TPOXX®"), an antiviral drug for the treatment of human smallpox disease caused by variola virus.

On July 13, 2018 the United States Food & Drug Administration ("FDA") approved oral TPOXX® for the treatment of smallpox. Oral TPOXX® is a novel small-molecule drug that has been delivered to the U.S. Strategic National Stockpile ("Strategic Stockpile") under the Project BioShield Act of 2004 ("Project BioShield"). Concurrent with the approval, the FDA granted the Company's request for a Priority Review Voucher ("PRV"). A PRV is a voucher that may be used to obtain an accelerated FDA review of a product candidate. On October 31, 2018, the Company sold its PRV for cash consideration of $80.0 million.

Lead Product-TPOXX®

2018 BARDA Contract

On September 10, 2018, the Company entered into a contract with the U.S. Biomedical Advanced Research and Development Authority ("BARDA") pursuant to which SIGA agreed to deliver up to 1,488,000 courses of oral TPOXX® to the Strategic Stockpile, and to manufacture and deliver to the Strategic Stockpile, or store as vendor-managed inventory, up to 212,000 courses of the intravenous (IV) formulation of TPOXX® ("IV TPOXX®"). Additionally, the contract includes funding from BARDA for advanced development of IV TPOXX®, post-marketing activities for oral and IV TPOXX®, and supportive procurement activities. The contract with BARDA (as amended, modified, or supplemented from time to time, the "2018 BARDA Contract") currently contemplates, as of February 28, 2019, up to approximately $600.1 million of payments, of which approximately $51.7 million of payments are included within the base period of performance of five years, approximately $12.2 million of payments are related to exercised options and up to approximately $536.2 million of payments are currently specified as unexercised options. BARDA may choose in its sole discretion when, or whether, to exercise any of the unexercised options. The period of performance for options is up to ten years from the date of entry into the 2018 BARDA Contract and such options could be exercised at any time during the contract term, including during the base period of performance. Initially, the 2018 BARDA Contract specified payments of up to approximately $628.7 million; on February 21, 2019, a cost-reimbursement plus fixed fee option for post-marketing, and other activities for oral TPOXX® was modified to $12.2 million (from $40.8 million) based on updated planning. As such, total potential payments currently specified under the 2018 BARDA Contract are $600.1 million.

The base period of performance specifies potential payments of approximately $51.7 million for the following activities: payments of approximately $11.1 million for the delivery of approximately 35,700 courses of oral TPOXX® to the Strategic Stockpile; payments of $8.0 million for the manufacture of 20,000 courses of final drug product of IV TPOXX® ("IV FDP"), of which $3.2 million of payments are related to the manufacture of bulk drug substance ("IV BDS") to be used in the manufacture of IV FDP; payments of approximately $32.0 million to fund advanced development of IV TPOXX®; and payments of approximately $0.6 million for supportive procurement activities. As of December 31, 2018, the Company has received $3.2 million for the manufacture of IV BDS; such bulk drug substance is expected to be used for the manufacture of 20,000 courses of IV FDP.

Exercised options specify potential payments up to approximately $12.2 million for funding of post-marketing activities for oral TPOXX®.

Unexercised options specify potential payments up to approximately $536.2 million in total (if all options are exercised). There are options for the following activities: payments of up to $450.2 million for the delivery of up to approximately 1,452,300 courses of oral TPOXX® to the Strategic Stockpile; payments of up to $76.8 million for the manufacture of up to 192,000 courses of IV FDP, of which up to $30.7 million of payments would be paid upon the manufacture of IV BDS to be used in the manufacture

of IV FDP; payments of up to approximately $3.6 million to fund post-marketing activities for IV TPOXX®; and payments of up to approximately $5.6 million for supportive procurement activities.

The options related to IV TPOXX® are divided into two primary manufacturing steps. There are options related to the manufacture of bulk drug substance ("IV BDS Options"), and there are corresponding options (for the same number of IV courses) for the manufacture of final drug product ("IV FDP Options"). BARDA may choose to exercise any, all, or none of these options in its sole discretion. The 2018 BARDA Contract includes: three separate IV BDS Options, each providing for the bulk drug substance equivalent of 64,000 courses of IV TPOXX®; and three separate IV FDP Options, each providing for 64,000 courses of final drug product of IV TPOXX®. BARDA has the sole discretion as to whether to simultaneously exercise IV BDS Options and IV FDP Options, or whether to make independent exercise decisions. If BARDA decides to only exercise IV BDS Options, then the Company would receive payments up to $30.7 million; alternatively, if BARDA decides to exercise both IV BDS Options and IV FDP Options, then the Company would receive payments up to $76.8 million. For each set of options relating to a specific group of courses (for instance, the IV BDS and IV FDP options that reference the same 64,000 courses), BARDA has the option to independently purchase IV BDS or IV FDP.

2011 BARDA Contract

On May 13, 2011, the Company signed a contract with BARDA pursuant to which BARDA agreed to buy from the Company 1.7 million courses of oral TPOXX®. Additionally, the Company agreed to contribute to BARDA 300,000 courses at no additional cost to BARDA.

The contract with BARDA (as amended, modified, or supplemented from time to time the "2011 BARDA Contract") includes a base contract, as modified, ("2011 Base Contract") as well as options. The 2011 Base Contract specifies approximately $508.7 million of payments (including exercised options), of which, as of December 31, 2018, $459.8 million has been received by the Company for the manufacture and delivery of 1.7 million courses of oral TPOXX® and $43.9 million has been received for certain reimbursements in connection with development and supportive activities. Approximately $5.0 million remains eligible to be received in the future for reimbursements of development and supportive activities.

For courses of oral TPOXX® that have been physically delivered to the Strategic Stockpile under the 2011 BARDA Contract, there are product replacement obligations, including: (i) a product replacement obligation in the event that the final version of oral TPOXX® approved by the FDA was different from any courses of oral TPOXX® that had been delivered to the Strategic Stockpile (the "FDA Approval Replacement Obligation"); (ii) a product replacement obligation, at no cost to BARDA, in the event that oral TPOXX® is recalled or deemed to be recalled for any reason; and (iii) a product replacement obligation in the event that oral TPOXX® does not meet any specified label claims. On July 13, 2018, the FDA approved oral TPOXX® for the treatment of smallpox and there is no difference between the approved product and courses in the Strategic Stockpile. As such, the possibility of the FDA Approval Replacement Obligation resulting in any future replacements of product within the Strategic Stockpile is remote.

The 2011 BARDA Contract includes options. On July 30, 2018, the 2011 BARDA Contract was modified and BARDA exercised its option relating to FDA approval of 84-month expiry for oral TPOXX® for which the Company was paid $50.0 million in August 2018. With the option exercise, the 2011 BARDA Contract was modified so that the 2011 Base Contract increased by $50.0 million. Remaining options, if all would be exercised by BARDA, would result in aggregate payments to the Company of $72.7 million, including up to $58.3 million of funding for development and supportive activities such as work on a post-exposure prophylaxis ("PEP") indication for TPOXX® and/or $14.4 million of funding for production-related activities related to warm-base manufacturing. BARDA may choose in its sole discretion not to exercise any or all of the unexercised options. In 2015, BARDA exercised two options related to extending the indication of the drug to the geriatric and pediatric populations. The stated value of those exercises was minimal.

The 2011 BARDA Contract expires in September 2020.

Liquidity

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern and contemplate the realization of assets and the satisfaction of liabilities in the normal course of business. On July 13, 2018, the FDA approved the Company's oral TPOXX® for the treatment of smallpox. There was no difference between the approved product and courses of oral TPOXX® that had been delivered to the Strategic Stockpile. As such, in July 2018, the Company received $41 million that previously had been held back under the 2011 BARDA Contract. Additionally, since July 2018, the Company has received: a $50 million payment from BARDA in August 2018 as a result of the exercise of an option (through modification of the 2011 BARDA Contract) relating to FDA approval of 84-month expiry for oral TPOXX®; and $80

million of cash proceeds from the sale of its PRV (defined in Note 1 to the consolidated financial statements). Furthermore, the 2018 BARDA Contract, awarded in September 2018, could provide payments of up to $600 million to the Company over the next series of years. Accordingly, management believes, based on currently forecasted operating costs that the Company will continue as a going concern.

Critical Accounting Estimates

The methods, estimates and judgments we use in applying our accounting policies have a significant impact on the results we report in our consolidated financial statements, which we discuss under the heading "Results of Operations" following this section of our Management's Discussion and Analysis of Financial Condition and Results of Operations. Some of our accounting policies require us to make difficult and subjective judgments, often as a result of the need to make estimates of matters that are inherently uncertain. Our most critical accounting estimates include revenue recognition, the valuation of warrants granted or issued by us, and income taxes (including realization of deferred tax assets).

Revenue Recognition

All of our revenue is derived from long-term contracts that can span multiple years. We account for revenue in accordance with ASC Topic 606, *Revenue from Contracts with Customers ("ASC 606")*. The unit of account in ASC 606 is a performance obligation. A contract's transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. Our performance obligations are satisfied over time as work progresses or at a point in time.

Substantially all of our revenue associated with research and development performance obligations is recognized over time. Because control transfers over time with these performance obligations, revenue is recognized based on the extent of progress towards completion of the performance obligation. The selection of the method to measure progress towards completion requires judgment and is based on the nature of the products or services to be provided. We generally use the cost-to-cost measure of progress for performance obligations connected with research and development activities because it best depicts the transfer of control to the customer, which occurs as we incur costs under our contracts. Under the cost-to-cost measure of progress, the extent of progress towards completion is measured based on the ratio of costs incurred to date to the total estimated costs to fully satisfy the performance obligation. Contract costs include labor, material, overhead and third-party services. Any loss on a research and development performance obligation would be recognized at the point in time that it became probable that a loss was going to be incurred.

Revenue under the 2011 BARDA Contract (see Note 3 to the consolidated financial statements) connected with courses of oral TPOXX® that are manufactured and delivered to the Strategic Stockpile and related services, milestones and advance payments (activities in combination that constitute one performance obligation) has been recognized at a point in time. Revenue associated with this performance obligation was recognized when BARDA obtained control of the asset, which was upon delivery to and acceptance by the customer and at the point in time when the constraint on the consideration was reasonably resolved. The consideration, which is variable, was constrained until the FDA approved oral TPOXX® for the treatment of smallpox on July 13, 2018. Prior to FDA approval, consideration had been constrained because the possibility of the FDA Approval Replacement Obligation (as defined herein) had not been quantified or specified. Following FDA approval, the possibility of having to replace product pursuant to the FDA Approval Replacement Obligation was essentially eliminated and deemed to be remote since there is no difference between the approved product and the courses of oral TPOXX® that had been delivered to the Strategic Stockpile. As a result, the deferred revenue associated with the performance obligation was recorded as product sales and supportive services for the year ended December 31, 2018.

Due to the nature of the work required to be performed on many of our performance obligations, the estimation of total revenue and costs to satisfy the obligations is complex, subject to many variables and requires significant judgment. The consideration associated with these types of performance obligations is considered variable. We estimate variable consideration as the most likely amount to which we expect to be entitled. We include estimated amounts in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur and when any uncertainty associated with variable consideration is resolved. Our estimates of variable consideration and determination of whether to include estimated amounts in the transaction price are based largely on an assessment of our historical and anticipated performance, external factors, trends and all other information (historical, current and forecasted) that is reasonably available to us.

Contracts are often modified to account for additional services to be performed. We consider contract modifications to exist when the modification either creates new enforceable rights and obligations, or changes existing enforceable rights and obligations. If the effect of a contract modification on the transaction price changes our measure of progress for the performance

obligation to which it relates, the impact will be recognized as an adjustment to revenue (either as an increase in or a reduction of revenue) on a cumulative catch-up basis.

We have a process in which management reviews the progress and execution of our performance obligations. As part of this process, management reviews information including, but not limited to, any outstanding key contract matters, progress towards completion and the related program schedule, identified risks and opportunities and the related changes in estimates of revenues and costs. The risks and opportunities include management's judgment about the ability and cost to achieve the schedule, technical requirements and other contract requirements. Management must make assumptions and estimates regarding labor productivity, the complexity of the work to be performed, customer behavior and execution by our subcontractors, among other variables.

Based on this analysis, any quarterly adjustments to revenues, research and development expenses and cost of sales and supportive services are recognized as necessary in the period they become known. Changes in estimates of revenues, research and development expenses and cost of sales and supportive services are recognized quarterly on a cumulative catch-up basis, which recognizes in the current period the cumulative effect of the changes on current and prior periods based on a performance obligation's percentage of completion. A significant change in one or more of these estimates could affect the profitability of one or more of our performance obligations.

Income Taxes

Our income tax expense and, deferred tax assets and liabilities reflect management's best estimate of current and future taxes to be paid. We are subject to US federal income tax and state income tax in numerous jurisdictions. Significant judgments and estimates are required in the determination of our income tax expense.

Deferred income taxes arise from temporary differences between the tax basis of assets and their reported amounts in the financial statements, which will result in taxable or deductible amounts in the future. Each reporting period, we assess the realizability of our deferred tax assets to determine if the deductible temporary differences will be utilized on a more-likely-than-not basis. In making this determination, we assess all available positive and negative evidence to determine if our existing deferred tax assets are realizable on a more-likely-than-not basis. Significant weight is given to positive and negative evidence that is objectively verifiable. We consider the reversal of existing taxable temporary differences, projected future taxable income, tax planning strategies and recent financial operating results. The realization of a deferred tax asset is ultimately dependent on our generation of sufficient taxable income within the available net operating loss carryback and/or carryforward periods to utilize the deductible temporary differences. During the year ended December 31, 2018, we received FDA approval and recorded revenue related to the delivery of our oral TPOXX® product. We also recorded revenue related to the FDA holdback payment and the payment for 84-month expiry for oral TPOXX®. In addition, we entered into a new contract with BARDA for the sale of up to 1.7 million courses of TPOXX®. Based on these factors, we determined that sufficient positive evidence exists to conclude that substantially all of our deferred tax assets are realizable on a more-likely-than-not basis.

The amount of deferred tax assets considered realizable, however, could be adjusted if estimates of future taxable income during the net operating loss carryforward period change and/or if significant objective negative evidence is no longer present. Such changes could lead to a change in judgment related to the realization of the net deferred tax asset. Future changes in the estimated amount of deferred taxes expected to be realized will be reflected in our financial statements in the period the estimate is changed with a corresponding adjustment to operating results.

Income tax benefits are recognized for a tax position when, in management's judgment, it is more likely than not that the position will be sustained upon examination by a taxing authority. For a tax position that meets the more-likely-than-not recognition threshold, the tax benefit is measured as the largest amount that is judged to have a greater than 50% likelihood of being realized upon ultimate settlement with a taxing authority. As of December 31, 2018, we recorded an uncertain tax position attribute reduction related to state net operating loss carryforwards. In the event that we conclude that we are subject to interest and/or penalties arising from uncertain tax positions, we will present interest and penalties as a component of income taxes.

Warrant Liability

We account for warrants in accordance with the authoritative guidance which requires that free-standing derivative financial instruments with certain cash settlement features be classified as assets or liabilities at the time of the transaction, and recorded at their fair value. Fair value is estimated using a model-derived valuation. Determining the fair value for warrants includes the expected volatility of our stock. Any changes in the fair value of the warrants are reported in earnings or loss as long as they are classified as assets or liabilities.

Recently Issued Accounting Pronouncements

For discussion regarding the impact of accounting standards that were recently issued but are not yet effective, on our consolidated financial statements, see Note 2, *Summary of Significant Accounting Policies*, to the consolidated financial statements.

Results of Operations for the *Years ended December 31, 2018, 2017, and 2016*

Revenues from product sales and supportive services for the year ended December 31, 2018 were $468.9 million. In 2017 and 2016, there were no recorded revenues from product sales and supportive services. Such revenues in 2018 are primarily associated with revenue recognition of all cash consideration received in prior periods under the 2011 BARDA Contract that is related to the delivery to the Strategic Stockpile of courses of oral TPOXX® and related services, milestones and advance payments ($375.6 million in total). In prior periods, these receipts had been deferred on the balance sheet since revenue recognition had been constrained by the possibility of a product replacement obligation being applicable. Following FDA approval of oral TPOXX® in the third quarter 2018, the possibility of the FDA Approval Replacement Obligation resulting in any future replacements of product within the Strategic Stockpile is remote, thus resulting in the recognition of revenues that previously had been deferred. In addition to the above-mentioned amounts, 2018 product sales and supportive service revenues also include $91 million received in the third quarter under the 2011 BARDA Contract in connection with a $41 million holdback payment and a $50 million payment for achieving 84-month expiry for oral TPOXX® (see Note 3 to the consolidated financial statements for further detail on these payments).

Revenues from research and development contracts and grants for the years ended December 31, 2018 and 2017, were $8.1 million and $12.3 million, respectively. The decrease of $4.1 million, or 33.7%, primarily relates to a decrease in revenues from our federal contracts supporting the development of oral TPOXX®, partially offset by the increase in revenues from our federal contracts supporting the development of IV TPOXX®. Revenues from federal contracts supporting the development of oral TPOXX® have decreased because active studies involving oral TPOXX® have decreased in number and scale in comparison to prior year activity, reflecting the filing of a new drug application ("NDA") for oral TPOXX® in December 2017.

Revenues from research and development contracts and grants for the years ended December 31, 2017 and 2016, were $12.3 million and $15.0 million, respectively. The decrease of $2.7 million, or 18.1%, primarily relates to a decrease in revenues from our federal contracts supporting the development of oral TPOXX®. Revenues from federal contracts supporting the development of oral TPOXX® decreased because active studies involving oral TPOXX® decreased in number and scale in comparison to prior year activity.

Cost of sales and supportive services for the year ended December 31, 2018, were $95.3 million; in 2017 and 2016, there were no recorded cost of sales and supportive services. Due to FDA approval of oral TPOXX® on July 13, 2018, all costs incurred in previous periods which had been deferred in connection with the deferral of related revenues were recognized.

Selling, general and administrative expenses (“SG&A”) for the years ended December 31, 2018 and 2017 were $12.9 million and $12.3 million, respectively, reflecting an increase of $0.6 million, or 4.7%. The increase is primarily attributable to a $0.3 million increase in employee compensation expense and non-recurring costs related to the application for listing our stock on The Nasdaq Global Market, partially offset by a reduction in rent expense stemming from the relocation of corporate headquarters in May 2017.

SG&A for the years ended December 31, 2017 and 2016 were $12.3 million and $13.7 million, respectively, reflecting a decrease of $1.4 million, or 10.3%. The decrease is primarily attributable to a $1.9 million decrease in professional service fees, partially offset by a $0.9 million increase in employee compensation expense. The decrease in professional service fees is primarily due to the final resolution of the PharmAthene litigation and related strategic initiatives, which resulted in a decrease in legal fees. The net increase in employee compensation expense reflects an increase in senior management headcount, partially offset by a reduction in annual bonus expense in 2017 (one-time bonuses were paid in 2016 in connection with the satisfaction of the PharmAthene liability).

Research and development (“R&D”) expenses were $13.0 million for the year ended December 31, 2018, a decrease of approximately $3.7 million, or 22.0% from the $16.7 million incurred during the year ended December 31, 2017. The decrease is attributable to a $4.2 million net decrease in direct vendor-related expenses supporting the development of oral TPOXX® and IV TPOXX®. Direct vendor-related expenses related to oral TPOXX® decreased $6.6 million due to a decrease in the number and scale of active studies, while such expenses related to IV TPOXX® increased $2.4 million. The decrease in R&D expenses is also partially attributable to there being no inventory write-down expenses in 2018 as compared with a net expense of $536,000 in 2017 in connection with an inventory write-down. These net decreases were partially offset by an increase in employee compensation of approximately $1.4 million which was primarily associated with the vesting in 2018 of restricted stock awards that had been contingent upon the FDA approval of oral TPOXX®.

R&D expenses were $16.7 million for the year ended December 31, 2017, a decrease of approximately $3.0 million, or 15.4% from the $19.7 million incurred during the year ended December 31, 2016. The decrease was primarily attributable to a decrease of $2.9 million in direct vendor-related expenses supporting the development of oral TPOXX® (number and scale of active studies decreased) and a $0.6 million decrease in bonus expense (one-time bonuses were paid in 2016 in connection with the satisfaction of the PharmAthene liability). These decreases were partially offset by a $536,000 net expense related to an inventory write-down. The $536,000 expense related to a $686,000 inventory write-down, partially offset by contractual Contract Manufacturing Organizations ("CMO") credits received in connection with the inventory write-down.

Patent expenses for the years ended December 31, 2018, 2017 and 2016 were $0.8 million, $0.9 million, and $0.9 million, respectively. These expenses reflect our ongoing efforts to protect our lead drug candidates in varied geographic territories.

Lease termination expense for the year ended December 31, 2017 was approximately $1.2 million. This expense relates to the Old HQ Sublease Termination Agreement. See Note 13 to the consolidated financial statements for additional information.

For the year ended December 31, 2016, we recorded approximately $11.7 million of interest expense on the PharmAthene liability. This amount represents interest expense related to the post-judgment interest on the Delaware Court of Chancery Final Order and Judgment. On November 16, 2016, we fully satisfied the PharmAthene liability, and thus there was no interest expense on the PharmAthene liability for the years ended December 31, 2018 and 2017.

Interest expense on the term loan facility under the Loan Agreement (the "Term Loan") for the year ended December 31, 2018 was $15.5 million, an increase of approximately $0.7 million from the $14.8 million incurred during the year ended December 31, 2017. The $15.5 million of interest for the year ended December 31, 2018 includes: $11.0 million of cash payments from restricted cash and $4.5 million of accretion of unamortized costs and fees related to the Term Loan balance. The $14.8 million of interest for the year ended December 31, 2017 includes: $10.3 million of cash payments from restricted cash and $4.5 million of accretion of unamortized costs and fees related to the Term Loan balance.

Interest expense on the Term Loan for the year ended December 31, 2017 was $14.8 million, an increase of approximately $12.4 million from the $2.4 million incurred during the year ended December 31, 2016. The increase is primarily attributable to a full 12 months of interest accrued on the Term Loan in 2017; in comparison, less than two months of interest accrued in 2016. The $14.8 million of interest for the year ended December 31, 2017 includes: $10.3 million of cash payments from restricted cash and $4.5 million of accretion of unamortized costs and fees related to the Term Loan balance. The $2.4 million of interest for the year ended December 31, 2016 included $1.3 million of cash payments from restricted cash and $1.1 million of accretion of unamortized costs and fees related to the Term Loan balance.

Changes in the fair value of liability classified warrants to acquire common stock were recorded within the income statement. For the years ended December 31, 2018, 2017 and 2016, we recorded a loss of approximately $6.9 million, $4.7 million and $0.9 million, respectively, reflecting an increase in fair value of liability classified warrants resulting principally from increases in the price of our common stock.

For the year-ended December 31, 2016, we incurred a non-cash backstop fee of approximately $1.8 million in connection with a rights offering and pursuant to a backstop agreement with an affiliate of MacAndrews & Forbes Inc. and other backstop parties.

Other income, net for the year ended December 31, 2018 was $78.9 million. Other income for 2018 reflects the sale of our PRV for $80.0 million, net of related expenses as well as interest income on cash accounts. See Note 1 to the consolidated financial statements regarding the PRV transaction.

Reorganization expenses in connection with the chapter 11 filing for the year ended December 31, 2016 were approximately $3.7 million, respectively. Reorganization expenses for the year-ended December 31, 2016 represents expenses incurred up to the Effective Date of the Plan (as defined in Note 15 to the consolidated financial statements).

For the year ended December 31, 2018, we recognized a tax benefit of $10.2 million on pre-tax income of $411.6 million. Our effective tax rate for the year ended December 31, 2018 was (2.5%). During 2018, we recognized a benefit of approximately $25.8 million primarily related to the Company's assessment that our deferred tax assets are realizable on a more-likely-than-not basis and the resulting reduction of the related valuation allowance. Our effective tax rate for the year ended December 31, 2018 differs from the statutory rate primarily as a result of the reduction of the valuation allowance.

FASB Accounting Standards Codification Topic 740, *Income Taxes* ("ASC 740") requires that a valuation allowance be established when it is "more likely than not" that all or a portion of deferred tax assets will not be realized. At each reporting date, we consider new evidence, both positive and negative, that could impact our view with regard to future realization of deferred tax assets. During the year ended December 31, 2018, we received FDA approval and recorded revenue related to the previous delivery of our oral TPOXX® product. We also recorded revenue related to the FDA holdback payment and the payment for 84-month expiry of oral TPOXX®. In addition, we entered into a new contract with BARDA for the purchase of up to 1.7 million courses of TPOXX®. Based on these factors, we determined that sufficient positive evidence existed to conclude that substantially all of our deferred tax assets were realizable on a more-likely-than-not basis.

For the year ended December 31, 2017, we recognized a tax benefit of approximately $2.1 million on a pre-tax loss of $38.3 million. Our effective tax rate for the year ended December 31, 2017 was 5.5%.

On December 22, 2017, the U.S. government enacted comprehensive tax reform commonly referred to as the Tax Cuts and Jobs Act ("TCJA"). Under ASC 740, the effects of changes in tax rates and laws are recognized in the period which the new legislation is enacted. The TCJA makes broad and complex changes to the U.S. tax code, including, but not limited to: (1) reducing the U.S. federal corporate tax rate from 35% to 21%; (2) changing rules related to uses and limitations of net operating loss carryforwards created in tax years beginning after December 31, 2017; (3) bonus depreciation that will allow for full expensing of qualified property; (4) creating a new limitation on deductible interest expense; (5) eliminating the corporate alternative minimum tax; (6) limitation on the deductibility of executive compensation under Internal Revenue Code §162(m); and (7) new tax rules related to foreign operations.

In connection with the initial analysis of the impact of the TCJA as of December 31, 2017, we recorded a provisional decrease in our deferred tax assets and liabilities with a corresponding adjustment to the related valuation allowance. In addition, the Company recorded an income tax benefit of $2.1 million primarily related to our Minimum Tax Credit carryforwards as such amounts will be refundable, in cash, under TCJA. As of December 31, 2018, the Company has approximately $2.7 million of minimum tax credits which are expected to be refunded no later than 2021.

In response to the TCJA, the SEC staff issued Staff Accounting Bulletin ("SAB") No. 118 which provides guidance on accounting for the tax effects of TCJA. The purpose of SAB No. 118 was to address any uncertainty or diversity of view in applying ASC 740 in the reporting period in which the TCJA was enacted. In addition, SAB No. 118 provides a measurement period that should not extend beyond one year from the TCJA enactment date for companies to complete the accounting under ASC 740. For the year ended December 31, 2017, we recorded a provisional decrease in our deferred tax assets and liabilities with a corresponding adjustment to the related valuation allowance. In addition, we recorded an income tax benefit of $2.7 million related to the elimination of the AMT as such amounts will be refundable, in cash, under TCJA. We expect to collect the refund no later than 2021. During the year ended December 31, 2018, we finalized the accounting for the tax effects of TCJA with no material changes to the provisional estimate recorded in 2017.

For the year ended 2016, we incurred a tax provision of $13,884 on pre-tax net losses of $39.7 million. Our effective tax rate for the year ended December 31, 2016 was (0.03%). Our effective tax rate was impacted by recurring items such as current operating losses with no tax benefit, federal alternative minimum tax, state taxes, and the change in the valuation allowance for deferred tax liabilities associated with indefinite-lived intangible assets. Such deferred tax liabilities generally cannot be used as a source of taxable income to realize deferred tax assets with a definitive loss carryforward period.

Liquidity and Capital Resources

As of December 31, 2018, we had $100.7 million in cash and cash equivalents compared with $19.9 million at December 31, 2017. Additionally, as of December 31, 2018, we had $79.7 million of restricted cash compared with $17.2 million at December 31, 2017. The restricted cash is available to pay interest, fees and principal on the Term Loan. The increase in the restricted cash relates to the sale of our PRV. See Note 7 to the consolidated financial statements for additional information.

Operating Activities

We prepare our consolidated statement of cash flows using the indirect method. Under this method, we reconcile net income (loss) to cash flows from operating activities by adjusting net income (loss) for those items that impact net income (loss) but may not result in actual cash receipts or payments during the period. These reconciling items include but are not limited to stock-based compensation and changes in the fair value of our warrant liability; gains and losses from various transactions and changes in the consolidated balance sheet for working capital from the beginning to the end of the period.

Net cash provided by (used in) operations for the years ended December 31, 2018 and 2017 was $68.9 million and $(18.4) million, respectively. For the year ended December 31, 2018, the primary sources of cash inflows were a $41.0 million holdback

payment under the 2011 BARDA Contract (see Note 3) and a $50.0 million payment from BARDA in connection with a modification made to the 2011 BARDA Contract, in which BARDA exercised an option relating to FDA approval of 84-month expiry for oral TPOXX®. These receipts were partially offset by net operating costs and $11.0 million of cash interest expense on the Term Loan. For the year ended December 31, 2017, cash usage was primarily due to: $26.7 million of cash operating expenses (net loss adjusted for non-cash items noted in the cash flow statement such as interest expense and change in fair value of warrants) and $4.9 million of payments to CMOs for the manufacture and related support of TPOXX®, partially offset by $8.5 million of cash received from BARDA for product deliveries of oral TPOXX® as well as reimbursement payments under the BARDA contract of certain vendor costs that were paid in the prior year.

Net cash (used in) operations for the years ended December 31, 2017 and 2016 was $(18.4) million and $(116.8) million, respectively. For the year ended December 31, 2017, cash usage was primarily due to: $26.7 million of cash operating expenses (net loss adjusted for non-cash items noted in the cash flow statement such as interest expense and change in fair value of warrants) and $4.9 million of payments to CMOs for the manufacture and related support of TPOXX®, partially offset by $8.5 million of cash received from BARDA for product deliveries of oral TPOXX® as well as reimbursement payments under the BARDA contract of certain vendor costs that were paid in the prior year. For the year ended December 31, 2016, cash usage was primarily attributable to $170 million of payments made to PharmAthene by the Company, which in combination with a $46.9 million payment made directly to PharmAthene by the Lender under the Term Loan, fully satisfied the PharmAthene claim (the $46.9 million payment by the Lender is not part of operating activities within the cash flow statement). Cash usage was also due to: operating expenses; costs attendant to the administration of the chapter 11 case; pre-petition claim payments (other than the PharmAthene claim); $31.4 million of payments to CMOs for the manufacture and related support of TPOXX®. These amounts were partially offset by $111.2 million of cash received from BARDA for product deliveries of oral TPOXX® and achieving a milestone under the BARDA contract.

On December 31, 2018 and 2017, our accounts receivable balance was approximately $2.0 million (which includes approximately $0.6 million of unbilled receivables) and $1.8 million, respectively. Our accounts receivable balances primarily reflect reimbursable work performed during December 31, 2018 and 2017, respectively, in connection with TPOXX®.

Investing Activities

Net cash provided by (used in) investing activities for the years ended December 31, 2018 and 2017 was $78.2 million and $(0.1) million, respectively. In 2018, we received net proceeds of approximately $78.3 million related to the sale of our PRV. In 2017, net cash used related to capital expenditures.

Net cash (used in) provided by investing activities for the years ended December 31, 2017 and 2016 was $(0.1) million and $1.2 million, respectively. For the year ended December 31, 2017 we purchased approximately $0.1 million of equipment in the ordinary course of business. For the year ended December 31, 2016, we received approximately $1.2 million in connection with the return of collateral supporting a surety bond that had been posted in 2012 in connection with the PharmAthene litigation.

Financing Activities

Net cash used in financing activities for the years ended December 31, 2018 and 2017 was $3.8 million and $0.6 million, respectively. For the year ended December 31, 2018, cash was used to repurchase $4.1 million of common stock to meet minimum statutory tax withholding requirements for shares issued to employees in connection with the release of restricted stock units and the exercise of stock appreciation rights and options. Additionally, we received approximately $0.3 million in exercise price payments in connection with the exercise of options. For the year ended December 31, 2017, cash was used to repurchase $0.6 million of common stock to meet minimum statutory tax withholding requirements for shares issued to employees in connection with the release of restricted stock units and the exercise of stock appreciation rights and options. Additionally, we bought back $84,000 of options at their intrinsic value, and we received $89,000 in exercise price payments in connection with the exercise of options.

Net cash (used in) provided by financing activities for the years ended December 31, 2017 and 2016 was $(0.6) million and $59.1 million, respectively. For the year ended December 31, 2017, cash was used to repurchase $0.6 million of common stock to meet minimum statutory tax withholding requirements for shares issued to employees in connection with the release of restricted stock units and the exercise of stock appreciation rights and options. Additionally, we bought back $84,000 of options at intrinsic value, and we received $89,000 in connection with the exercise of options. On November 16, 2016, the Term Loan was funded and a rights offering was completed. The rights offering provided net proceeds of approximately $34.6 million through the sale of 23.5 million shares of common stock. In connection with the Term Loan, we paid $3.8 million of costs. Separately, during 2016, we repurchased $0.4 million of common stock to meet minimum statutory tax withholding requirements for restricted shares issued to employees. The Term Loan provided $46.9 million ($50 million, less fees and expenses of $3.1 million) that was paid directly by the Lender to PharmAthene as part of the full satisfaction of the PharmAthene claim. The Term Loan placed an additional $30

million in a reserve account to be utilized primarily to pay interest on the Term Loan (such amount being recorded as restricted cash).

Contractual Obligations, Commercial Commitments and Purchase Obligations

Future contractual obligations and commercial commitments as of December 31, 2018 are expected to be as follows:

	Total	Less than 1 year	1 to 3 years	3 to 5 years	Greater than 5 years
Operating lease obligations (1)	$ 3,019,928	$ 541,376	$ 608,000	$ 672,774	$ 1,197,778
Term loan obligations at maturity	84,000,000	—	84,000,000	—	—
Interest payment obligations on the Term Loan (2)	21,523,631	11,452,078	10,071,553	—	—
Purchase obligations (3)	7,224,223	6,679,261	488,530	56,432	—
Payments under Lease Termination Agreement	568,057	336,955	231,102	—	—
Total contractual obligations	$ 116,335,839	$ 19,009,670	$ 95,399,185	$ 729,206	$ 1,197,778

(1) Includes facilities and office space under two operating leases expiring in 2019 and 2027, respectively. These obligations assume non-termination of agreements and represent expected payments, which are subject to change.

(2) Includes amounts to be paid with restricted cash. Assumes cash interest rate of 14.1% (the rate at December 31, 2018) throughout the duration of the Term Loan.

(3) Includes purchase orders for manufacturing and R&D activities.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Our investment portfolio includes cash and cash equivalents. Our main investment objective is the preservation of investment capital. We believe that our investment policy is conservative, both in the duration of our investments and the credit quality of the investments we hold. We do not utilize derivative financial instruments, derivative commodity instruments or other market risk sensitive instruments, positions or transactions to manage exposure to interest rate changes. As such, we believe that, the securities we hold are subject to market risk, changes in the financial standing of the issuer of such securities and our interest income is sensitive to changes in the general level of U.S. interest rates. Additionally, we are also subject to the risk of rising LIBOR rates; whenever the minimum rates for one-month, two-month, three-month and six-month LIBOR rates ("minimum LIBOR rate") are above 1%, then the interest rate charged on the Term Loan could increase materially depending on the magnitude of any increase in LIBOR rates. For every increase of 0.5% in the minimum LIBOR rate (e.g., an increase from a LIBOR rate of 2.50% to 3.00%), annual interest payments on the Term Loan would increase by approximately $0.4 million. Furthermore, we are subject to the impact of stock price fluctuations of our common stock in that we have a liability-classified warrant in which 1.7 million shares of SIGA common stock can be purchased at a strike price of $1.50 per share. For every $1 increase in the stock price of SIGA, the intrinsic value of the liability-classified warrant will increase by approximately $1.7 million.

Item 8. Financial Statements and Supplementary Data

Index to the Consolidated Financial Statements

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors of SIGA Technologies, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of SIGA Technologies, Inc. (the "Company") as of December 31, 2018 and 2017, and the related consolidated statements of operations and comprehensive income (loss), changes in stockholders' equity/(deficiency), and cash flows for each of the three years in the period ended December 31, 2018, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and December 31, 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Change in Accounting Principles

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for revenues from contracts with customers and the manner in which it accounts for the classification and presentation of restricted cash on the consolidated statements of cash flows in 2018.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting 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 audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated 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 consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and

dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

/s/ PricewaterhouseCoopers LLP

Florham Park, New Jersey
March 5, 2019

We have served as the Company's auditor since 1997.

Table of Contents

SIGA TECHNOLOGIES, INC.
CONSOLIDATED BALANCE SHEETS
As of

	December 31, 2018	December 31, 2017
ASSETS		
Current assets		
Cash and cash equivalents	$ 100,652,809	$ 19,857,833
Restricted cash, short-term	11,452,078	10,701,305
Accounts receivable	1,959,133	1,802,107
Inventory	2,908,210	2,983,249
Prepaid expenses and other current assets	4,317,615	2,019,999
Total current assets	121,289,845	37,364,493
Property, plant and equipment, net	171,274	138,640
Restricted cash, long-term	68,292,023	6,542,448
Deferred costs	—	96,592,334
Deferred tax asset, net	11,733,385	2,431,963
Goodwill	898,334	898,334
Other assets	1,058,880	702,167
Total assets	$ 203,443,741	$ 144,670,379
LIABILITIES AND STOCKHOLDERS' EQUITY/(DEFICIENCY)		
Current liabilities		
Accounts payable	$ 1,688,488	$ 1,328,867
Accrued expenses and other current liabilities	9,648,917	5,481,579
Total current liabilities	11,337,405	6,810,446
Deferred revenue	—	377,641,485
Warrant liability	12,380,939	11,466,162
Other liabilities	1,263,113	840,253
Long-term debt	75,547,597	71,050,324
Total liabilities	100,529,054	467,808,670
Commitments and contingencies (Note 13)		
Stockholders' equity/(deficiency)		
Common stock ($.0001 par value, 600,000,000 shares authorized, 80,763,350 and 79,039,000 issued and outstanding at December 31, 2018, and December 31, 2017, respectively)	8,076	7,904
Additional paid-in capital	218,697,872	214,229,581
Accumulated deficit	(115,791,261)	(537,375,776)
Total stockholders' equity/(deficiency)	102,914,687	(323,138,291)
Total liabilities and stockholders' equity/(deficiency)	$ 203,443,741	$ 144,670,379

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

SIGA TECHNOLOGIES, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME (LOSS)
For the Years Ended December 31

	2018	2017	2016
Revenues			
Product sales and supportive services	$ 468,918,468	$ —	$ —
Research and development	8,135,314	12,268,960	14,987,628
Total revenues	477,053,782	12,268,960	14,987,628
Operating expenses			
Cost of sales and supportive services	95,268,974	—	—
Selling, general and administrative	12,879,738	12,303,050	13,713,635
Research and development	13,016,183	16,679,712	19,710,673
Patent expenses	789,489	909,946	909,376
Lease termination	—	1,225,421	—
Interest on PharmAthene liability	—	—	11,668,900
Total operating expenses	121,954,384	31,118,129	46,002,584
Operating income (loss)	355,099,398	(18,849,169)	(31,014,956)

Loss from change in fair value of warrant liability	(6,922,624)	(4,738,753)	(894,785)
Interest expense	(15,478,203)	(14,758,140)	(2,395,517)
Backstop fee	—	—	(1,764,240)
Other income, net	78,940,985	16,788	102,324
Reorganization items, net	—	—	(3,716,902)
Income (loss) before income taxes	411,639,556	(38,329,274)	(39,684,076)
Benefit/(provision) for income taxes	10,168,272	2,093,790	(13,884)
Net and comprehensive income (loss)	$ 421,807,828	$ (36,235,484)	$ (39,697,960)
Basic earnings (loss) per share	$ 5.28	$ (0.46)	$ (0.69)
Diluted earnings (loss) per share	$ 5.18	$ (0.46)	$ (0.69)
Weighted average shares outstanding: basic	79,923,295	78,874,494	57,188,503
Weighted average shares outstanding: diluted	82,708,472	78,874,494	57,188,503

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

Table of Contents

SIGA TECHNOLOGIES, INC.
CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY/(DEFICIENCY)
For the Years Ended December 31, 2018, 2017 and 2016

	Common Stock		Additional Paid-In	Accumulated	Accumulated Other Comprehensive	Total Stockholders' Equity/
	Shares	Amount	Capital	Deficit	Income (Loss)	(Deficiency)
Balances, December 31, 2015	**54,114,296**	**$ 5,411**	**$ 177,008,371**	**$ (461,442,332)**	**$ —**	**$ (284,428,550)**
Net loss				(39,697,960)		(39,697,960)
Issuance of common stock upon exercise of RSUs	483,335	48	(48)			—
Stock-based compensation			775,541			775,541
Payment of common stock tendered for employee stock-based compensation tax obligations	(136,744)	(13)	(427,996)			(428,009)
Issuance of common stock associated with rights offering	23,523,195	2,352	34,594,117			34,596,469
Issuance of common stock associated with backstop agreement	708,530	71	1,764,169			1,764,240
Balances, December 31, 2016	**78,692,612**	**$ 7,869**	**$ 213,714,154**	**$ (501,140,292)**	**$ —**	**$ (287,418,269)**
Net loss				(36,235,484)		(36,235,484)
Issuance of common stock upon exercise of stock options	33,870	3	89,495			89,498
Issuance of common stock upon vesting of RSUs and exercise of stock-settled appreciation rights	466,328	47	(47)			—
Payment of common stock tendered for employee stock-based compensation tax obligations	(153,810)	(15)	(591,052)			(591,067)
Stock-based compensation	—	—	1,101,031			1,101,031
Buy-back of stock options	—	—	(84,000)			(84,000)
Balances, December 31, 2017	**79,039,000**	**$ 7,904**	**$ 214,229,581**	**$ (537,375,776)**	**$ —**	**$ (323,138,291)**
Net income				421,807,828		421,807,828
Issuance of common stock upon exercise of stock options	426,366	42	261,837			261,879
Issuance of common stock upon vesting of RSUs and exercise of stock-settled appreciation rights	1,184,283	118	(118)			—
Issuance of common stock upon exercise of warrants	760,626	77	6,007,770			6,007,847
Payment of common stock tendered for employee stock-based compensation tax obligations	(646,925)	(65)	(4,074,375)			(4,074,440)
Cumulative effect of accounting change				(223,313)		(223,313)
Stock-based compensation			2,273,177			2,273,177
Balances, December 31, 2018	**80,763,350**	**$ 8,076**	**$ 218,697,872**	**$ (115,791,261)**	**$ —**	**$ 102,914,687**

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

SIGA TECHNOLOGIES, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
For the Years Ended December 31

	2018	2017	2016
Cash flows from operating activities:			
Net income (loss)	$ 421,807,828	$ (36,235,484)	$ (39,697,960)
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:			
Depreciation and other amortization	69,630	132,189	174,275
Loss on change in fair value of warrant liability	6,922,624	4,738,753	894,785
Lease termination	—	1,225,421	—
Stock-based compensation	2,273,177	1,101,031	775,541
Net realization of deferred revenue and costs due to FDA approval	(281,950,853)	—	—
Deferred income taxes (benefit)/provision	(9,301,422)	(2,718,029)	20,423
Write down of inventory, net	—	536,000	—
Non-cash backstop fee	—	—	1,764,240
Non-cash interest expense	4,497,273	4,497,271	566,779
Gain on sale of priority review voucher	(78,338,826)	—	—
Changes in assets and liabilities:			
Accounts receivable	(49,723)	1,352,263	522,360
Inventory	39	22,690,715	(13,762,876)

Deferred costs	—	(23,943,057)	(19,712,849)
Prepaid expenses and other current assets	(2,222,616)	(1,065,573)	(330,443)
Other assets	(356,713)	(60,084)	80,928
Accounts payable, accrued expenses and other current liabilities	1,622,331	(1,847,427)	(177,342)
Liabilities subject to compromise	—	—	(160,072,170)
Deferred revenue	3,475,714	11,412,898	112,225,534
Other liabilities	422,860	(203,654)	(84,228)
Net cash provided by (used in) operating activities	68,871,323	(18,386,767)	(116,813,003)
Cash flows from investing activities:			
Capital expenditures	(102,264)	(100,124)	(23,927)
Net proceeds from sale of priority review voucher	78,338,826	—	—
Return of collateral for surety bond	—	—	1,212,591
Net cash provided by (used in) investing activities	78,236,562	(100,124)	1,188,664
Cash flows from financing activities:			
Net proceeds from exercise of stock options	261,879	89,498	—
Net proceeds from equity rights offering - net of offering costs	—	—	34,596,468
Proceeds from Term Loan escrow release	—	—	28,694,444
Buy back of stock options	—	(84,000)	—
Payment of employee tax obligations for common stock tendered	(4,074,440)	(591,067)	(428,009)
Debt issue costs	—	—	(3,775,546)
Net cash (used in) provided by financing activities	(3,812,561)	(585,569)	59,087,357
Net increase (decrease) in cash and cash equivalents	143,295,324	(19,072,460)	(56,536,982)
Cash, cash equivalents and restricted cash at the beginning of period	37,101,586	56,174,046	112,711,028
Cash, cash equivalents and restricted cash at end of period	$ 180,396,910	$ 37,101,586	$ 56,174,046
Supplemental disclosure of cash inflows information:			
Conversion of warrants to common stock	$ 6,007,847	$ —	$ —
Issuance of common stock upon cashless exercise	$ 1,681,426	$ —	$ —
Portion of Term Loan paid directly to PharmAthene by the Lender in satisfaction of the PharmAthene claim; such liability is part of the Liabilities Subject to Compromise line item	$ —	$ —	$ 46,900,000
Cash interest paid on PharmAthene liability	$ —	$ —	$ 11,668,900
Cash income taxes paid (refund)	$ 251,961	$ 325,000	$ 500,975
Fair value of warrant, at issuance date, in connection with loan agreement and recorded as warrant liability	$ —	$ —	$ 5,832,624

The accompanying notes are an integral part of these financial statements

1. Organization and Basis of Presentation

Description of Business
SIGA Technologies, Inc. ("SIGA" or the "Company") is a commercial-stage pharmaceutical company focused on the health security market. Health security comprises countermeasures for biological, chemical, radiological and nuclear attacks (biodefense market), vaccines and therapies for emerging infectious diseases, and health preparedness. Our lead product is TPOXX®, an orally administered antiviral drug for the treatment of human smallpox disease caused by variola virus. On July 13, 2018, the United States Food & Drug Administration ("FDA") approved the Company's orally-administered drug TPOXX® ("oral TPOXX®").

Liquidity
The accompanying condensed consolidated financial statements have been prepared assuming that the Company will continue as a going concern and contemplate the realization of assets and the satisfaction of liabilities in the normal course of business. On July 13, 2018, the FDA approved the Company's oral TPOXX® for the treatment of smallpox. There was no difference between the approved product and courses of oral TPOXX® that had been delivered to the U.S. Strategic National Stockpile ("Strategic Stockpile"). As such, in July 2018, the Company received $41 million that previously had been held back under the 2011 U.S. Biomedical Advanced Research and Development Authority ("BARDA") Contract (see Note 3). Additionally, since July 2018, the Company has received: a $50 million payment from BARDA in August 2018 as a result of the exercise of an option (through modification of the 2011 BARDA Contract (defined in Note 3)) relating to FDA approval of 84-month expiry for oral TPOXX®; and $80 million of cash proceeds from the sale of its PRV (defined below). Furthermore, the 2018 BARDA Contract (defined in Note 3), awarded in September 2018, could provide payments of up to $600 million to the Company over the next series of years. Accordingly, management believes, based on currently forecasted operating costs that the Company will continue as a going concern.

Priority Review Voucher
Concurrent with the approval of oral TPOXX®, the FDA granted the Company's request for a Priority Review Voucher ("PRV"). A PRV is a voucher that may be used to obtain an accelerated FDA review of a product candidate. On October 31, 2018 the Company sold its PRV for cash consideration of $80 million.

2. Summary of Significant Accounting Policies

Use of Estimates
Management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and revenues and expenses during the periods reported. The most significant estimates include the variables used in the calculation of fair value of warrants granted or issued by the Company, reported amounts of revenue, and the valuation of deferred tax assets. Estimates and assumptions are reviewed periodically and the effects of revisions are reflected in the financial statements in the period they are determined to be necessary. Actual results could differ from these estimates.

Basis of Presentation
The consolidated financial statements and related disclosures are presented in accordance with generally accepted accounting principles in the United States of America ("US GAAP") and reflect the consolidated financial position, results of operations and cash flows for all periods presented.

Cash Equivalents
The Company considers all highly liquid investments with original maturities of three months or less to be cash equivalents.

Restricted Cash and Cash Equivalents
On January 1, 2018, the Company adopted ASU No. 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash, a consensus of the FASB's Emerging Issues Task Force*. The new standard requires that the statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Entities are required to reconcile such total to amounts on the balance sheet and disclose the nature of the restrictions. Adoption of this guidance impacts the cash flow disclosure for the years ended December 31, 2017 and 2016; cash flows from operating activities, as disclosed herein, are $10.2 million and $1.2 million, respectively, less than the amounts disclosed in the 2017 Form

10-K. In addition, cash flows from financing activities for the year ended December 31, 2016, as disclosed herein, are $28.7 million more than the amount disclosed in the 2017 Form 10-K.

A portion of the Company's cash received from the Loan Agreement and net cash proceeds from the PRV sale are restricted and have been placed in reserve accounts. Cash originally received from the Loan Agreement, and placed in a reserve account, could only be used to pay interest on the Term Loan, aside from $5 million that was withdrawn from the reserve account on July 12, 2018 under the provisions of the Term Loan. Cash received from the PRV sale is available to pay interest, fees and principal of the Term Loan. See Note 7 for additional information.

The following table reconciles cash, cash equivalents and restricted cash per the consolidated statements of cash flows to the consolidated balance sheet for each respective period:

	As of December 31,			
	2018	2017	2016	2015
Cash and cash equivalents	$ 100,652,809	$ 19,857,833	$ 28,701,824	$ 112,711,028
Restricted cash - short-term	11,452,078	10,701,305	10,138,890	—
Restricted cash - long-term	68,292,023	6,542,448	17,333,332	—
Cash, cash equivalents and restricted cash	$ 180,396,910	$ 37,101,586	$ 56,174,046	$ 112,711,028

Concentration of Credit Risk
The Company has cash in bank accounts that exceeds the Federal Deposit Insurance Corporation insured limits. The Company has not experienced any losses on its cash accounts and no allowance has been provided for potential credit losses because management believes that any such losses would be minimal, if any.

Accounts Receivable
Accounts receivable are recorded net of provisions for doubtful accounts. At December 31, 2018 and 2017, 100% of accounts receivable represented receivables from BARDA. An allowance for doubtful accounts is based on specific analysis of the receivables. At December 31, 2018 and 2017, the Company had no allowance for doubtful accounts.

Inventory
Inventory is stated at the lower of cost or net realizable value. The Company capitalizes inventory costs associated with the Company's products when, based on management's judgment, future commercialization is considered probable and the future economic benefit is expected to be realized; otherwise, such costs are expensed as research and development. Inventory is evaluated for impairment periodically to identify inventory that may expire prior to expected sale or has a cost basis in excess of its net realizable value. If certain batches or units of product no longer meet quality specifications or become obsolete due to expiration, the Company records a charge to write down such unmarketable inventory to its net realizable value. As of December 31, 2018, inventory is expected to have a shelf life in excess of five years and is expected to be available for delivery under any new or existing procurement contracts.

Property, Plant and Equipment
Property, plant and equipment are stated at cost, net of accumulated depreciation. Depreciation is provided on a straight-line method over the estimated useful lives of the various asset classes. The estimated useful lives are as follows: five years for laboratory equipment; three years for computer equipment; and seven years for furniture and fixtures. Leasehold improvements are amortized over the shorter of the estimated useful lives of the assets or the lease term. Maintenance, repairs and minor replacements are charged to expense as incurred.

Warrant Liability
The Company accounts for warrants in accordance with the authoritative guidance which requires that free-standing derivative financial instruments with certain cash settlement features be classified as assets or liabilities at the time of the transaction, and recorded at their fair value. Fair value is estimated using model-derived valuations. Any changes in the fair value of the derivative instruments are reported in earnings or loss as long as the derivative contracts are classified as assets or liabilities.

Revenue Recognition
All of the Company's revenue is derived from long-term contracts that span multiple years. The Company accounts for revenue in accordance with ASC Topic 606, *Revenue from Contracts with Customers* ("ASC 606").

Adoption of ASC 606. On January 1, 2018, the Company adopted ASC 606 using the modified retrospective method applied to those contracts that were not completed as of January 1, 2018. Results for reporting periods beginning after January 1, 2018 are presented under ASC 606, while prior period amounts are not adjusted and continue to be reported in accordance with our historical accounting under ASC 605, *Revenue Recognition*.

The cumulative impact of adopting ASC 606 as of January 1, 2018 was a decrease to deferred revenue of approximately $1.8 million; a decrease to deferred costs of approximately $2.1 million; an increase to receivables of approximately $0.1 million and a net increase to opening accumulated deficit of $0.2 million, net of tax. For the year ended December 31, 2018, the impact to revenues as a result of applying ASC 606 was an increase of approximately $1.0 million.

Performance Obligations. A performance obligation is a promise in a contract to transfer a distinct good or service to the customer, and is the unit of account in ASC 606. A contract's transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. As of December 31, 2018, the Company's active performance obligations, for the contracts outlined in Note 3, consist of the following: three performance obligations relate to research and development services; two relate to manufacture and delivery of product; and one is associated with storage of product.

Contract modifications may occur during the course of performance of our contracts. Contracts are often modified to account for changes in contract specifications or requirements. In most instances, contract modifications are for services that are not distinct, and, therefore, are accounted for as part of the existing contract.

The Company's performance obligations are satisfied over time as work progresses or at a point in time. Substantially all of the Company's revenue related to research and development performance obligations is recognized over time, because control transfers continuously to our customers. Typically, revenue is recognized over time using costs incurred to date relative to total estimated costs at completion to measure progress toward satisfying the Company's performance obligations. Incurred cost represents work performed, which corresponds with, and thereby best depicts, the transfer of control to the customer. Contract costs include labor, material, overhead, and third-party services.

Revenue connected with the performance obligation to deliver courses of oral TPOXX® to the Strategic Stockpile, which includes related services, milestones and advance payments under the 2011 BARDA Contract, has been recognized at a point in time. Revenue associated with this performance obligation was recognized when BARDA obtained control of the asset, which was upon delivery to and acceptance by the customer and at the point in time when the constraint on the consideration was resolved. The consideration, which is variable consideration, was constrained until the FDA approved oral TPOXX® for the treatment of smallpox on July 13, 2018. Prior to FDA approval, consideration had been constrained because the FDA Approval Replacement Obligation (as defined in Note 3) had not been quantified or specified. Following FDA approval, the possibility of having to replace product pursuant to the FDA Approval Replacement Obligation was essentially eliminated and deemed to be remote since there was no difference between the approved product and the courses of oral TPOXX® that had been delivered to the Strategic Stockpile.

Contract Estimates. Accounting for long-term contracts and grants involves the use of various techniques to estimate total contract revenue and costs.

Contract estimates are based on various assumptions to project the outcome of future events that often span multiple years. These assumptions include labor productivity; the complexity of the work to be performed; external factors such as customer behavior and potential regulatory outcomes; and the performance of subcontractors, among other variables.

The nature of the work required to be performed on many of the Company's performance obligations and the estimation of total revenue and cost at completion are complex, subject to many variables and require significant judgment. The consideration associated with research and development services is variable as the total amount of services to be performed has not been finalized. The Company estimates variable consideration as the most likely amount to which it expects to be entitled. The Company includes estimated amounts in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur and when any uncertainty associated with variable consideration is resolved. The Company's estimates of variable consideration and determination of whether to include estimated amounts in the transaction price are based largely on an assessment of our historical and anticipated performance, external factors, trends and all other information (historical, current and forecasted) that is reasonably available to us.

A significant change in one or more of these estimates could affect the profitability of the Company's contracts. As such, the Company reviews and updates its contract-related estimates regularly. The Company recognizes adjustments in estimated revenues, research and development expenses and cost of sales and supportive services under the cumulative catch-up method. Under this

method, the impact of the adjustment on revenues, research and development expenses and cost of sales and supportive services recorded to date on a contract is recognized in the period the adjustment is identified.

Contract Balances. The timing of revenue recognition, billings and cash collections may result in billed accounts receivable, unbilled receivables (contract assets) and customer advances and deposits (contract liabilities) in the consolidated balance sheets. Generally, amounts are billed as work progresses in accordance with agreed-upon contractual terms either at periodic intervals (monthly) or upon achievement of contractual milestones. Under typical payment terms of fixed price arrangements, the customer pays the Company either performance-based payments or progress payments. For the Company's cost-type arrangements, the customer generally pays the Company for its actual costs incurred, as well as its allocated overhead and G&A costs. Such payments occur within a short period of time.

Remaining Performance Obligations. Remaining performance obligations represent the transaction price for which work has not been performed and excludes unexercised contract options. As of December 31, 2018 the aggregate amount of transaction price allocated to remaining performance obligations for the 2011 BARDA Contract, 2018 BARDA Contract and the IV Formulation R&D Contract was $58.1 million. The Company expects to recognize this amount as revenue over the next five years as the specific timing for satisfying the performance obligations is subjective and outside the Company's control.

Deferred Revenue

When the Company receives consideration, or such consideration is unconditionally due, prior to transferring goods or services to the customer under the terms of a sales contract, the Company records deferred revenue, which represents a contract liability. The Company recognizes deferred revenue as net revenues once control of goods and/or services has been transferred to the customer and all revenue recognition criteria have been met and any constraints have been resolved.

Historically, the Company deferred revenue in connection with the manufacture and delivery of oral TPOXX® under the 2011 BARDA Contract. Revenue recognition as of December 31, 2017 was constrained by the unquantifiable possibility of product replacement pursuant to the FDA Approval Replacement Obligation. On July 13, 2018, the FDA approved oral TPOXX® for the treatment of smallpox. As a result of FDA approval, the possibility of having to replace product pursuant to the FDA Approval Replacement Obligation was essentially eliminated and deemed to be remote since there was no difference between the approved product and the courses of oral TPOXX® that had already been delivered to the Strategic Stockpile. As such, deferred revenue as of December 31, 2017 associated with the 2011 BARDA Contract was recorded as product sales and supportive services during the year ended December 31, 2018.

The following table presents changes in the Company's deferred revenue:

	For the year ended December 31, 2018
Balance at December 31, 2017	$ 378,896,803
Cumulative effect of accounting change	(1,780,050)
Billings in advance of revenue recognized	3,399,630
Revenue recognized	(376,356,437)
Balance at December 31, 2018, included in Accrued expenses and other current liabilities	$ 4,159,946

As of December 31, 2017 approximately $1.3 million of deferred revenue was included in accrued expenses and other current liabilities on the consolidated balance sheet. Billings in advance of revenue recognized include $3.2 million for the manufacture of IV BDS (see Note 3).

Research and Development

Research and development expenses include costs directly and indirectly attributable to the conduct of research and development programs, and performance pursuant to the BARDA contracts, including employee related costs, materials, supplies, depreciation on and maintenance of research equipment, the cost of services provided by outside contractors, including services related to the Company's clinical trials and facility costs, such as rent, utilities, and general support services. All costs associated with research and development are expensed as incurred. Costs related to the acquisition of technology rights, for which development work is still in process, and that have no alternative future uses, are expensed as incurred.

Goodwill
The Company evaluates goodwill for impairment at least annually or as circumstances warrant. The impairment review process compares the fair value of the reporting unit in which goodwill resides to its carrying value. The Company operates as one business and one reporting unit. Therefore, the goodwill impairment analysis is performed on the basis of the Company as a whole, using the market capitalization of the Company as an estimate of its fair value.

Share-based Compensation
Stock-based compensation expense for all share-based payment awards made to employees and directors is determined on the grant date; for options awards, fair value was estimated using the Black-Scholes model and for stock-settled stock appreciation rights ("SSARs"), fair value was estimated using the Monte Carlo method. These compensation costs are recognized net of an estimated forfeiture rate over the requisite service periods of the awards. Forfeitures are estimated on the date of the respective grant and revised if actual or expected forfeiture activity differs from original estimates.

Income Taxes
The Company recognizes income taxes utilizing the asset and liability method of accounting for income taxes. Under this method, deferred income taxes are recorded for temporary differences between financial statement carrying amounts and the tax basis of assets and liabilities at enacted tax rates expected to be in effect for the years in which the differences are expected to reverse. A valuation allowance is established if it is more likely than not that some or the entire deferred tax asset will not be realized. The recognition of a valuation allowance for deferred taxes requires management to make estimates and judgments about the Company's future profitability which are inherently uncertain.

Earnings (Loss) per Share
Basic earnings per share is computed by dividing net income (loss) by the weighted-average number of common shares outstanding during the period. Diluted earnings per share is computed by dividing net income (loss) by the weighted-average number of common shares outstanding during the period, assuming potentially dilutive common shares from option exercises, SSARs, RSUs, warrants and other incentives had been issued and any proceeds received in respect thereof were used to repurchase common stock at the average market price during the period. The assumed proceeds used to repurchase common stock is the sum of the amount to be paid to the Company upon exercise of options and the amount of compensation cost attributed to future services not yet recognized.

Fair Value of Financial Instruments
The carrying value of cash and cash equivalents, restricted cash and cash equivalents, accounts receivable, accounts payable and accrued expenses and other current liabilities approximates fair value due to the relatively short maturity of these instruments. Common stock warrants which are classified as liabilities are recorded at their fair market value as of each reporting period.

The measurement of fair value requires the use of techniques based on observable and unobservable inputs. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect our market assumptions. The inputs create the following fair value hierarchy:

- Level 1 – Quoted prices for identical instruments in active markets.
- Level 2 – Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations where inputs are observable or where significant value drivers are observable.
- Level 3 – Instruments where significant value drivers are unobservable to third parties.

The Company uses model-derived valuations where certain inputs are unobservable to third parties to determine the fair value of common stock warrants on a recurring basis and classify such liability-classified warrants in Level 3. As described in Note 8, the fair value of the liability-classified warrant was $12.4 million at December 31, 2018.

At December 31, 2018, the fair value of the debt was $91.1 million and the carrying value of the debt was $75.5 million. The Company used a discounted cash flow model to estimate the fair value of the debt by applying a discount rate to future payments expected to be made as set forth in the Loan Agreement. The fair value of the loan was measured using Level 3 inputs. The discount rate was determined using market participant assumptions.

There were no transfers between levels of the fair value hierarchy during 2018. In addition, there were no Level 1 or Level 2 financial instruments as of December 31, 2018 and 2017.

The following table presents changes in the liability-classified warrant measured at fair value using Level 3 inputs:

	Fair Value Measurements of Level 3 liability classified warrant
Warrant liability at December 31, 2017	$ 11,466,162
Increase in fair value of warrant liability	6,922,624
Exercise of warrants	(6,007,847)
Warrant liability at December 31, 2018	$ 12,380,939

Loss Contingencies

The Company is subject to certain contingencies arising in the ordinary course of business. The Company records accruals for these contingencies to the extent that a loss is both probable and reasonably estimable. If some amount within a range of loss appears to be a better estimate than any other amount within the range, that amount is accrued. Alternatively, when no amount within a range of loss appears to be a better estimate than any other amount, the lowest amount in the range is accrued. The Company expenses legal costs associated with loss contingencies as incurred. We record anticipated recoveries under existing insurance contracts when recovery is assured.

Segment Information

The Company is managed and operated as one business. The entire business is managed by a single management team that reports to the chief executive officer, who is the Chief Operating Decision Maker. The Company does not operate separate lines of business or separate business entities with respect to any of its product candidates. Accordingly, the Company does not prepare discrete financial information with respect to separate product areas or by location and has only one reportable segment.

Recent Accounting Pronouncements

On January 26, 2017, the FASB issued ASU No. 2017-04, *Intangibles-Goodwill and Other (Topic 350)*: *Simplifying the Test for Goodwill Impairment*. The guidance removes Step 2 of the goodwill impairment test, which requires a hypothetical purchase price allocation. A goodwill impairment will now be the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. All other goodwill impairment guidance will remain largely unchanged. Entities will continue to have the option to perform a qualitative assessment to determine if a quantitative impairment test is necessary. The same one-step impairment test will be applied to goodwill at all reporting units, even those with zero or negative carrying amounts. The revised guidance will be applied prospectively, and is effective for fiscal years beginning after December 15, 2019. The Company believes the adoption of ASU No. 2017-04 will not have a significant impact on its consolidated financial statements.

On February 25, 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*, which relates to the accounting for leasing transactions. This standard requires a lessee to record on the balance sheet the assets and liabilities for the rights and obligations created by leases with lease terms of more than 12 months. In addition, this standard requires both lessees and lessors to disclose certain key information about lease transactions. The Company has elected to adopt the standard using the modified retrospective transition approach with a January 1, 2019 effective date of initial application. Under the modified retrospective transition method, the Company will recognize a cumulative effect adjustment to retained earnings as of the effective date in the period of adoption. Consequently, comparative financial information and disclosures provided for dates and periods before January 1, 2019 will not be updated in the Company's future filings. While the Company is continuing to evaluate the impact that ASU No. 2016-02 will have on its consolidated financial statements, the Company expects that a right-of-use asset and a corresponding amount of lease liability in the range of $3.0 - $4.0 million will be recorded on the consolidated balance sheet.

3. Procurement Contract and Research Agreements

2018 BARDA Contract

On September 10, 2018, the Company entered into a contract with BARDA pursuant to which SIGA agreed to deliver up to 1,488,000 courses of oral TPOXX® to the Strategic Stockpile, and to manufacture and deliver to the Strategic Stockpile, or store as vendor-managed inventory, up to 212,000 courses of the intravenous (IV) formulation of TPOXX® ("IV TPOXX®"). Additionally, the contract includes funding from BARDA for advanced development of IV TPOXX®, post-marketing activities for oral and IV TPOXX®, and supportive procurement activities. The contract with BARDA (as amended, modified, or supplemented from time to time, the "2018 BARDA Contract") currently contemplates, as of February 28, 2019, up to approximately $600.1 million of payments, of which approximately $51.7 million of payments are included within the base period of performance of five years, approximately $12.2 million of payments are related to exercised options and up to approximately $536.2 million

of payments are currently specified as unexercised options. BARDA may choose in its sole discretion when, or whether, to exercise any of the unexercised options. The period of performance for options is up to ten years from the date of entry into the 2018 BARDA Contract and such options could be exercised at any time during the contract term, including during the base period of performance. Initially, the 2018 BARDA Contract specified payments of up to approximately $628.7 million; on February 21, 2019, a cost-reimbursement plus fixed fee option for post-marketing, and other activities for oral TPOXX® was modified to $12.2 million (from $40.8 million) based on updated planning. As such, total potential payments currently specified under the 2018 BARDA Contract are $600.1 million.

The base period of performance specifies potential payments of approximately $51.7 million for the following activities: payments of approximately $11.1 million for the delivery of approximately 35,700 courses of oral TPOXX® to the Strategic Stockpile; payments of $8.0 million for the manufacture of 20,000 courses of final drug product of IV TPOXX® ("IV FDP"), of which $3.2 million of payments are related to the manufacture of bulk drug substance ("IV BDS") to be used in the manufacture of IV FDP; payments of approximately $32.0 million to fund advanced development of IV TPOXX®; and payments of approximately $0.6 million for supportive procurement activities. As of December 31, 2018, the Company has received $3.2 million for the manufacture of IV BDS; such bulk drug substance is expected to be used for the manufacture of 20,000 courses of IV FDP.

Exercised options specify potential payments up to approximately $12.2 million for funding of post-marketing activities for oral TPOXX®.

Unexercised options specify potential payments up to approximately $536.2 million in total (if all options are exercised). There are options for the following activities: payments of up to $450.2 million for the delivery of up to approximately 1,452,300 courses of oral TPOXX® to the Strategic Stockpile; payments of up to $76.8 million for the manufacture of up to 192,000 courses of IV FDP, of which up to $30.7 million of payments would be paid upon the manufacture of IV BDS to be used in the manufacture of IV FDP; payments of up to approximately $3.6 million to fund post-marketing activities for IV TPOXX®; and payments of up to approximately $5.6 million for supportive procurement activities.

The options related to IV TPOXX® are divided into two primary manufacturing steps. There are options related to the manufacture of bulk drug substance (“IV BDS Options”), and there are corresponding options (for the same number of IV courses) for the manufacture of final drug product (“IV FDP Options”). BARDA may choose to exercise any, all, or none of these options in its sole discretion. The 2018 BARDA Contract includes: three separate IV BDS Options, each providing for the bulk drug substance equivalent of 64,000 courses of IV TPOXX®; and three separate IV FDP Options, each providing for 64,000 courses of final drug product of IV TPOXX®. BARDA has the sole discretion as to whether to simultaneously exercise IV BDS Options and IV FDP Options, or whether to make independent exercise decisions. If BARDA decides to only exercise IV BDS Options, then the Company would receive payments up to $30.7 million; alternatively, if BARDA decides to exercise both IV BDS Options and IV FDP Options, then the Company would receive payments up to $76.8 million. For each set of options relating to a specific group of courses (for instance, the IV BDS and IV FDP options that reference the same 64,000 courses), BARDA has the option to independently purchase IV BDS or IV FDP.

2011 BARDA Contract

On May 13, 2011, the Company signed a contract with BARDA pursuant to which BARDA agreed to buy from the Company 1.7 million courses of oral TPOXX®. Additionally, the Company agreed to contribute to BARDA 300,000 courses at no additional cost to BARDA.

The contract with BARDA (as amended, modified, or supplemented from time to time the "2011 BARDA Contract") includes a base contract, as modified, ("2011 Base Contract") as well as options. The 2011 Base Contract specifies approximately $508.7 million of payments (including exercised options), of which, as of December 31, 2018, $459.8 million has been received by the Company for the manufacture and delivery of 1.7 million of oral TPOXX® and $43.9 million has been received for certain reimbursements in connection with development and supportive activities. Approximately $5.0 million remains eligible to be received in the future for reimbursements of development and supportive activities.

For courses of oral TPOXX® that have been physically delivered to the Strategic Stockpile under the 2011 BARDA Contract, there are product replacement obligations, including: (i) a product replacement obligation in the event that the final version of oral TPOXX® approved by the FDA was different from any courses of oral TPOXX® that had been delivered to the Strategic Stockpile (the “FDA Approval Replacement Obligation”); (ii) a product replacement obligation, at no cost to BARDA, in the event that oral TPOXX® is recalled or deemed to be recalled for any reason; and (iii) a product replacement obligation in the event that oral TPOXX® does not meet any specified label claims. On July 13, 2018, the FDA approved oral TPOXX® for the treatment of smallpox and there is no difference between the approved product and courses in the Strategic Stockpile. As such,

the possibility of the FDA Approval Replacement Obligation resulting in any future replacements of product within the Strategic Stockpile is remote.

The 2011 BARDA Contract includes options. On July 30, 2018, the 2011 BARDA Contract was modified and BARDA exercised its option relating to FDA approval of the aforementioned 84-month expiry for oral TPOXX® for which the Company was paid $50.0 million in August 2018. With the option exercise, the 2011 BARDA Contract was modified so that the 2011 Base Contract increased by $50.0 million. Remaining options, if all were exercised by BARDA, would result in aggregate payments to the Company of $72.7 million, including up to $58.3 million of funding for development and supportive activities such as work on a post-exposure prophylaxis ("PEP") indication for TPOXX® and/or $14.4 million of funding for production-related activities related to warm-base manufacturing. BARDA may choose, in its sole discretion not to exercise any or all of the unexercised options. In 2015, BARDA exercised two options related to extending the indication of the drug to the geriatric and pediatric populations. The stated value of those exercises was immaterial.

The 2011 BARDA Contract expires in September 2020.

As described in Note 2, cash inflows related to delivery of courses under the 2011 BARDA Contract had been recorded as deferred revenue prior to FDA approval of oral TPOXX®, which occurred in the third quarter 2018. The deferral was due to a constraint on the consideration received. During the third quarter 2018, the constraint was satisfied with FDA approval of oral TPOXX®. As such, $375.6 million associated with cash consideration received in prior periods under the 2011 BARDA Contract was recognized as revenue for the year ended December 31, 2018. Separately, as discussed above, $90.9 million of revenues were recognized in the third quarter of 2018 in connection with a $40.9 million holdback payment (under the 2011 BARDA Contract) and a $50.0 million payment for achieving 84-month expiry for oral TPOXX® (under the 2011 BARDA Contract). Direct costs incurred by the Company to manufacture and fulfill the delivery of courses had also been deferred. As of December 31, 2017, deferred direct costs under the 2011 BARDA Contract were approximately $96.5 million. In connection with the FDA approval of oral TPOXX®, all related deferred costs were recognized in the consolidated statement of operations during the third quarter of 2018.

Research Agreements and Grants

The Company has an R&D program for IV TPOXX®. This program is funded by the 2018 BARDA Contract and a development contract with BARDA ("IV Formulation R&D Contract"). The IV Formulation R&D Contract has a period of performance that terminates on December 30, 2020. As of December 31, 2018, the IV Formulation R&D Contract provides for future aggregate research and development funding of approximately $15.1 million.

Contracts and grants include, among other things, options that may or may not be exercised at the U.S. Government's discretion. Moreover, contracts and grants contain customary terms and conditions including the U.S. Government's right to terminate or restructure a contract or grant for convenience at any time. As such, we may not be eligible to receive all available funds.

4. Inventory

Due to the deferral of revenue under the 2011BARDA Contract (see Note 3 for additional information), amounts that would be otherwise recorded as cost of sales and supportive services for delivered courses were recorded as deferred costs on the consolidated balance sheet as of December 31, 2017. In the third quarter of 2018, such deferred costs were recognized in the statement of operations. Inventory includes costs related to the manufacture of TPOXX®.

Inventory consisted of the following:

	As of	
	December 31, 2018	December 31, 2017
Work in-process	$ 1,950,445	$ 2,025,445
Finished goods	957,765	957,804
Inventory	$ 2,908,210	$ 2,983,249

For the year ended December 31, 2017, research and development expenses include net inventory-related losses of approximately $536,000 related to a $686,000 inventory write-down, partially offset by credits received from contract manufacturing organizations ("CMO") in connection with the inventory write-down. No such losses were incurred in 2018.

5. Property, Plant and Equipment

Property, plant and equipment consisted of the following:

	As of	
	December 31, 2018	December 31, 2017
Leasehold improvements	$ 2,420,028	$ 2,420,028
Computer equipment	618,248	701,762
Furniture and fixtures	377,859	363,588
	3,416,135	3,485,378
Less-accumulated depreciation	(3,244,861)	(3,346,738)
Property, plant and equipment, net	$ 171,274	$ 138,640

Depreciation and amortization expense on property, plant, and equipment was $69,630, $132,189, and $174,275 for the years ended December 31, 2018, 2017, and 2016, respectively. In connection with the lease termination discussed in Note 14, the Company wrote off $129,000 of leasehold improvements and furniture and fixtures during the year ended December 31, 2017.

6. Accrued Expenses

Accrued expenses and other current liabilities consisted of the following:

	As of	
	December 31, 2018	December 31, 2017
Bonus	$ 2,600,839	$ 2,538,340
Deferred revenue	4,159,946	1,255,318
Research and development vendor costs	1,446,410	183,856
Professional fees	242,043	381,980
Vacation	294,794	328,588
Other	904,885	793,497
Accrued expenses and other current liabilities	$ 9,648,917	$ 5,481,579

7. Debt

On September 2, 2016, the Company entered into a loan and security agreement (as amended from time to time, the "Loan Agreement") with OCM Strategic Credit SIGTEC Holdings, LLC ("Lender"), pursuant to which the Company received $80.0 million (less fees and other items) on November 16, 2016 having satisfied certain pre-conditions. Such $80.0 million had been placed in an escrow account on September 30, 2016 (the "Escrow Funding Date"). Prior to the Escrow Release Date (November 16, 2016), the Company did not have access to, or any ownership interest in, the escrow account. Until the Escrow Release Date occurred, the Company did not have an obligation to make any payments under the Loan Agreement, no security was granted under the Loan Agreement and no affirmative or negative covenants or events of default were effective under the Loan Agreement. Amounts were held in the escrow account until the satisfaction of certain conditions including the closing of the Rights Offering (see Note 10) on November 16, 2016. As part of the satisfaction of a litigation claim, funds were released from the escrow account (the date on which such transfer occurred, the "Escrow Release Date").

The Loan Agreement provides for a first-priority senior secured term loan facility in the aggregate principal amount of $80.0 million (the "Term Loan"), of which (i) $25.0 million was placed in a reserve account (the "Reserve Account") only to be utilized to pay interest on the Term Loan as it becomes due; (ii) an additional $5.0 million was also placed in the Reserve Account and up to the full amount of such $5.0 million was eligible to be withdrawn after June 30, 2018 upon the satisfaction of certain conditions, provided that any of such amount is required to fund any interest to the extent any interest in excess of the aforementioned $25.0 million is due and owing and any of such $5.0 million remains in the Reserve Account; and (iii) $50.0 million (net of fees and expenses then due and owing to the Lender) was paid as part of the final payment to satisfy a litigation claim. Interest on the Term Loan is at a per annum rate equal to the Adjusted LIBOR rate plus 11.5%, subject to adjustments as set forth in the Loan Agreement. At December 31, 2018, the effective interest rate on the Term Loan, which includes interest payments and accretion of unamortized costs and fees, was 19.4%. The Company incurred approximately $15.5 million of interest expense during the year-ended December

31, 2018, of which $11.0 million was paid from restricted cash and the remaining $4.5 million accreted to the Term Loan balance. For the year ended December 31, 2017, the Company incurred approximately $14.8 million of interest expense, of which $10.3 million was paid from restricted cash and the remaining $4.5 million accreted to the Term Loan balance. On July 12, 2018, upon confirmation that there had been no events of default, $5 million was withdrawn by the Company from the Reserve Account and was placed in the Company's cash operating account. On October 31, 2018, the Loan Agreement was amended to expand the definition of permitted dispositions to include a sale of the PRV. In connection with the amendment, net cash proceeds from the sale of the PRV ($78.3 million) were placed in a restricted cash account; such restricted account is to be used only for interest, fees and principal payments (other than those in connection with an event of default) on the Term Loan.

The Term Loan matures on the earliest to occur of (i) the four-year anniversary of the Escrow Release Date, and (ii) the acceleration of certain obligations pursuant to the Loan Agreement. At maturity, $80.0 million of principal will be repaid, and an additional $4.0 million will be paid (see below). Prior to maturity, there are no scheduled principal payments.

Through the three and one-half year anniversary of the Escrow Release Date, any prepayment of the Term Loan is subject to a make-whole provision in which interest payments related to the prepaid amount are due (subject to a discount of treasury rate plus 0.50%).

In connection with the Term Loan, the Company has granted the Lender a lien on and security interest in all of the Company’s right, title and interest in substantially all of the Company’s tangible and intangible assets, including all intellectual property.

The Loan Agreement contains customary representations and warranties and customary affirmative and negative covenants. These covenants, among other things, require a minimum cash balance throughout the term of the Term Loan and the achievement of regulatory milestones by certain dates, and contain certain limitations on the ability of the Company to incur unreimbursed research and development expenditures over a certain threshold, make capital expenditures over a certain threshold, incur indebtedness, dispose of assets outside of the ordinary course of business, make cash distributions and enter into certain merger or consolidation transactions. The minimum cash requirement was $5.0 million until August 27, 2018 (45 days after FDA approval of oral TPOXX®), at which point the minimum cash requirement became $20.0 million.

The Loan Agreement includes customary events of default, including, among others: (i) non-payment of amounts due thereunder, (ii) the material inaccuracy of representations or warranties made thereunder, (iii) non-compliance with covenants thereunder, (iv) non-payment of amounts due under, or the acceleration of, other material indebtedness of the Company and (v) bankruptcy or insolvency events. Upon the occurrence and during the continuance of an event of default under the Loan Agreement, the interest rate may increase by 2.00% per annum above the rate of interest otherwise in effect, and the Lenders would be entitled to accelerate the maturity of the Company’s outstanding obligations thereunder.

As of December 31, 2018, the Company is in compliance with the Loan Agreement covenants.

In connection with the Loan Agreement, the Company incurred $8.2 million of costs (including interest on amounts held in the escrow account between September 30, 2016 and November 15, 2016). Furthermore, an additional $4.0 million will become payable when principal of the Term Loan is repaid. As part of the Company's entry into the Loan Agreement, the Company issued the Warrant (see Note 9) with a fair market value of $5.8 million. The fair value of the Warrant, as well as costs related to the Term Loan issuance, were recorded as deductions to the Term Loan balance on the Balance Sheet. These amounts are being amortized on a straight-line basis over the life of the related Term Loan. The Company compared the amortization under the effective interest method with the straight-line basis and determined the results were not materially different. The $4.0 million that will be paid when principal is repaid is being accreted to the Term Loan balance. As of December 31, 2018, the Term Loan balance is $75.5 million.

8. Per Share Data

The Company computes, presents and discloses earnings per share in accordance with the authoritative guidance which specifies the computation, presentation and disclosure requirements for earnings per share of entities with publicly held common stock or potential common stock. The objective of basic EPS is to measure the performance of an entity over the reporting period by dividing income (loss) by the weighted average shares outstanding. The objective of diluted EPS is consistent with that of basic EPS, except that it also gives effect to all potentially dilutive common shares outstanding during the period.

The following is a reconciliation of the basic and diluted earnings (loss) per share computation:

	Year Ended December 31,		
	2018	2017	2016
Net income (loss) for basic earnings per share	$ 421,807,828	$ (36,235,484)	$ (39,697,960)
Less: Change in fair value of warrants	(6,922,624)	—	—
Net income (loss), adjusted for change in fair value of warrants for diluted earnings per share	$ 428,730,452	$ (36,235,484)	$ (39,697,960)
Weighted-average shares	79,923,295	78,874,494	57,188,503
Effect of potential common shares	2,785,177	—	—
Weighted-average shares: diluted	82,708,472	78,874,494	57,188,503
Earnings (loss) per share: basic	$ 5.28	$ (0.46)	$ (0.69)
Earnings (loss) per share: diluted	$ 5.18	$ (0.46)	$ (0.69)

For the year ended December 31, 2018, the diluted earnings per share calculation reflects the effect of the assumed exercise of outstanding warrants and any corresponding elimination of the impact included in operating results from the change in fair value of the warrants. Weighted-average diluted shares include the dilutive effect of in-the-money options and warrants, unvested restricted stock and unreleased restricted stock units. The dilutive effect of warrants and options is calculated based on the average share price for each fiscal period using the treasury stock method. Under the treasury stock method, the amount the employee or director must pay for exercising stock options, the average amount of compensation cost for future service that the Company has not yet recognized, and the amount of tax benefits that would be recorded in additional paid-in capital when the award becomes deductible, are collectively assumed to be used to repurchase shares.

The Company incurred losses for the twelve months ended December 31, 2017 and 2016 and as a result, for such years the equity instruments listed below are excluded from the calculation of diluted earnings (loss) per share as the effect of the exercise, conversion or vesting of such instruments would be anti-dilutive. The weighted average number of equity instruments excluded consisted of:

	Year Ended December 31,	
	2017	2016
Stock Options	1,386,176	1,789,751
Stock-Settled Stock Appreciation Rights	333,252	360,031
Restricted Stock Units	1,396,730	705,850
Warrants	2,690,950	877,303

As discussed in Note 11, the appreciation of each stock-settled stock appreciation right was capped at a determined maximum value. As a result, the weighted average number shown in the table above for stock-settled stock appreciation rights reflects the weighted average maximum number of shares that could be issued.

9. Financial Instruments

2016 Warrant

On September 2, 2016, in connection with the entry into the Loan Agreement (see Note 7 for additional information), the Company issued a warrant (the "Warrant") to the Lender to purchase a number of shares of the Company's common stock equal to $4.0 million divided by the lower of (i) $2.29 per share and (ii) the subscription price paid in connection with the Rights Offering (as defined in Note 10). The subscription price paid was $1.50 in connection with the Rights Offering; accordingly, the exercise price of the Warrant was set at $1.50 per share, and there were 2.7 million shares underlying the Warrant. Subsequent to partial exercises of the Warrant in 2018, there are approximately 1.75 million shares underlying the Warrant as of December 31, 2018. The Warrant provides for weighted average anti-dilution protection and is exercisable in whole or in part for ten (10) years from the date of issuance.

The Company accounted for the Warrant in accordance with the authoritative guidance which requires that free-standing derivative financial instruments with certain anti-dilution and cash settlement features be classified as assets or liabilities at the time of the transaction, and recorded at their fair value. Any changes in the fair value of the derivative instruments are reported in earnings

or loss as long as the derivative contracts are classified as assets or liabilities. Accordingly, the Company classified the Warrant as a liability and reports its change in fair value in the consolidated statement of operations.

On September 2, 2016, the issuance date of the Warrant, the fair value of the liability-classified Warrant was $5.8 million. The Company applied a Monte Carlo Simulation-model to calculate the fair value of the Warrant using the following assumptions: risk free interest rate of 1.60%; no dividend yield; an expected life of 10 years; and a volatility factor of 80%. The Company compared the Monte Carlo simulation model calculation to a Black-Scholes model calculation as of December 31, 2016. These models generated substantially equivalent fair values for the Warrant. As such, the Company utilized a Black-Scholes model for December 31, 2018 and 2017 to determine the fair value of the Warrant.

As of December 31, 2018, the fair value of the Warrant was $12.4 million. A Black Scholes model was applied to calculate the fair value of the Warrant using the following assumptions: risk free interest rate of 2.6%; no dividend yield; an expected life of 7.7 years; and a volatility factor of 70%.

As of December 31, 2017, the fair value of the Warrant was $11.5 million. A Black Scholes model was applied to calculate the fair value of the Warrant using the following assumptions: risk free interest rate of 2.38%; no dividend yield; an expected life of 8.67 years; and a volatility factor of 75%.

For the years ended December 31, 2018, 2017, and 2016 the Company recorded a loss of $6.9 million, $4.7 million, and $0.9 million, respectively as a result of increases in fair value of the liability-classified Warrant. During the year ended December 31, 2018 approximately $6.0 million of warrants were exercised resulting in the net issuance of approximately 760,000 shares of common stock. As of December 31, 2018 there are approximately 1.75 million shares underlying the outstanding Warrants.

At December 31, 2018, pursuant to the Warrant agreement, there were no conditions under which current assets would have been required to satisfy the Warrant obligation.

10. Stockholders' Equity

On December 31, 2018, the Company's authorized share capital consisted of 620,000,000 shares, of which 600,000,000 are designated common shares and 20,000,000 are designated preferred shares. The Company's Board of Directors is authorized to issue preferred shares in series with rights, privileges and qualifications of each series determined by the Board. As of December 31, 2018 and 2017, no preferred shares were outstanding or issued.

Rights Offering

On November 16, 2016, the Company completed a rights offering (the "Rights Offering"), pursuant to which it raised approximately $35.3 million in gross proceeds through the sale of 23,523,195 shares of its common stock. The Rights Offering was made pursuant to a registration statement on Form S-1 and declared effective by the SEC on October 21, 2016. As part of the Rights Offering, each stockholder of the Company received a subscription right for each share of common stock owned as of the record date of October 12, 2016. Each subscription right entitled its holder to invest $0.65 towards the purchase of shares of the Company's common stock at a subscription price equal to the lower of $1.50 or 85% of the volume weighted average price of Company shares during market hours on the expiration date of the Rights Offering. The Rights Offering expired on November 8, 2016. Through basic subscriptions and oversubscriptions, the Rights Offering was fully subscribed. The subscription price was set at $1.50. The Company used the net proceeds of the Rights Offering, together with proceeds from the Term Loan and cash on hand, to fully satisfy PharmAthene's claim related to litigation (see Note 13).

Rights Offering-Backstop Agreement

On October 13, 2016, in connection with the Rights Offering as discussed above, the Company entered into an investment agreement or "backstop agreement", with an affiliate of MacAndrews & Forbes Incorporated ("M&F") (see Note 14), and certain other backstop parties (the "Backstop Parties"). Under the terms of the backstop agreement, the Backstop Parties agreed to purchase, pursuant to a separate private placement, a number of shares of common stock equal to the numbers of shares that were not subscribed for in the Rights Offering. Because the Rights Offering was fully subscribed, the Backstop Parties were not required to draw on such commitment. The Company issued 708,530 shares to Backstop Parties, of which approximately 565,000 shares were received by M&F, in payment of the five percent backstop fee ($1,764,240) payable to the Backstop Parties in connection with the backstop agreement. The fair value of the shares issued in satisfaction of the backstop fee was expensed in the income statement in the fourth quarter of 2016. There are no remaining payment obligations to the Backstop Parties under the backstop agreement.

11. Stock Compensation Plans

The Company's 2010 Stock Incentive Plan (the "2010 Plan") was initially adopted in May 2010. The 2010 Plan provided for the issuance of stock options, restricted stock and unrestricted stock with respect to an aggregate of 2,000,000 shares of the Company's common stock to employees, consultants and outside directors of the Company. On May 17, 2011, the 2010 Plan was amended to provide for the issuance of restricted stock units ("RSUs") and on February 2, 2012, the 2010 Plan was amended to provide for the issuance of SSARs. Effective April 25, 2012 and May 23, 2017, the 2010 Plan was amended to increase the maximum number of shares of common stock available for issuance to an aggregate of 4,500,000 shares and 8,500,000 shares, respectively. The vesting period for awards granted under the 2010 Plan, is determined by the Compensation Committee of the Board of Directors. The Compensation Committee also determines the expiration date of each equity award, however, stock options and SSARs may not be exercisable more than ten years after the date of grant as the maximum term of equity awards issued under the 2010 Plan is ten years.

For the years ended December 31, 2018, 2017 and 2016, the Company recorded stock-based compensation expense, including stock options, SSARs, RSUs and certain warrant amortization, of approximately $2.3 million, $1.1 million and $0.8 million, respectively.

Stock Options

Stock option awards provide holders the right to purchase shares of Common Stock at prices determined by the Compensation Committee and must have an exercise price equal to or in excess of the fair market value of the Company's common stock at the date of grant.

The fair value of options granted is estimated at the date of grant. Expected volatility has been estimated using a combination of the historical volatility of the Company's common stock and the historical volatility of a group of comparable companies' common stock, both using historical periods equivalent to the options' expected lives. The expected dividend yield assumption is based on the Company's intent not to issue a dividend in the foreseeable future. The risk-free interest rate assumption is based upon observed interest rates for securities with maturities approximating the options' expected lives. The expected life was estimated based on historical experience and expectation of employee exercise behavior in the future giving consideration to the contractual terms of the award.

A summary of the Company's stock option activity is as follows:

	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Life (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at January 1, 2018	1,062,467	$ 5.42		
Granted	—	—		
Exercised	(635,067)	3.06		
Canceled/Expired	(25,000)	7.13		
Outstanding at December 31, 2018	402,400	$ 9.03	2.04	$ 421,250
Vested at December 31, 2018	402,400	$ 9.03	2.04	$ 421,050
Exercisable at December 31, 2018	402,400	$ 9.03	2.04	$ 421,050

As of December 31, 2018, there is no remaining unrecognized stock-based compensation cost related to stock options expected to be recognized. The total fair value of stock options which vested during the year ended December 31, 2017 was approximately $73,000. For the years ended December 31, 2018 and 2016 there were no stock options that vested.

The total intrinsic value of stock options exercised was approximately $2,900,000, $65,000 and $0 for the years ended December 31, 2018, 2017 and 2016, respectively. The intrinsic value represents the amount by which the market price of the underlying stock exceeds the exercise price of an option.

As of December 31, 2017, 100,000 of the Company's outstanding options were subject to specific performance conditions consisting of regulatory approval of our lead drug candidate. The performance conditions were met in 2018.

Stock Appreciation Rights

SSARs provide holders the right to purchase shares of Common Stock at prices determined by the Compensation Committee and must have an exercise price equal to or in excess of the fair market value of the Company's common stock at the date of grant. Upon exercise, the gain, or intrinsic value, is settled by the delivery of SIGA stock to the employee.

There were no SSARs granted during the years ended December 31, 2018 or 2017. During the year ended December 31, 2012, the Company granted 1.4 million shares of SSARs at a weighted average grant-date fair value of $0.68 per share. The exercise price of a SSAR is equal to the closing market price on the date of grant. The granted SSARs vested in equal annual installments over a period of three years and expire no later than seven years from the date of grant. Moreover, the appreciation of each SSAR was capped at a determined maximum value. At December 31, 2018 and 2017, due to the cap on value, the maximum number of shares that could be issued in the future was 23,157 and 162,393, respectively.

The fair value of granted SSARs was estimated utilizing a Monte Carlo method. The Monte Carlo method is a statistical simulation technique used to provide the grant-date fair value of an award. As the issued SSARs were capped at maximum values, such attribute was considered in the simulation.

The Company calculated the expected volatility using a combination of historical volatility of SIGA's common stock and the volatility of a group of comparable companies' common stock. The expected life from grant date was estimated based on the expectation of exercise behavior in consideration of the maximum value and contractual term of the SSARs. The dividend yield assumption was based on the Company's intent not to issue a dividend in the foreseeable future. The risk-free interest rate assumption was based upon observed interest rates appropriate for the expected life of the SSARs.

A summary of the Company's SSAR activity is as follows:

	Number of SSARs	Weighted Average Exercise Price	Weighted Average Remaining Life (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at January 1, 2018	266,150	$ 3.53		
Granted	—	—		
Exercised	(232,050)	3.53		
Canceled/Expired	—	—		
Outstanding at December 31, 2018	34,100	3.53	0.09	149,017
Vested at December 31, 2018	34,100	$ 3.53	0.09	$ 149,017
Exercisable at December 31, 2018	34,100	$ 3.53	0.09	$ 149,017

The total intrinsic value of SSARs exercised was approximately $0.7 million and $0.9 million and for the years ended December 31, 2018 and 2017, respectively. For the years ended December 31, 2016 there were no SSARs exercised.

Restricted Stock Awards/Restricted Stock Units

RSUs awarded to employees vest in equal annual installments over a three-year period and RSUs awarded to directors of the Company vest over a one-year period. A summary of the Company's RSU activity is as follows:

	Number of RSUs	Weighted Average Grant-Date Fair Value
Outstanding at January 1, 2018	1,472,000	$ 2.61
Granted	105,000	6.53
Vested and released	(1,077,884)	2.69
Canceled/Expired	—	—
Outstanding at December 31, 2018	499,116	$ 3.26

As of December 31, 2018, $1.1 million of total remaining unrecognized stock-based compensation cost related to RSUs is expected to be recognized over the weighted-average remaining requisite service period of 0.79 years. The weighted average fair value at the date of grant for restricted stock awards granted during the years ended December 31, 2018, 2017 and 2016 was $6.53, $3.51 and $2.24 per share, respectively. Based on the grant date, the total fair value of restricted stock and restricted stock units vested

and released during the years ended December 31, 2018, 2017 and 2016 was approximately $2.9 million, $0.6 million and $1.4 million, respectively.

12. Income Taxes

On December 22, 2017, the U.S. government enacted comprehensive tax reform referred to as the Tax Cuts and Jobs Act ("TCJA"). Under FASB Accounting Standards Codification Topic 740, *Income Taxes* ("ASC 740"), the effects of changes in tax rates and laws are recognized in the period in which the new legislation is enacted. The TCJA makes broad and complex changes to the U.S. tax code, including, but not limited to: (1) reducing the U.S. federal corporate tax rate from 35% to 21%; (2) changing rules related to uses and limitations of net operating loss carryforwards created in tax years beginning after December 31, 2018; (3) bonus depreciation that will allow for full expensing of qualified property; (4) creating a new limitation on deductible interest expense; (5) eliminating the corporate alternative minimum tax ("AMT"); (6) limitation on the deductibility of executive compensation under Internal Revenue Code §162(m); and (7) new tax rules related to foreign operations.

In response to the TCJA, the SEC staff issued Staff Accounting Bulletin ("SAB") No. 118, which provides guidance on accounting for the tax effects of the TCJA. The purpose of SAB No. 118 was to address any uncertainty or diversity of view in applying ASC 740 in the reporting period in which the TCJA was enacted. In addition, SAB No. 118 provides a measurement period that should not extend beyond one year from the TCJA enactment date for companies to complete the accounting under ASC 740. For the year ended December 31, 2017, the Company recorded a provisional decrease in its deferred tax asset and liabilities with a corresponding adjustment to the related valuation allowance. In addition, the Company recorded an income tax benefit of $2.7 million related to the elimination of the AMT as such amounts will be refundable, in cash, under the TCJA. The Company expects to collect the refund no later than 2021. During the year ended December 31, 2018, the Company finalized the accounting for the tax effects of the TCJA with no material changes to the provisional estimate recorded in 2017.

The Company's (benefit) provision for income taxes comprises the following:

	For the year ended December 31,		
	2018	2017	2016
Current:			
Federal	$ (1,326,022)	$ 623,060	$ (5,093)
State and local	459,172	1,179	(1,446)
Total current provision (benefit)	(866,850)	624,239	(6,539)
Deferred:			
Federal	(9,256,661)	(2,724,371)	21,252
State and local	(44,761)	6,342	(829)
Total deferred (benefit) provision	(9,301,422)	(2,718,029)	20,423
Total (benefit) provision	$ (10,168,272)	$ (2,093,790)	$ 13,884

The Company's deferred tax assets and liabilities comprise the following:

	As of December 31,	
	2018	2017
Deferred income tax assets:		
Net operating losses	9,798,319	$ 38,087,782
Deferred research and development costs	60,535	205,527
Amortization of intangible assets	171,044	282,213
Share-based compensation	508,089	1,001,662
Fixed assets	371,804	417,085
Deferred revenue	—	84,130,212
Alternative minimum tax credits	1,326,228	2,652,250
Other	1,028,083	1,024,082
Deferred income tax assets	13,264,102	127,800,813
Less: valuation allowance	(1,051,307)	(102,556,657)
Deferred income tax assets, net of valuation allowance	$ 12,212,795	$ 25,244,156
Deferred income tax liabilities:		
Amortization of goodwill	(192,146)	(193,458)
Capitalized contract costs	—	(21,518,646)
Other	(287,264)	(1,100,089)
Deferred income tax asset (liability), net	$ 11,733,385	$ 2,431,963

The recognition of a valuation allowance for deferred taxes requires management to make estimates and judgments about the Company's future profitability which is inherently uncertain. The Company assesses all available positive and negative evidence to determine if its existing deferred tax assets are realizable on a more-likely-than-not basis. In making such assessment, the Company considered the reversal of existing taxable temporary differences, projected future taxable income, tax planning strategies and recent financial operating results. The ultimate realization of a deferred tax asset is ultimately dependent on the Company's generation of sufficient taxable income within the available net operating loss carryback and/or carryforward periods to utilize the deductible temporary differences.

During the year ended December 31, 2018, the Company received FDA approval and recorded revenue related to the delivery of our oral TPOXX® product. The Company also received payments for the FDA holdback, the expiry option under the 2011 Base Contract, and for the sale of its PRV. In addition, the Company entered into a new contract with BARDA for the sale of up to 1.7 million courses of (oral and IV) TPOXX®. Based on these factors, management determined that sufficient positive evidence exists to conclude that substantially all of our deferred tax assets are realizable on a more-likely-than-not basis and reversed our valuation allowance. During 2018, the valuation allowance decreased by $101.5 million which relates to the reversal of substantially all of the Company's valuation allowance against its deferred tax assets with the exception of those related to certain state net operating losses.

As of December 31, 2018, the Company had $40.3 million of federal net operating loss carryforwards, which expire in 2036, to offset future taxable income.

The Company's effective tax rate differs from the U.S. federal statutory income tax rate as follows:

	As of December 31,		
	2018	2017	2016
Statutory federal income tax rate	21.0 %	(35.0)%	(35.0)%
State tax benefit	0.8 %	(3.9)%	0.6 %
Increase in fair value of common stock warrants	0.4 %	4.3 %	0.8 %
Reorganization costs	— %	— %	3.3 %
Other	— %	(1.8)%	0.2 %
U.S. federal tax law change	— %	(5.1)%	— %
Valuation allowance on deferred tax assets	(24.7)%	36.0 %	30.1 %
Effective tax rate	(2.5)%	(5.5)%	— %

For the year ended December 31, 2018, the Company's effective tax rate differs from the statutory rate of 21% primarily due to the reversal of the Company's valuation allowance as substantially all of the Company's deferred tax assets became realizable on a more-likely-than-not basis. For the year ended December 31, 2017, the Company's effective tax rate differs from the statutory rate of 35% principally due to the operating losses for which no tax benefit was provided, coupled with the impact of the TCJA.

A reconciliation of the beginning and ending amount of unrecognized tax benefits, excluding interest and penalties, is as follows:

	For the year ended December 31, 2018
Balance at beginning of year	$ —
Tax positions related to the current and prior years:	
Additions	5,738,964
Reductions	—
Settlements	—
Lapses in applicable statutes of limitation	—
Balance at the end of the year	$ 5,738,964

As of December 31, 2017, the Company did not have any unrecognized tax benefits. Included in the balance of unrecognized tax benefits as of December 31, 2018, are potential benefits of $5.7 million that, if recognized, would affect the effective tax rate. There are no uncertain tax positions for which it is reasonably possible that the total amounts of unrecognized benefits will significantly increase or decrease within twelve months from December 31, 2018.

The Company files federal income tax returns and income tax returns in various state and local tax jurisdictions. The open tax years for U.S. federal, state and local tax returns are 2014-2018; open tax years relating to any of the Company's net operating losses begin in 2001. In the event that the Company concludes that it is subject to interest and/or penalties arising from uncertain tax positions, the Company will present interest and penalties as a component of income taxes. No amounts of interest or penalties were recognized in the Company's consolidated financial statements for any of the years in the three-year period ended December 31, 2018.

13. Commitments and Contingencies

Operating lease commitments

The Company leases its Corvallis, Oregon, facilities and office space under an operating lease which was signed on November 3, 2017 and commenced on January 1, 2018. This lease expires December 31, 2019. The Company had a lease for the same location prior to this lease. On May 26, 2017 the Company and M&F Incorporated entered into a ten-year office lease agreement (the "New HQ Lease"), pursuant to which the Company agreed to lease 3,200 square feet at 31 East 62nd Street, New York, New York. The Company is utilizing premises leased under the New HQ Lease as its new corporate headquarters. Rental expense, including charges for maintenance, utilities, real estate taxes and other operating expenses, totaled $0.7 million, $1.0 million and $1.2 million for the years ended December 31, 2018, 2017 and 2016, respectively.

Future minimum cash rental commitments under non-cancelable operating leases as of December 31, 2018 are expected to be as follows:

2019	$	541,376
2020		304,000
2021		304,000
2022		320,774
2023		352,000
Thereafter		1,197,778
Total	$	3,019,928

Legal Proceedings

After several years of proceedings in litigation initiated by PharmAthene in 2006, the Delaware Court of Chancery on August 8, 2014 issued an opinion and order in which it determined, among other things, that PharmAthene was entitled to a lump sum damages award for its lost profits including interest and fees, based on U.S. government purchases of the Company's smallpox drug allegedly anticipated as of December 2006. On September 16, 2014, as a consequence of SIGA's chapter 11 filing, the legal proceedings with PharmAthene were stayed, except that the parties agreed by stipulation approved by the Court on October 8, 2014 that the litigation could proceed. On January 15, 2015, the Delaware Court of Chancery entered its Final Order and Judgment (the "Final Order and Judgment") awarding PharmAthene approximately $195.0 million, including pre-judgment interest up to January 15, 2015 (the "Judgment"). On December 23, 2015 the Delaware Supreme Court affirmed the Judgment. Pursuant to the Final Order and Judgment, SIGA also was liable to PharmAthene for $30,663.89 per day in post-judgment interest. On a series of dates up to and including a final payment on November 16, 2016, the Company paid PharmAthene an aggregate of $217.0 million to fully satisfy the Judgment, including post-judgment interest, in accordance with the bankruptcy plan of reorganization.

From time to time, we may be involved in a variety of claims, suits, investigations and proceedings arising from the ordinary course of our business, collections claims, breach of contract claims, labor and employment claims, tax and other matters. Although such claims, suits, investigations and proceedings are inherently uncertain and their results cannot be predicted with certainty, we believe that the resolution of such current pending matters, if any, will not have a material adverse effect on our business, consolidated financial position, results of operations or cash flow. Regardless of the outcome, litigation can have an adverse impact on us because of legal costs, diversion of management resources and other factors.

14. Related Party Transactions

Board of Directors and Outside Counsel
A member of the Company's Board of Directors is a member of the Company's outside counsel. During the years ended December 31, 2018, 2017 and 2016, the Company incurred expenses of $450,000, $400,000 and $1.5 million, respectively, related to services provided by the outside counsel. On December 31, 2018 the Company's outstanding payables and accrued expenses included a $37,000 liability to the outside counsel.

Board of Directors-Consulting Agreement
On October 13, 2018, the Company, entered into a consulting agreement with a member of the Company's Board of Directors. Under the agreement, the consulting services will include assisting the Company on expanded indications for TPOXX® and other business development opportunities as requested by the Company. The term of the agreement is for two years, with compensation for such services at an annual rate of $200,000. During the year ended December 31, 2018, the Company incurred $42,935 related to services under this agreement. As of December 31, 2018, the Company's outstanding payables and accrued expenses included a $42,935 liability associated with this agreement.

Rights Offering-Backstop Agreement
On October 13, 2016, in connection with the Rights Offering as discussed above, the Company entered into the Backstop Agreement with an affiliate of M&F (M&F is a principal stockholder of the Company) and the other Backstop Parties. Under the terms of the Backstop Agreement, the Backstop Parties agreed to purchase, pursuant to a separate private placement, a number of shares of common stock equal to the numbers of shares that would have not been subscribed for in the Rights Offering. The Backstop Agreement provided that the subscription price for the Backstop Parties would be equal to the subscription price applicable to all shareholders under the Rights Offering. Because the Rights Offering was fully subscribed, the Backstop Parties were not required to draw on such commitment. The Company issued 708,530 shares to Backstop Parties, of which approximately 565,000 shares were received by M&F, in payment of the five percent backstop fee ($1,764,240) payable to the Backstop Parties in connection with the backstop agreement. When shares were issued to the Backstop Parties in payment of the backstop fee, the stock price of SIGA common stock was $2.49 per share (the closing price of the Company's common stock on November 16, 2016). The fair value of the shares issued in satisfaction of the backstop fee was expensed to the income statement in 2016. There are no remaining payment obligations to the Backstop Parties under the Backstop Agreement.

Real Estate Leases
On May 26, 2017 the Company and M&F Incorporated entered into the New HQ Lease, pursuant to which the Company agreed to lease 3,200 square feet at 31 East 62nd Street, New York, New York. The Company is utilizing premises leased under the New HQ Lease as its new corporate headquarters. The Company's rental obligations consist of a fixed rent of $25,333, per month in the first sixty-three months of the term, subject to a rent abatement for the first six months of the term. From the first day of the sixty-fourth month of the term through the expiration or earlier termination of the lease, the Company's rental obligations consist of a fixed rent of $29,333 per month. In addition to the fixed rent, the Company will pay a facility fee in consideration of the landlord making available certain ancillary services, commencing on the first anniversary of entry into the lease. The facility fee will be $3,333 per month for the second year of the term and increase by five percent each year thereafter, to $4,925 per month in the final year of the term.

On July 31, 2017, the Company and M&F, entered into a Termination of Sublease Agreement (the "Old HQ Sublease Termination Agreement"), pursuant to which the Company and M&F agreed to terminate the sublease dated January 9, 2013 for 6,676 square feet of rental square footage located at 660 Madison Avenue, Suite 1700, New York, New York (such sublease being the "Old HQ Sublease" and the location being the "Old HQ").

Effectiveness of the Old HQ Sublease Termination Agreement was conditioned upon the commencement of a sublease for the Old HQ between M&F and a new subtenant (the "Replacement M&F Sublease"), which occurred on August 2, 2017. The Old HQ Sublease Termination Agreement obligates the Company to pay, on a monthly basis, an amount equal to the discrepancy (the "Rent Discrepancy") between the sum of fixed rent and Additional Rent (as defined below) under the Old HQ Overlease (as defined below) and the sum of fixed rent and Additional Rent under the Replacement M&F Sublease. Under the Old HQ Sublease Termination Agreement, the Company and M&F release each other from any liability under the Old HQ Sublease.

Under the Old HQ Sublease, the Company was obligated to pay fixed rent of approximately $60,000 per month until August 2018 and approximately $63,400 per month thereafter until the Old HQ Sublease expiration date of August 31, 2020. Additionally, the Company was obligated to pay certain operating expenses and taxes ("Additional Rent"), such Additional Rent being specified in the overlease between M&F and the landlord at 660 Madison Avenue (the "Old HQ Overlease").

Under the Replacement M&F Sublease, the subtenant's rental obligations were excused for the first two (2) months of the lease term ("Rent Concession Period"). Thereafter, the subtenant was obligated to pay fixed rent of $36,996 per month for the first twelve (12) months, and is obligated to pay $37,831 per month for the next 12 months, and $38,665 per month until the scheduled expiration of the Replacement M&F Sublease on August 24, 2020. In addition to fixed rent, the subtenant is also obligated to pay, pursuant to the Replacement M&F Sublease, a portion of the Additional Rent specified in the Old HQ Overlease.

For the time period between August 2, 2017 and August 31, 2020 (the expiration date of the Old HQ Sublease), the Company estimates that it will pay a total of approximately $0.9 million combined in fixed rent and additional amounts payable under the New HQ Lease and a total of approximately $1.1 million in Rent Discrepancy under the Old HQ Sublease Termination Agreement, for a cumulative total of $2.0 million. In contrast, fixed rent and estimated Additional Rent under the Old HQ Sublease, for the aforementioned time period, would have been a total of approximately $2.4 million if each of the New HQ Lease, Replacement M&F Sublease and Old HQ Sublease Termination Agreement had not been entered into by each of the parties thereto. Because amounts such as operating expenses and taxes may vary, the foregoing totals can only be estimated at this time and are subject to change.

As a result of the above-mentioned transactions, the Company has discontinued usage of Old HQ in the third quarter of 2017. As such, for the year ended December 31, 2017 the Company recorded a loss of approximately $1.1 million in accordance with ASC 420, *Exit or Disposal Obligations*. This loss primarily represented the discounted value of estimated Rent Discrepancy payments to occur in the future, and included costs related to the termination of the old HQ Sublease. The Company also wrote-off approximately $0.1 million of leasehold improvements and furniture and fixtures related to the Old HQ.

The following table summarizes activity relating to the liability that was recorded as a result of the lease termination:

	For the years ended December 31,	
	2018	**2017**
Beginning Balance	$ 814,622	$ —
Charges	35,861	1,096,648
Cash Payments	(340,546)	(282,026)
Lease Termination Liability	$ 509,937	$ 814,622

For the years ended December 31, 2018 and 2017, approximately $0.2 million and $0.5 million of the lease termination liability is included in Other liabilities on the consolidated balance sheet with the remainder in accrued expenses.

Pre-Clinical Development Program
On May 17, 2018, the Company and vTv Therapeutics LLC ("vTv") entered into an asset purchase agreement, pursuant to which the Company acquired data related to certain pre-clinical development activities. Such data contains information that could be used to potentially develop clinical drug candidates. A de minimis amount ($10) was paid by the Company to vTv in order to execute the asset purchase agreement. vTv, which is majority owned by affiliates of M&F, will receive a royalty of 1-4% of sales in the event that SIGA is able to (i) successfully develop a drug from the acquired data and (ii) there are drug sales. Additionally, vTv will receive up to 10% of development revenues in the event that SIGA receives revenues in connection with any development activities.

15. Reorganization Items, net:

On April 12, 2016, the Company emerged from chapter 11 of the Bankruptcy Code when the Company's plan of reorganization (the "Plan") became effective, and on December 22, 2016 the Company's chapter 11 case was closed by the Bankruptcy Court. Under the Plan, the Company fully paid all of its claims. The Company did not apply the provisions of fresh start accounting as ownership of existing shares of the Company's common stock remained unaltered by the Plan.

Prior to April, 12 2016, the effective date of the Plan, the Company was operating its business as a "debtor-in-possession." The Company had filed on September 16, 2014, a voluntary petition for relief under chapter 11 of Title 11 of the United States Code (the "Bankruptcy Code") in the United States Bankruptcy Court for the Southern District of New York (the "Bankruptcy Court") chapter 11 Case Number 14-12623 (SHL). The chapter 11 case preserved the Company's ability to satisfy its commitments under the 2011 BARDA Contract (as defined in Note 3) and preserved its operations, which likely would have been jeopardized by the enforcement of a judgment stemming from the Company's litigation with PharmAthene, Inc. While operating as a debtor-in-

possession under chapter 11, the Company pursued an appeal of the Delaware Court of Chancery Final Order and Judgment, without having to post a bond.

Reorganization items represent expenses in connection with the chapter 11 case. For the year ended December 31, 2016, reorganization items consisted of the following:

Legal fees	$	1,951,381
Professional fees		1,732,521
Trustee fees		33,000
Total	$	3,716,902

Subsequent to the Effective Date of the Plan, expenses directly attributable to the implementation of the Plan are reported in selling, general and administrative expenses. During the year ended December 31, 2016, the Company paid approximately $4.6 million for reorganization items.

16. Financial Information By Quarter (Unaudited)

	Three Months Ended				
2018	**March 31**	**June 30**	**September 30**	**December 31**	
	(in thousands, except for per share data)				
Revenues	$ 1,748	$ 2,661	$ 471,075	$ 1,569	
Cost of sales and supportive services	—	—	95,166	103	
Selling, general & administrative	3,057	2,880	3,115	3,828	
Research and development	3,008	3,312	3,723	2,973	
Patent preparation fees	218	178	186	207	
Operating income (loss)	(4,535)	(3,710)	368,885	(5,541)	
Net income (loss)	(11,582)	(7,051)	388,050	52,391	A
Net loss per share: basic	$ (0.15)	$ (0.09)	$ 4.85	$ 0.65	
Net loss per share: diluted	$ (0.15)	$ (0.09)	$ 4.71	$ 0.65	

A- Includes sale of PRV in October 2018. See Note 1 for additional information.

	Three Months Ended			
2017	**March 31**	**June 30**	**September 30**	**December 31**
	(in thousands, except for per share data)			
Revenues	$ 5,202	$ 4,265	$ 1,390	$ 1,412
Selling, general and administrative	2,870	3,058	3,094	3,281
Research and development	6,360	5,068	2,471	2,781
Patent expenses	241	197	251	221
Lease termination	—	—	1,225	—
Operating loss	(4,269)	(4,059)	(5,651)	(4,871)
Net loss	(8,615)	(7,501)	(9,816)	(10,303)
Loss per common share: basic and diluted	$ (0.11)	$ (0.10)	$ (0.12)	$ (0.13)

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

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2018 in accordance with the framework on *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The term "disclosure controls and procedures" is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934. Management recognizes that any disclosure controls and procedures no matter how well designed and operated, can only provide reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Based on that evaluation, our Chief Executive Office and Chief Financial Officer have concluded that our disclosure controls and procedures were effective as of December 31, 2018 at a reasonable level of assurance.

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting during the quarter ended December 31, 2018 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) or Rule 15d-15(f) of the Securities Exchange Act of 1934, as amended. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Our internal control over financial reporting includes those policies and procedures that:

a. pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and disposition of the Company's assets;

b. provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and the directors of the Company; and

c. provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

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

Our management conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2018 using the framework in *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation using the COSO criteria, management concluded that the Company's internal control over financial reporting was effective as of December 31, 2018.

The effectiveness of our internal control over financial reporting as of December 31, 2018 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in its report which appears herein.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers, and Corporate Governance

Information required by this item is incorporated herein by reference to our definitive proxy statement for the 2019 Annual Meeting of Stockholders.

Item 11. Executive Compensation

Information required by this item is incorporated herein by reference to our definitive proxy statement for the 2019 Annual Meeting of Stockholders.

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

Information required by this item is incorporated herein by reference to our definitive proxy statement for the 2019 Annual Meeting of Stockholders.

Equity Compensation Plan Information

The following table sets forth certain compensation plan information with respect to compensation plans as of December 31, 2018:

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Restricted Stock Units (1)	Weighted-average Exercise Price of Outstanding Options, Warrants and Restricted Stock Units	Number of Securities Available for Future Issuance under Equity Compensation Plans (2)
Equity compensation plans approved by security holders	924,674	$ 5.78	4,862,804
Equity compensation plans not approved by security holders	—	—	—
Total	924,674	$ 5.78	4,862,804

(1) Consists of the 1996 Incentive and Non-Qualified Stock Option Plan and the 2010 Stock Incentive Plan.

(2) Consists of the 2010 Stock Incentive Plan.

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

Information required by this item is incorporated herein by reference to our definitive proxy statement for the 2019 Annual Meeting of Stockholders.

Item 14. Principal Accounting Fees and Services

Information required by this item is incorporated herein by reference to our definitive proxy statement for the 2019 Annual Meeting of Stockholders.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a) (1) and (2). Financial Statements.

See Index to Financial Statements under Item 8 in Part II hereof where these documents are listed. All schedules for which provision is made in the applicable accounting regulations of the Securities and Exchange Commission are not required under the related instructions or are inapplicable and, therefore, have been omitted.

(a) (3). Exhibits.

The following is a list of exhibits:

Exhibit No.	Description
2(c)	Asset Purchase Agreement, dated October 31, 2018, by and between Eli Lilly and Company and SIGA Technologies, Inc. (incorporated by referenced to the Current Report on Form 8-K of the Company filed on November 1, 2018).
3(a)	Amended and Restated Certificate of Incorporation of SIGA Technologies, Inc. (incorporated by reference to the Current Report on Form 8-K of the Company filed on April 14, 2016).
3(b)	Amended and Restated Bylaws of SIGA Technologies, Inc. (incorporated by reference to the Current Report on Form 8-K of the Company filed on April 14, 2016).
3(c)	Amendment to Amended and Restated Bylaws of SIGA Technologies, Inc. (incorporated by reference to the Current Report on Form 8-K of the Company filed on December 13, 2016).
4(a)	Form of Common Stock Certificate (incorporated by reference to the Form SB-2 Registration Statement of the Company dated March 10, 1997 (No. 333-23037)).
10(a)	Contract dated as of May 13, 2011, between SIGA and the Biomedical Advanced Research and Development Authority of the United States Department of Health and Human Services (portions of this exhibit have been omitted and separately filed with the Securities and Exchange Commission with a request for confidential treatment) (incorporated by reference to the Current Report on Form 8-K of the Company filed on May 17, 2011).
10(b)	Amendment of Solicitation/Modification of Contract dated as of June 24, 2011, to Agreement dated as of May 13, 2011, between SIGA and the Biomedical Advanced Research and Development Authority of the United States Department of Health and Human Services (portions of this exhibit have been omitted and separately filed with the Securities and Exchange Commission with a request for confidential treatment) (incorporated by reference to the Current Report on Form 8-K of the Company filed on June 28, 2011).
10(c)	Director Compensation Program, effective January 1, 2012 (incorporated by reference to the Definitive Proxy Statement on Form DEF 14A of the Company filed on April 27, 2012).
10(d)	Amendment of Solicitation/Modification of Contract dated as of September 28, 2011, to Agreement dated as of May 13, 2011, between SIGA and the Biomedical Advanced Research and Development Authority of the United States Department of Health and Human Services (portions of this exhibit have been omitted and separately filed with the Securities and Exchange Commission with a request for confidential treatment) (incorporated by reference to the Quarterly Report on Form 10-Q of the Company filed on May 7, 2012).

10(e)	Amendment of Solicitation/Modification of Contract dated as of October 7, 2011, to Agreement dated as of May 13, 2011, between SIGA and the Biomedical Advanced Research and Development Authority of the United States Department of Health and Human Services (portions of this exhibit have been omitted and separately filed with the Securities and Exchange Commission with a request for confidential treatment) (incorporated by reference to the Quarterly Report on Form 10-Q of the Company filed on May 7, 2012).
10(f)	Amendment of Solicitation/Modification of Contract dated as of January 25, 2012 to Agreement, dated as of May 13, 2011, between SIGA and the Biomedical Advanced Research and Development Authority of the United States Department of Health and Human Services (portions of this exhibit have been omitted and separately filed with the Securities and Exchange Commission with a request for confidential treatment) (incorporated by reference to the Quarterly Report on Form 10-Q of the Company filed on May 7, 2012).
10(g)	Amendment of Solicitation/Modification of Contract dated as of February 7, 2012, to Agreement, dated as of May 13, 2011, between SIGA and the Biomedical Advanced Research and Development Authority of the United States Department of Health and Human Services (incorporated by reference to the Quarterly Report on Form 10-Q of the Company filed on May 7, 2012).
10(h)	Amendment of Solicitation/Modification of Contract dated as of December 19, 2012, to Agreement, dated as of May 13, 2011, between SIGA and the Biomedical Advanced Research and Development Authority of the United States Department of Health and Human Services (portions of this exhibit have been omitted and separately filed with the Securities and Exchange Commission with a request for confidential treatment) (incorporated by reference to the Annual Report on Form 10-K of the Company filed on March 6, 2013).
10(i)	Amendment of Solicitation/Modification of Contract dated as of February 28, 2013, to Agreement, dated as of May 13, 2011, between SIGA and the Biomedical Advanced Research and Development Authority of the United States Department of Health and Human Services (incorporated by reference to the Annual Report on Form 10-K of the Company filed on March 10, 2014).
10(j)	Amendment of Solicitation/Modification of Contract dated as of April 9, 2013, to Agreement, dated as of May 13, 2011, between SIGA and the Biomedical Advanced Research and Development Authority of the United States Department of Health and Human Services (incorporated by reference to the Annual Report on Form 10-K of the Company filed on March 10, 2014).
10(k)	Amendment of Solicitation/Modification of Contract 0009, dated April 29, 2015, to Agreement, dated May 13, 2011 by and between SIGA and the Biomedical Advanced Research and Development Authority of the United States Department of Health and Human Services (portions of this exhibit have been omitted and separately filed with the Securities and Exchange Commission with a request for confidential treatment) (incorporated by reference to the Quarterly Report on Form 10-Q of the Company filed on May 6, 2015).
10(l)	Amendment of Solicitation/Modification of Contract 0010, dated July 1, 2015, to Agreement, dated May 13, 2011 by and between SIGA and the Biomedical Advanced Research and Development Authority of the United States Department of Health and Human Services (portions of this exhibit have been omitted and separately filed with the Securities and Exchange Commission with a request for confidential treatment) (incorporated by reference to the Annual Report on Form 10-K of the Company filed on March 4, 2016).
10(m)	Amendment of Solicitation/Modification of Contract 0011, dated December 9, 2015, to Agreement, dated May 13, 2011 by and between SIGA and the Biomedical Advanced Research and Development Authority of the United States Department of Health and Human Services (portions of this exhibit have been omitted and separately filed with the Securities and Exchange Commission with a request for confidential treatment)(incorporated by reference to the Annual Report on Form 10-K of the Company filed on March 4, 2016).
10(n)	Amended and Restated Employment Agreement, dated April 12, 2016, between SIGA Technologies, Inc. and Daniel J. Luckshire (incorporated by reference to the Current Report on Form 8-K of the Company filed on April 14, 2016).

10(o)	Amended and Restated Employment Agreement, dated April 12, 2016, between SIGA Technologies, Inc. and Dennis E. Hruby (incorporated by reference to the Current Report on Form 8-K of the Company filed on April 14, 2016).
10(p)	Amendment of Solicitation/Modification of Contract 0013, dated June 28, 2016, to Agreement, dated May 13, 2011, between the Biomedical Advanced Research and Development Authority of the United States Department of Health and Human Services and SIGA (portions of this exhibit have been omitted and separately filed with the Securities and Exchange Commission with a request for confidential treatment) (incorporated by reference to the Current Report on Form 8-K of the Company filed on July 5, 2016).
10(q)	Loan and Security Agreement, dated as of September 2, 2016, by and among SIGA Technologies, Inc., OCM Strategic Credit SIGTEC Holdings, LLC, Cortland Capital Market Services LLC, in its capacity as administrative agent and collateral agent, OCM Strategic Credit SIGTEC Holdings, LLC, as sole lead arranger, and each of the other persons who are or thereafter become parties to the Loan Agreement as guarantors (incorporated by reference to the Current Report on Form 8-K of the Company filed on September 7, 2016).
10(r)	Warrant, dated as of September 2, 2016, by the Company in favor of OCM Strategic Credit SIGTEC Holdings, LLC or its registered assigns (incorporated by reference to the Current Report on Form 8-K of the Company filed on September 7, 2016).
10(s)	Employment Agreement, dated as of October 13, 2016, between SIGA and Phillip Louis Gomez, III (incorporated by reference to the Current Report on Form 8-K of the Company filed on October 13, 2016).
10(t)	Investment Agreement, dated October 13, 2016, by and among SIGA Technologies, Inc., ST Holdings One LLC, Blackwell Partners LLC-Series A, Nantahala Capital Partners Limited Partnership, Nantahala Capital Partners II Limited Partnership, Silver Creek CS SAV, L.L.C. and Nantahala Capital Partners SI, LP (incorporated by reference to the Current Report on Form 8-K of the Company filed on October 19, 2016).
10(u)	Amendment of Solicitation/Modification of Contract 0012, dated April 22, 2016, to Agreement, dated May 13, 2011, between the Biomedical Advanced Research and Development Authority of the United States Department of Health and Human Services and SIGA (incorporated by reference to the Quarterly Report on Form 10-Q of the Company filed on May 4, 2017).
10(v)	Amendment of Solicitation/Modification of Contract 0014, dated September 21, 2016, to Agreement, dated May 13, 2011, between the Biomedical Advanced Research and Development Authority of the United States Department of Health and Human Services and SIGA (incorporated by reference to the Quarterly Report on Form 10-Q of the Company filed on May 4, 2017).
10(w)	Office Lease, dated as of May 26, 2017, by and between SIGA Technologies, Inc. and MacAndrews & Forbes Incorporated (portions of this exhibit have been omitted and separately filed with the Securities and Exchange Commission with a request for confidential treatment) (incorporated by reference to the Current Report on Form 8-K of the Company filed on May 30, 2017).
10(x)	Termination of Sublease, dated as of July 31, 2017 (incorporated by reference to the Quarterly Report on Form 10-Q of the Company filed on August 3, 2017).
10(y)	Amendment, dated August 29, 2017, to that certain Loan and Security Agreement, dated as of September 2, 2016, by and among SIGA Technologies, Inc., OCM Strategic Credit SIGTEC Holdings, LLC, Cortland Capital Market Services LLC, in its capacity as administrative agent and collateral agent, OCM Strategic Credit SIGTEC Holdings, LLC, as sole lead arranger, and each of the other persons who are or thereafter become parties to the Loan Agreement as guarantors (incorporated by reference to the Quarterly Report on Form 10-Q of the Company filed on November 7, 2017).
10(z)	Commercial Lease Agreement for Corvallis, Oregon dated November 3, 2017 (incorporated by reference to the Quarterly Report on Form 10-Q of the Company filed on November 7, 2017).

10(aa)	Second Amendment to Loan and Security Agreement, dated June 25, 2018, by and among the Company, OCM Strategic Credit SIGTEC Holdings, LLC, as lender, Cortland Capital Market Services LLC, in its capacity as administrative agent and collateral agent, and OCM Strategic Credit SIGTEC Holdings, LLC, as sole lead arranger (incorporated by reference to the Quarterly Report on Form 10-Q of the Company filed on August 7, 2018).
10(bb)	Amendment of Solicitation/Modification of Contract 0015, dated July 30, 2018, to Agreement, dated May 13, 2011, between the Biomedical Advanced Research and Development Authority of the United States Department of Health and Human Services and SIGA (incorporated by reference to the Current Report on Form 8-K of the Company filed on August 1, 2018).
10(cc)	Second Amended and Restated Employment Agreement, dated August 1, 2018, between SIGA Technologies, Inc. and Robin E. Abrams (incorporated by reference to the Current Report on Form 8-K of the Company filed on August 3, 2018).
10(dd)	Addendum, dated August 10, 2018, to Seconded Amended and Restated Employment Agreement, dated April 12, 2016, between SIGA Technologies, Inc. and Dennis E. Hruby (incorporated by reference to the Current Report on Form 8-K of the Company filed on August 10, 2018).
10(ee)	Contract, dated as of September 10, 2018, between SIGA Technologies, Inc. and the Biomedical Advanced Research and Development Authority of the United States Department of Health and Human Services (portions of this exhibit have been omitted and separately filed with the Securities and Exchange Commission with a request for confidential treatment) (incorporated by reference to the Current Report on Form 8-K of the Company filed on September 11, 2018).
10(ff)	Amendment of Solicitation/Modification of Contract 0016, dated September 21, 2018, to Agreement, dated May 13, 2011, between the Biomedical Advanced Research and Development Authority of the United States Department of Health and Human Services and SIGA (incorporated by reference to the Quarterly Report on Form 10-Q of the Company filed on November 6, 2018).
10(gg)	Amendment of Solicitation/Modification of Contract 0017, dated September 28, 2018, to Agreement, dated May 13, 2011, between the Biomedical Advanced Research and Development Authority of the United States Department of Health and Human Services and SIGA (incorporated by reference to the Quarterly Report on Form 10-Q of the Company filed on November 6, 2018).
10(hh)	Amendment of Solicitation/Modification of Contract 0018, dated September 28, 2018 to Agreement, dated June 1, 2011, between the Biomedical Advanced Research and Development Authority of the United States Department of Health and Human Services and SIGA (incorporated by reference to the Quarterly Report on Form 10-Q of the Company filed on November 6, 2018).
10(ii)	Consulting Agreement and Release, dated October 13, 2018, between SIGA Technologies, Inc. and Dr. Eric A. Rose (incorporated by reference to the Current Report on Form 8-K of the Company filed on October 18, 2018).
10(jj)	Third Amendment to Loan and Security Agreement, dated October 31, 2018, by and among the Company, OCM Strategic Credit SIGTEC Holdings, LLC, as lender, Cortland Capital Market Services LLC, in its capacity as administrative agent and collateral agent, and OCM Strategic Credit SIGTEC Holdings, LLC, as sole lead arranger (incorporated by reference to the Current Report on Form 8-K of the Company filed on November 1, 2018).
10(kk)	Commercial Manufacturing Agreement, dated October 1, 2018, by and between Albemarle Corporation and SIGA (portions of this exhibit have been omitted and separately filed with the Securities and Exchange Commission with a request for confidential treatment).
10(ll)	Amendment of Solicitation/Modification of Contract 0001, dated February 21, 2019, to Agreement, dated September 10, 2018, between the Biomedical Advanced Research and Development Authority of the United States Department of Health and Human Services and SIGA.
23.1	Consent of PRICEWATERHOUSECOOPERS LLP, Independent Registered Public Accounting Firm.
31.1	Certification pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002-Chief Executive Officer.

31.2	Certification pursuant to Rules 13a-14(a) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002-Chief Financial Officer.
32.1	Certification Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002-Chief Executive Officer.
32.2	Certification Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002-Chief Financial Officer.

101.INS	XBRL Instance Document
101.SCH	Taxonomy Extension Schema Document
101.CAL	Taxonomy Extension Calculation Linkbase Document
101.DEF	Taxonomy Extension Definition Linkbase Document
101.LAB	Taxonomy Extension Labels Linkbase Document
101.PRE	Taxonomy Extension Presentation Linkbase Document

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.

SIGA TECHNOLOGIES, INC.
(Registrant)

Date: March 5, 2019

By: */s/ Phillip L. Gomez*
Phillip L. Gomez
Chief Executive Officer

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 of Capacities	Date
/s/ Phillip L. Gomez		March 5, 2019
Phillip L. Gomez	Chief Executive Officer and Director	
/s/ Daniel J. Luckshire		
Daniel J. Luckshire	Executive Vice President and Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	March 5, 2019
/s/ Eric A. Rose		
Eric A. Rose, M.D.	Chairman	March 5, 2019
/s/ James J. Antal		
James J. Antal	Director	March 5, 2019
/s/ Michael J. Bayer		
Michael J. Bayer	Director	March 5, 2019
/s/ Thomas E. Constance		
Thomas E. Constance	Director	March 5, 2019
/s/ Jeffrey Kindler		
Jeffrey Kindler	Director	March 5, 2019
/s/ Joseph Marshall		
Joseph Marshall	Director	March 5, 2019
/s/ Michael Plansky		
Michael Plansky	Director	March 5, 2019
/s/ Paul G. Savas		
Paul G. Savas	Director	March 5, 2019

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES	
	1	2

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
0001	See Block 16C	OS235415	

6. ISSUED BY — CODE HHS/OS/ASPR/BARDA

US DEPT OF HEALTH & HUMAN SERVICES
ASST SEC OF PREPAREDNESS & RESPONSE
ACQ MANAGEMENT, CONTRACTS, & GRANTS
O'NEILL HOUSE OFFICE BUILDING
Washington DC 20515

7. ADMINISTERED BY *(If other than Item 6)* — CODE ASPR-BARDAO1

ASPR-BARDA
330 Independence Ave, SW, Rm G644
Washington DC 20201

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State, and Zip Code)*

SIGA TECHNOLOGIES, INC. 1385150
SIGA TECHNOLGIES, INC.
31 East 62nd Street
NEW YORK, NY 100658446

CODE 1385150 FACILITY CODE

(x)	9A. AMENDMENT OF SOLICITATION NO.
	9B. DATED *(SEE ITEM 11)*
x	10A. MODIFICATION OF CONTRACT/ORDER NO. HHSO100201800019C
	10B. DATED *(SEE ITEM 13)* 09/10/2018

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended, is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:
(a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)* Net Increase: $12,186,975.00

2019.1990051.25505

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: FAR 43.103(a) Bilateral Modification; FAR 17.207(c) (1) Exercise of Options with Avaliable Funds
	D. OTHER *(Specify type of modification and authority*

E. IMPORTANT: Contractor is not, is required to sign this document and return ___1___ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Tax ID Number: 13-3864870
DUNS Number: 932651516
Procurement and Late-Stage Development of Smallpox Antiviral Drug(s)

The purpose of this modification is to exercise Option CLIN0007 in the amount of $12,186,975.00 and change the COR information listed in Article G.2 as follows.
Delivery: 12/31/2023
Delivery Location Code: HHS/OS/ASPR
HHS/OS/ASPR
200 C St SW
WASHINGTON DC 20201 US
Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*	16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*
Dennis E Hurby, CSO	Brooke Bernold

15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16b. united states of america	16c. date signed
/s/ Dennis E Hurby, CSO	19 Feb 2019	BY /s/ Brooke T. Bernold	21 Feb 2019
(Signature of person authorized to sign)		*(Signature of Contracting Officer)*	

The purpose of this modification is to exercise Option CLIN0007 in the amount of $12,186,975.00 and change the COR information

listed in Article G.2 as follows.

Article B.3. Option Prices

CLIN	Period of Performance	Supplies/ Services	Total Est. Cost	Fixed Fee	Total Cost Plus Fixed Fee ($)
0007 (Option - Exercised)	01/01/19 – 12/31/2023	Phase IV post marketing commitments (**nonparenteral (oral)** formulation) including relabeling of approved drug in the SNS (this is an option that may or may not be exercised as required by the FDA)	$11,497,147	$689,828	$12,186,975

Article G.2. Contracting Officer's Representative (COR)

The following Contracting Officer's Representative (COR) will represent the Government for the purpose of this contract:

David Simon
Contracting Officer's Representative
Biomedical Advanced Research and Development Authority (BARDA)
Office of the Assistant Secretary for Preparedness and Response
Department of Health and Human Services
David.Simon@hhs.gov
(202) 260-1101

COMMERCIAL MANUFACTURING AGREEMENT

This COMMERCIAL MANUFACTURING AGREEMENT (this "Agreement") is entered into effective as of October 1, 2018 (the "Effective Date"), by and between SIGA Technologies, Inc., a Delaware corporation ("Customer"), having a place of business at 31 East 62nd Street, New York, NY, 10065, and Albemarle Corporation, a Virginia corporation ("Albemarle"), having a place of business at 4350 Congress Street, Suite 700, Charlotte, North Carolina 28209. Each of Customer and Albemarle is sometimes referred to herein as a "Party" and collectively as the "Parties".

RECITALS

A. Customer is in the business of developing and commercializing pharmaceutical products.

B. Albemarle is in the business of performing contract manufacturing and supply of pharmaceutical products.

C. Customer is actively engaged in various efforts to sell courses of tecovirimat (primarily known as TPOXX®), including but not limited to seeking a contract from the United States Government (the "USG") under the Project BioShield Act of 2004 (the "Act") pursuant to RFP-BARDA-18-100-SOL-00011 (the "RFP"), including contract HHSO100201800019C to supply, among other things, up to 1.7 million courses of FDP (as defined below) to the Strategic National Stockpile. Any contract to be entered into by the Customer with the USG in response to the RFP shall be known as the "BARDA Contract".

D. Customer and Albemarle entered into a Mutual Confidential Disclosure Agreement dated January 23, 2006, as amended December 28, 2006, December 8, 2008 and January 12, 2010 (collectively, the "Prior CDA").

E. Customer and Albemarle entered into a Mutual Confidential Disclosure Agreement dated April 27, 2018 (the "CDA").

F. Customer and Albemarle entered into an agreement dated January 23, 2006 pursuant to which Albemarle has manufactured, tested and supplied the API (as defined below) for oral FDP, for use in the manufacture of registration batches and pursuant to which Albemarle continues to conduct stability studies with respect to such batches (the "Prior Manufacturing Agreement").

G. Customer and Albemarle entered in an agreement dated August 24, 2009 to manufacture, test, and supply ST-246® Monohydrate (Form-I) to Customer for use as the API for FDP in quantities that are scaled up for the Customer's validation batches (the "Validation Supply Agreement").

H. Customer and Albemarle entered in a commercial manufacturing agreement dated as of August 25, 2011, as amended on December 21, 2012 by that certain Addendum to Commercial Manufacturing Agreement (the "First Addendum"); as amended on July 1, 2013 by that certain Addendum 2 to Commercial Manufacturing Agreement (the "Second Addendum"); as amended on July 2, 2014 by that certain Addendum 3 to Commercial Manufacturing Agreement (the "Third Addendum"); as amended on April 29, 2015 by that certain 2015 Amendment to the Commercial Manufacturing Agreement (the "2015 Amendment", collectively, the "Prior Commercial Manufacturing Agreement').

I. Customer desires to contract with Albemarle to manufacture, test and supply the Product (as defined below) to Customer as set forth herein..

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

NOW, THEREFORE, in consideration of the foregoing premises and the mutual promises and covenants set forth below, the Parties hereby agree as follows:

1. DEFINITIONS

For purposes of this Agreement, the terms defined in this Section 1 shall have the respective meanings set forth below:

"API" shall mean active pharmaceutical ingredient.

"Applicable Law" means all laws, ordinances, rules and regulations of the United States or any other jurisdiction applicable to any aspect of the obligations of Albemarle or Customer, as the context requires, under this Agreement, as amended from time to time, including (A) all applicable federal, state and local laws and regulations of the United States, (B) the U.S. Federal Food, Drug and Cosmetic Act, as amended (the "FFDCA"), (C) all applicable laws and regulations in any other relevant jurisdiction where Product is being manufactured or supplied, and (D) cGMP, or their respective equivalents in any other relevant jurisdiction where Product is being manufactured.

"BARDA" means the U.S. Biomedical Advanced Research and Development Authority.

"BARDA Contract" shall have the meaning set forth in paragraph C of the Recitals.

"Batch Documentation" shall mean complete and accurate copies of all of the following, as applicable: Albemarle audited production batch records, deviation reports, investigation reports, a COA, Product release chromatographs and corresponding calculations for all batches, management of Change (MOCs), cGMP certificate of compliance, and stability data, when available (including one chromatograph utilizing one condition for each pull interval from one batch). For the sake of clarity, originals of the Batch Documentation will be retained by Albemarle and made available for inspection for all batches produced, including aborted batches, and a complete copy of Batch Documentation shall be furnished to Customer in accordance with Section 3.2.

"cGMP" shall mean Good Manufacturing Practices as (a) prescribed from time to time by the FDA, including within the meaning of 21 C.F.R. Parts 210 and 211, as amended, (b) their respective equivalents in any other relevant jurisdiction where Product is being manufactured, and (c) the ICH Q7 guidelines.

"CMC" means Chemistry, Manufacturing and Controls.

"COA" shall mean a certificate of analysis prepared in accordance with the Quality Agreement that shall include the results of the tests set forth in the Specifications in Exhibit C, as may be amended in accordance with this Agreement.

"Facility" shall mean the Albemarle cGMP FDA-approved manufacturing facility at which the manufacturing and testing services will be performed. This facility is located at 1421 Kalamazoo Street, South Haven, Michigan 49090.

"FDP" shall mean the final drug product utilizing the Product as its API.

"FDA" shall mean the United States Food and Drug Administration or the successor thereto.

"Government Contract" shall mean any contract currently existing or hereafter entered into by a Government Entity and Customer for the supply of the FDP, including any BARDA Contract.

"Government Entity" shall mean any government entity of any country of the world, including the USG.

"include(ing)" shall mean "include(ing) without limitation".

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

"Lead Time" shall mean (a) with respect to the First Renewal Order (as defined below) of Product, [redacted]*, and (b) with respect to each Firm Order (as defined below) of Product, [redacted]*.

"Product" shall mean the unmicronized form of the active pharmaceutical ingredient known as, or containing, tecovirimat (Form-I, also known as Form B), the structure of which is attached as Exhibit A hereto, which meets the Specifications set forth in Exhibit C.

"Regulatory Authority" shall mean, with respect to a country, any governmental authority (whether federal, state, provincial, municipal or others) regulating the exportation, importation, use, manufacture, distribution, marketing and/or sale of pharmaceuticals, which, in the United States, shall include the FDA.

"Specifications" shall mean the specifications for the manufacture of the Product set forth in Exhibit C, as may be amended in accordance with this Agreement.

2. MANUFACTURE OF PRODUCT

2.1 Manufacturing Services. Albemarle shall manufacture, sell and deliver to Customer or its designee all Product ordered by Customer in conformance with terms and conditions of this Agreement. In addition, Albemarle shall perform an analysis of samples of the micronized form of the Product as set forth in Section 2.12 and Exhibit B, and shall perform the stability studies as set forth in Section 2.11 and Exhibit D. Albemarle will dedicate sufficient manufacturing capacity to fill Customer's orders within the applicable Lead Time; provided, however, that Customer's orders do not exceed [redacted]* batches, or approximately [redacted]* of Product. If Customer's demand exceeds [redacted]*, or approximately [redacted]*, Customer and Albemarle will mutually agree on the amount of Product to be manufacturered, sold and delivered by Albemarle. Unless otherwise agreed between Albemarle and Customer, all Product will be manufactured under cGMP conditions at the Facility. Subject to the provisions of this Agreement related to subcontracting, Albemarle shall not transfer or perform any of the work required by this Agreement outside of the United States without specific written consent by Customer, which shall be subject to the restrictions on foreign manufacturing contained in Customer's Government Contracts, the contents of which, to the extent necessary, shall be made known to Albemarle by Customer and which contents shall be deemed to be Confidential Information of Customer.

2.2 First Renewal Order. Albemarle and Customer shall cooperate fully and negotiate in good faith in estimating and scheduling the first order of commercial quantities of Product ("First Renewal Order") to be placed by Customer, with the mutual goal of the Parties that the First Renewal Order be scheduled for completion and delivery to Customer or its designee not later than six (6) months after the date the First Renewal Order is placed by Customer, except in cases where the First Renwal Order requires the purchase of raw materials with lead times more than six (6) months. In such case, Albemarle and Customer shall cooperate fully and negotiate in good faith in estimating and scheduling any such orders.

2.3 Forecasts and Firm Orders.

2.3.1 Starting after the placement of the First Renewal Order, on or before the first day of each calendar month, Customer shall give Albemarle Customer's good faith written estimate of Customer's projected requirements of the Product for delivery during the upcoming twelve (12) months. Such forecasts constitute non-binding, good faith estimates provided solely to assist Albemarle in raw material procurement, production planning and manufacturing of the Product. Albemarle shall use these forecasts to procure long leadtime raw materials.

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

2.3.2 Customer acknowledges that, since Product is a product made exclusively for Customer, and in order to accommodate Albemarle's planning, manufacturing, analytical testing and release of the Product, Customer agrees to place a binding non-cancelable written purchase order for the delivery of any Product required in the first three (3) month period of the initial or any updated forecast (a "Firm Order"). Customer further agrees to place Firm Orders in one-batch increments, each batch to consist of approximately 1,450 kg. Albemarle shall, upon receipt of any Firm Order after the First Renewal Order, deliver ordered batches of Product within the Lead Time applicable to such Firm Order, which period shall be shortened, as much as possible, taking into account the availability of raw materials.

2.3.3 In the event that Customer does not place binding orders for Product consistent with the forecasted quantities, then in order to compensate Albemarle for the actual and full costs of procuring long lead time raw materials, Customer shall pay Albemarle the documented direct costs associated with any unused quantity of such raw materials purchased by Albemarle specifically for the manufacture of the Product, provided that Albemarle has made good faith efforts to return such raw materials to their manufacturers for credit. Any such raw materials, for which Customer pays Albemarle the documented direct costs, shall be deemed to be the property of Customer, and Albemarle shall promptly assign all right, title and interest in and to such raw materials to Customer. Albemarle shall store such unused raw materials at the Customer's request at no charge for up to one (1) year, and thereafter shall, at Albemarle's option, continue to store such raw materials at the Customer's expense and Albemarle shall, upon notice to Customer, deliver them to Customer or its designee. Albemarle shall otherwise, at Customer's expense, properly dispose of any unused raw materials, any rejected Product and any waste in accordance with Applicable Law.

2.4 Purchase Orders. Customer shall issue written purchase orders to Albemarle for the First Renewal Order and each Firm Order. Purchase orders shall be placed at least the applicable Lead Time before the desired delivery date and shall be deemed accepted if placed in accordance with the terms and conditions of this Agreement. Purchase orders shall specify the quantity of the Product ordered, the requested delivery date, and the means of shipment (provided, however, that the means of shipment complies with all Applicable Law and any requirement of any applicable Government Contract). Purchase orders issued by Customer and accepted (or deemed accepted) by Albemarle shall constitute the binding obligation of Albemarle to manufacture, sell and deliver to Customer the specified quantity of the Product by the specified delivery date (and perform the post-micronization testing services set forth in Section 2.12 and Exhibit B for such Product and the stability studies set forth in Section 2.11 and Exhibit D for such Product) and the binding obligation of Customer to purchase the specified quantity of the Product therein delivered in conformance with this Agreement. Purchase orders issued by Customer shall be effective solely with respect to specifying the quantity, requested delivery date and means of shipment of the Product being ordered. All other terms and conditions printed or included on such purchase orders which contradict or would serve to alter the provisions of this Agreement shall be of no effect or force.

2.5 Purchase Commitments.

2.5.1 Customer agrees (i) to order one hundred percent (100%) of Customer's internal and external requirements of the Product from Albemarle for the first three (3) years of this Agreement except in cases whereby the potential demand opportunity requires local or alternative manufacturing location (as required by a customer as part of a procurement award) which would exclude Albemarle as the site of manufacture, and (ii) in the event that production over three (3) years is less than twelve (12) metric tons of API, then Albemarle shall continue to

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

manufacture 100% of Customer's internal and external requirements of the Product until Albemarle has cumulatively manufactured twelve (12) metric tons since the Effective Date. Additionally, if SIGA does not provide firm orders for the manufacture of at least twelve (12) metric tons of API within the first three (3) years of this Agreement, then the minimum supply percentage for Albemarle in year 4 will be 50% and in year 5 it will be 30%. For years 4 and 5 of this Agreement, provided that twelve (12) metric tons of API has been manufactured by Albemarle within the first three (3) years of this Agreement, Albemarle will manufacture at least 70% of Customer's internal and external requirements of the Product. Beginning in year 4, provided that that Customer has placed firm orders for twelve (12) metric tons of API with Albemarle during the first three (3) years, SIGA may bring a valid comparable offer to sell Product, by a responsible supplier, of a like quantity of Product of a quality equal to the Albemarle Product and appropriately qualified by SIGA for the same application as the Albemarle Product, at a price that is lower than is provided pursuant to this Agreement. SIGA must submit written evidence satisfactory to Albemarle of such lower priceand, if Albemarle is unable to meet the comparable price within 30 days, SIGA may accept such competitive offer by providing written notice to Albemarle within five business days, provided, however, that Albemarle will continue to manufacture at least 30% of Customer's internal and external requirements of the Product in years 4 and 5. SIGA can bring a valid comparable price to Albemarle once per year. If Albemarle is able to meet the comparable price the parites will discuss the option to extend the term and the percentage of Customer's internal and external product requirements to be manufactured by Albemarle.

2.5.2 Customer's purchase commitments under Section 2.5.1 of this Agreement are subject to the following:

(a) In the event that a proposed contract to be entered into by Customer for the sale of FDP in an intravenous formulation requires that the Product used as the API for such FDP be manufactured to specifications other than the Specifications, and the Parties are not able to reach agreement on the necessary changes to the Specifications for such intravenous formulation or to pricing therefore, the amounts of Product contemplated by such proposed Customer contract shall not be counted or considered when calculating Customer's internal and external requirements or the amount to be ordered by Customer or the amount to be delivered by Albemarle.

(b) If either (i) the shipment of any Customer order of Product or any portion thereof, or the provision of any analytical data for released Product to be provided to Customer hereunder is late by more than twenty (20) days on more than one occasion, (ii) Product produced and released by Albemarle is defective or does not conform to the Specifications or Applicable Law on more than one occasion, or (iii) Albemarle otherwise fails to perform any of its obligations under this Agreement and does not cure such failure within thirty (30) days of written notice from Customer (said notice specifying the nature of the failure), Customer shall have, in addition to any other rights under this Agreement or in law, the right to reduce or terminate its purchase commitment obligation under Section 2.5.1 hereof.

2.6 Subcontractors.

2.6.1 Subject to approval by the applicable Government Entity if required by a Government Contract, (a) Customer consents that Albemarle may engage, for the duration of the Term, [redacted]*, as subcontractor to provide [redacted]*, (b) Customer also consents that Albemarle may engage, for the duration of the Term, [redacted]*, as subcontractor to provide [redacted]*, and (c) Customer also consents that Albemarle may engage, for the duration of the Term, [redacted]*, as a subcontractor to provide [redacted]*, as long as such subcontractors may

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

perform their respective subcontracts in accordance with all applicable legal requirements and the requirements of this Agreement. Albemarle may not engage any other subcontractors to perform Albemarle's obligations under this Agreement, except upon express prior written consent by Customer, which consent shall not be unreasonably withheld but which will be subject to and take into account whether the approval of the applicable Government Entity as necessary.

2.6.2 The Parties agree and acknowledge that, if, in order to meet Customer's requirements, it is necessary that a portion of Customer's Product requirements be manufactured outside the United States, Albemarle shall be afforded a reasonable opportunity to subcontract such portion of the manufacture and testing of the Product to a third party that fulfills the requirements of Customer, provided that (i) Customer shall have the right to prior approval of the proposed subcontractor, and the non-commercial terms of such subcontract, which approval will not be withheld without cause; (ii) any such subcontract will grant Customer the right to oversee and monitor the performance of any such subcontractor in the manner to be agreed by the Parties in good faith, but in no event with less oversight than Customer would have had if the Product had been manufactured by Albemarle under this Agreement; (iii) any such subcontract will contain all of the terms and conditions to which Albemarle is obligated under this Agreement, including any "flow-down" requirements under any Government Contract for which such Product will be used, and (iv) any such subcontract will be subject to the approval of the applicable Government Entity as necessary.

2.6.3 Any such permitted appointment of subcontractors pursuant to Sections 2.6.1 and 2.6.2 hereof shall not affect or diminish Albemarle's responsibilities and obligations set forth herein and Albemarle shall remain responsible to Customer for the performance of its subcontractors. Albemarle will cause its subcontractors to grant Customer the right to perform annual and "for cause" audits of Albemarle's subcontractors to evaluate their quality systems and for compliance with cGMP, Applicable Law, Specifications, applicable product and establishment standards, and security requirements. Albemarle represents and warrants that the approved subcontractors are aware of and have agreed to any requirements imposed by Applicable Law on Customer and its contractors and subcontractors, and such subcontractors shall also comply with all relevant obligations imposed on Albemarle under this Agreement, including Customer's right to place, at Customer's option, a person in subcontractor's facility to observe the activities of the subcontractor.

2.7 Albemarle's Responsibilities; Quality Agreement.

2.7.1 Albemarle shall manufacture the Product and perform the other activities in accordance with this Agreement, the Specifications and all Applicable Law. Albemarle shall bear the full cost of manufacturing the Product and shall be responsible to manufacture and/or supply, without limitation, all raw materials, starting materials, source materials, intermediates, labor, facilities, utilities, and the equipment necessary for the manufacture of the Product, setting up of the manufacturing process, and assembling and packaging of the Product, all in accordance with the Specifications. Any materials, including raw materials, purchased by Albemarle in excess of the volume required for manufacture of Product under this Agreement shall remain the property of Albemarle, subject to Section 2.3.3. In addition, Albemarle shall perform the analysis of the micronized form of the Product as set forth in Section 2.12 and Exhibit B, and shall perform the stability studies as set forth in Section 2.11 and Exhibit D.

2.7.2 Albemarle shall abide by the terms and conditions of the Quality Agreement attached hereto as Exhibit E ("Quality Agreement"), the provisions of which are integral to its performance of its obligations under this Agreement. In the event of an inconsistency between the terms of the Quality Agreement and the terms of the body of this Agreement, the terms of this

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

Agreement shall control. The Quality Agreement may only be amended upon written agreement of the Parties, provided that, the Quality Agreement shall be deemed to be amended to the extent necessary to conform with the provisions of any Government Contract, or a quality agreement with any Government Entity required to be entered into pursuant to any such Government Contract. Customer shall provide Albemarle a written notice of any such amendment, and to the extent any such amendment would require Albemarle to incur more expense or commercial effort for adherence to the revised Quality Agreement as reasonably determined by Albemarle in good faith, the Parties agree to negotiate in good faith revised pricing for the sale of the Product hereunder.

2.8 Specifications and Vendors.

2.8.1 The Specifications for Product may only be revised upon written agreement of both Parties, except that Albemarle shall provide its prompt written agreement if the FDA or any other Government Entity requires Customer to revise the Specifications, whether pursuant to Customer's Government Contracts, cGMP requirements, or otherwise (a "Mandated Specification Change"). If any such Mandated Specification Change or a mutually agreed upon change to the Specifications requires any material change to the manufacturing process or raw materials, the Parties shall negotiate in good faith a reasonable adjustment to the Unit Price to be paid by Customer hereunder and the applicable Lead Time. Albemarle and Customer agree that a Mandated Specification Change or mutual agreement to change the Specifications shall not change, effect, modify or alter any other provision of this Agreement with the exception of the Unit Price and possibly the Lead Time. Both Parties understand and agree that material changes in Specifications may affect Unit Price and Lead Time and agree to negotiate in good faith in such cases to arrive at a revised Unit Price and Lead Time mutually agreed in writing by both Parties for all subsequent work affected by such changes in Specifications, provided however, that any Mandated Specification Change that imposes a more stringent Specification, but which Specification is within the demonstrated process capability for the manufacture of the Product, based on relevant available data from all commercial size batches of Product manufactured prior to the date of such change, shall not be considered a material change in the Specifications.

2.8.2 Albemarle has qualified the raw material vendors set forth in Exhibit H. In the event that Albemarle wants to add an alternate raw material vendor, or wants to supply any raw material itself, it must qualify such vendor (including Albemarle) in the manner provided in its standard operating procedures, and provide the results of such qualifying tests to Customer for its approval, which approval will not be withheld without cause.

2.9 Compliance. Albemarle shall maintain the Facility, and shall manufacture the Product, in compliance with this Agreement, the Specifications and all Applicable Law. Albemarle shall allow Customer, at Customer's option, to place a person in the Facility to observe the commercial manufacturing process.

2.10 Recalls. In the event of a Product or FDP defect or recall caused by Albemarle's failure to manufacture the Product in accordance with the Specifications and Applicable Law, or its failure to analyze appropriately the micronized form of the Product, Albemarle shall reimburse Customer for the costs related to curing the defect and accomplishing the recall, to the extent such costs result from Albemarle's failure, provided, that in no event will Albemarle's liability pursuant to this Section 2.10 exceed the liability limitation set forth in Section 7.2 hereof, except as provided in Section 6.1.2 with regard to any claim by a third party. In all other instances, the costs related to a recall shall be borne by Customer.

2.11 Stability Studies. Albemarle will conduct [redacted]* month stability studies in accordance with Exhibit D.

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

2.12 Micronized Product Analysis. Samples for analysis by FP14.SG, only, will be provided by Customer through its drug product service provider and data will be provided to Customer in the form of a COA within fourteen (14) days from the receipt of test samples by the drug product service provider.

2.13 Security When requested by the Customer, Albemarle shall maintain security at levels, and of quality, as has been provided under the Prior Commercial Manufacturing Agreement. Additionally, Albemarle agrees to implement security changes, when practicable, if such changes or enhancements are required under any government contract or by Applicable Law. The Parties agree that in the event such additional security corrective actions are necessary, they will negotiate in good faith to reach agreement on a reimbursement amount for each such additional security corrective action. Costs related to security requested by the Customer shall be agreed upon between Albemarle and Customer and shall be paid for by the Customer. Prior to the initial manufacturing under this Agreement the Parties have participated in a pre-award security audit of the Facility conducted by BARDA representatives. If such security audit resulted in BARDA imposing a requirement that certain security corrective actions be implemented by Albemarle as a condition to commencement of Product manufacturing for the BARDA Contract, if it is awarded to the Customer. The Parties agree that in the event such additional security corrective actions are necessary, they will negotiate in good faith to reach agreement on a reimbursement amount for each such additional security corrective action.

3. SUPPLY OF PRODUCT

3.1 Shipment. Albemarle shall ship the released Product FCA Facility, Freight Collect, (per Incoterms 2010) to such location as designated in writing by Customer. The purchase order shall set forth the transport means and company selected by Customer for shipping the Product, provided that in the event a designated carrier is unable to ship Product on schedule, Albemarle will obtain an alternate carrier designation from Customer. Title and risk of loss and damages to the Product ordered by Customer hereunder shall pass to Customer upon delivery of the Product to the transporting carrier.

3.2 Product Release. Subject to the provisions of Sections 3.2.1 and 3.2.2, batch review and release of Product for shipment to Customer's shipping point will be the responsibility of Albemarle's Quality Assurance department, who will act in accordance with Albemarle's standard operating procedures. For each batch of Product released by Albemarle for shipment, Albemarle will deliver to Customer, at the same time it ships such batch, (i) a certificate of compliance that will include a statement that the batch has been manufactured in accordance with cGMP, Applicable Law and the Specifications, and (ii) a copy of the Batch Documentation and COA.

3.2.1 For each of the first four (4) batches of Product ordered by the Customer only, the following additional batch release procedure shall be followed. Upon completion of each such batch and the review of all Batch Documentation by Albemarle's Quality Assurance department, Albemarle shall forward to Customer, electronically or by overnight mail, the applicable completed Batch Documentation for each Batch. Customer shall use reasonable efforts to complete its review of the Batch Documentation within seven (7) working days of receiving it from Albemarle (the "Customer Review Period"). Subject to the results of its review, Customer will disposition the Product for release and upon receipt of Customer's disposition Albemarle shall deliver to Customer the final COA, and release and ship the Product to the Customer's designated shipping point by the shipping method designated by the Customer.

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

3.2.2 Any problem discovered by either Party during its quality assurance reviews will be communicated to the other Party directly along with any supporting documentation of the problem. The communication shall occur within three (3) business days after the discovery of the problem. The Product will be immediately placed in quarantine until Albemarle and the Customer have met and determined the final disposition of the Product. The resolution of any such problem shall be accomplished in accordance with the Quality Agreement.

3.3 Packaging and Labeling. Albemarle shall package the Product in accordance with the Specifications, and in compliance with the applicable labeling requirements of FDA and all other Applicable Law regarding the labeling, materials and containers applicable to the Product. Albemarle shall label the Product with such labels, trade names, and trademarks as directed by Customer.

3.4 Freight and Insurance. Customer shall pay all freight, insurance charges, taxes, import and export duties, inspection fees and other charges applicable to the transport and delivery of the Product.

3.5 Rejection and Cure. Customer shall notify Albemarle within one hundred twenty (120) days of Albemarle's delivery of any batch of Product if it believes that the batch, or any portion thereof, was damaged, defective or did not conform to the Specifications or Applicable Law. In addition to any remedy available to Customer under Sections 2.5.2(b), 2.10 or 6.1.2, Customer's sole remedy under this Section 3.5 against Albemarle for any failure to supply a batch of conforming Product is expressly limited to one of the following (as may be elected by Customer at its sole option):

(i) Albemarle will promptly provide a replacement batch of conforming Product to Customer at no additional cost and on a schedule mutually agreed upon by Albemarle and Customer based upon lead time requirements for raw materials and reimburse Customer for the shipping and micronization costs, if any, incurred by Customer for the non-conforming batch, or

(ii) refund within 10 business days to the Customer the full aggregate Price for such batch of Product containing non-conforming Product, plus shipping and micronization costs, if any, incurred by the Customer with respect to such non-conforming batch of Product.

If Albemarle disputes the above referenced notice of rejection with respect to any batch containing non-conforming Product, the Parties will each retest the rejected Product within thirty (30) days of Albemarle's notice of dispute. If the Parties, after retesting the rejected Product continue to have conflicting test results, the matter shall be referred to a laboratory selected by Customer from the list included on Exhibit G (or other mutually agreed upon laboratory) to perform tests on representative samples from the rejected portion of the shipment. The results of such tests will be binding upon Customer and Albemarle. If the laboratory determines that the batch contained Product that was non-conforming, Albemarle will pay for all laboratory charges; if the laboratory determines that Customer rejected the batch containing non-conforming Product in error, then Customer will pay for all laboratory charges. Rejected Product will be returned to Albemarle or disposed of at Albemarle's expense in accordance with Albemarle's instructions, in which case Customer will deliver to Albemarle an appropriate certificate of destruction. If Albemarle requests, Customer will make its personnel available on a reasonable basis to work with Albemarle in order to assist Albemarle in determining the reason for the non-conformity and in developing remedial measures.

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

3.6 Force Majeure. Neither Party shall be liable to the other for any delay or failure of performance resulting from any circumstance (other than the payment of money owed) beyond the reasonable control of such Party (a "Force Majeure Event"), which may include: fire, storm, flood, act of God, war, earthquake, explosion, sabotage, epidemic, quarantine restrictions, embargo, expropriation, strikes, failure of all available means of production or of transportation, or shortage of labor, raw materials, or shortage of utilities, fuel and/or energy. Subject to Section 3.7, Albemarle shall make every effort to make up any deficiencies during the course of the force majeure event, unless such oblligations are modified by written mutual agreement. In the event Albemarle experiences a Force Majeure Event that continues for more than ninety (90) days, Customer may, in addition to any other rights or remedies it may have under this Agreement or in law, terminate this Agreement without cost or penalty, except to pay Albemarle for all work performed and reimburse for all costs incurred up to the termination date, not to exceed the applicable Price.

3.7 Apportionment. In the case of a shortage or anticipated shortage of labor, raw materials, utilities, fuel or energy, Albemarle will allocate equitably the available labor, raw materials, utilities, fuel and energy to manufacture and use in the Product, to Albemarle's own internal use, to the use of its affiliates and to the use in other products.

4. PAYMENT TERMS

4.1 Unit Price; Adjustments. The price to be charged by Albemarle for Product manufactured and delivered under this Agreement shall [redacted]* per kilogram of Product actually delivered in each batch ("Unit Price"). Pricing listed and payment of the invoiced costs is contingent upon Albemarle and Customer written agreement on security measures required for the production facility prior to start of production of Product and the reimbursement plan for said security measures. If necessary, Albemarle will perform a recrystallization upon Customer's request. For each such recrystallization (including multiple recrystalizations for the same batch), Customer will pay Albemarle [redacted]*.

4.2 Unit Price Adjustments. The Unit Price set forth in Section 4.1 shall be adjusted in accordance with Sections 4.2.2 and 4.2.3 below.

4.2.1 "Base Raw Material Cost" means the average invoiced cost of raw materials used to produce all orders of Product placed by the Customer, such average being the average invoiced cost of raw materials for the twelve months prior to each anniversary date used in section 4.2.2 calculations..

4.2.2 Albemarle may raise or lower the Unit Price set forth in Section 4.1 due to increases or decreases in raw material costs over the Base Raw Material Cost on the twelve (12) month anniversary of the Effective Date, and upon each subsequent twelve month anniversary date thereafter, upon written notice to Customer provided no less than thirty (30) days prior to the applicable anniversary date (a "Raw Material Price Adjustment Notice"). Such revised Unit Price shall be applicable for all batches of Product ordered after the twelve (12) month anniversary of the Effective Date hereof, or any subsequent anniversary date set forth above. At the request of the Customer Albemarle shall furnish Customer with documentation demonstrating the raw material cost changes from the Base Raw Material Cost. If, after receipt of such documentation, Customer is not in agreement with such adjustment, then Customer shall notify Albemarle in writing, and the Parties shall agree to an independent, qualified, third party audit company whose services shall be retained to determine whether or not such Unit Price increases or decreases meet the terms of this Agreement. In the event the proposed Unit Price adjustment shall be deemed to have been warranted by the third party auditor, Customer shall pay for all costs related to such audit services.

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

In the event the proposed price adjustment shall be deemed to not have been warranted by the third party auditor, Albemarle shall pay for all costs related to such audit.

4.2.3 Upon no less than thirty (30) days' notice prior to the third annual anniversary of the Effective Date, and each annual anniversary date thereafter, Albemarle shall also be entitled, but not obligated, to raise the Unit Price set forth herein to reflect increases in non raw material costs incurred in the manufacture of Product. This increase will be limited to the percentage increase, if any, in the final U.S. Department of Labor, Bureau of Labor Statistics, Producer Price Index for Commodities, Drugs and Pharmaceuticals (ID: WPU 063) (Base Period 1982=100), as published by the Bureau of Labor Statistics, U.S. Department of Labor, in the *PPI Detailed Report* for the month of July of the year in which the calculation is being made, over such index for the preceding July. All increases in Unit Price shall be applicable for all batches of Product ordered hereunder after the thirty sixth (36th) month anniversary of the effective date hereof and each twelve month anniversary thereafter, as applicable.

4.2.4 Prior to the third annual anniversary of the Effective Date, any unit price adjustments related to the cost of the raw material shall not exceed [redacted]* per kilogram over any twelve (12) month period. After the third annual anniversary of the Effective Date, any unit price adjustments related to the cost of the raw material and non raw material costs incurred in the manufacture of Product shall not exceed [redacted]* per kilogram over any twelve (12) month period. Any adjustment to the unit price cannot occur until at least [redacted]* kilograms of Product has been manufactured under this agreement.

4.3 Stability Study Fee. Albemarle shall charge a fee of [redacted]* for each [redacted]* unmicronized stability study and [redacted]* for each [redacted]* micronized stability study described in Section 2.11 that is requested by the Customer. Such fee will be invoiced by Albemarle quarterly in arrears during the first year of such study.

4.4 Invoicing. Albemarle shall provide to Customer an invoice with each delivery of the Product. Each invoice shall reference the purchase order to which the invoice relates and the quantity of the Product actually shipped. Payments shall be sent to the "Remit to" address set forth on the invoice. Should Customer dispute any portion of an invoice, it shall so notify Albemarle in writing and the Parties shall attempt in good faith to resolve said dispute. Any terms on any invoice or other purchase documentation issued by Albemarle which are inconsistent with this Agreement shall be of no effect or force.

4.5 Payment. Customer shall pay all amounts due in U.S. dollars, payable within forty-five (45) days of the date of the corresponding invoice. If Customer fails to make payment within forty-five(45) days of the invoice date, Albemarle shall be entitled to collect from the Customer interest on past due payments at a rate of interest of one percent (1.0%) per month or the highest rate permitted by law, whichever is less, as well as any costs incurred by Albemarle in collecting such past due payments, including but not limited to, reasonable attorneys' fees, court costs and the reasonable value of Albemarle's time and expenses spent in connection with such collection action, computed at Albemarle's prevailing fee schedule and expense policies.

4.6 Taxes. Except as expressly provided elsewhere in the Agreement, Customer will pay any tax (other than on income), duty or other governmental charge now or hereafter imposed on any Product or imposed on Albemarle by reason of the manufacture, sale, use or transportation of such products or raw material.

5. CONFIDENTIALITY

5.1 Confidential Information. The Parties agree and acknowledge that all disclosures of information between the Parties, whether under this Agreement, the Prior CDA, the

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

Validation Supply Agreement, the Prior Manufacturing Agreement, or the Prior Commercial Manufacturing Agreement, shall be treated as "Proprietary Information" under the CDA and shall be subject to the terms of the CDA. The Parties hereby amend the CDA as necessary to protect the relevant disclosures under this Agreement, including by extending the term of disclosure protected under the CDA through the Term, and the Parties shall sign a written document memorializing such amendment.

5.1 Confidential Agreement. Neither Party shall disclose any of the terms and conditions of this Agreement to any person or entity outside such Party whatsoever (other than to such Party's affiliates and actual or potential investors, lenders and acquirers (provided, that such recipients are bound to maintain the confidentiality of this Agreement to the same extent as if they were parties hereto) and subject to Section 8.5 below to any Government Entity that is a purchaser or potential purchaser of FDP and such Party's legal counsel without the prior written consent of the other Party, except as such disclosure may be required for accounting or tax reporting purposes, for purpose of complying with the rules of any stock exchange on which the shares of a Party trades, or as otherwise may be required by law.

5.2 Ownership of Confidential and Proprietary Information. Except as otherwise agreed upon in writing or required pursuant to Section 11 (Flow down provisions) below, each Party shall remain the sole owner of the patent rights (and any other intellectual property rights) which have been or are being developed by said Party before entering into this Agreement or during this Agreement but independent of any activities to be carried out under this Agreement. Notwithstanding the foregoing and for the avoidance of doubt, Customer is the sole owner of any improvements (including process improvements), derivations, inventions, innovations, developments, works of authorship, know-how or processes related to the Product developed during the performance of activities under this Agreement or under the Validation Supply Agreement or the Prior Manufacturing Agreement, the Prior Commercial Manufacturing Agreement, and all intellectual property rights therein, (collectively the "Process Improvements"), and Albemarle and its Affiliates and subcontractors hereby assigns to Customer all right, title and interest in and to all such Process Improvements. Albemarle shall promptly disclose to Customer all Process Improvements upon their creation, and shall provide Customer with such other information about Process Improvements as Customer may reasonably request. Albemarle and its Affiliates and subcontractors shall cooperate with Customer, at Customer's sole expense, by furnishing supporting data and signing documents needed for the prosecution and maintenance of patent applications and patents covering the Process Improvements. Albemarle shall not use any technology or intellectual property proprietary to Albemarle or any Affiliate or third party to manufacture the Product unless Albemarle first notifies Customer of such intended use and obtains Customer's prior written consent, and grants to Customer a license reasonably acceptable to Customer thereunder.

6. INDEMNITY; INSURANCE

6.1 Indemnity.

6.1.1 By Customer. Customer shall defend, indemnify and hold Albemarle harmless from and against all losses, liabilities, damages, costs and expenses (including reasonable attorneys' fees and costs) ("Losses") resulting from all claims, demands, actions and other proceedings by any third party to the extent arising from (a) the breach of any representation, warranty or covenant of Customer under this Agreement, (b) any bodily injury to person (including

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

death) or damage to real or tangible personal property caused by the Product or the use thereof (except if subject to Albemarle's indemnification obligations under Section 6.1.2(a) or 6.1.2(b)), (c) the gross negligence or willful misconduct of Customer in the performance of its obligations under this Agreement, or (d) infringement of any patents or trademarks or other third party intellectual property rights which result from Customer's particular use of the Product or from Albemarle's compliance with Customer's designs, specifications or instructions.

6.1.2 By Albemarle. Albemarle shall defend, indemnify and hold Customer and its affiliates, and its and their officers, directors, employees and agents, harmless from and against all Losses resulting from all claims, demands, actions and other proceedings by any third party (including any subcontractor of Albemarle) to the extent arising from (a) the breach of any representation, warranty or covenant of Albemarle under this Agreement, including any such breach arising as a result of the action or omission of any Albemarle subcontractor, or (b) the gross negligence or willful misconduct of Albemarle or any subcontractor in the performance of Albemarle's obligations under this Agreement.

6.1.3 Indemnity Procedure. A Party (the "Indemnitee") that intends to claim indemnification under this Section 6 shall promptly notify the other Party (the "Indemnitor") of any claim, demand, action or other proceeding for which the Indemnitee intends to claim such indemnification. The Indemnitor shall have the right to assume and control the defense thereof with counsel selected by the Indemnitor; provided, however, that the Indemnitee shall have the right to retain its own counsel to participate in the defense at Indemnitee's own expense, subject to Indemnitor's right to control the defense. The indemnity obligations under this Section 6 shall not apply to amounts paid in settlement of any claim, demand, action or other proceeding if such settlement is effected without the prior express written consent of the Indemnitor, which consent shall not be unreasonably withheld or delayed. The failure to deliver notice to the Indemnitor within a reasonable time after notice of any such claim or demand, or the commencement of any such action or other proceeding shall not relieve such Indemnitor of all liability to the Indemnitee under this Section 6 with respect thereto, but if such failure is prejudicial to the Indemnitor's ability to defend such claim, demand, action or other proceeding, and if such prejudice results in liabilities that may have been avoided or reduced if timely notice had been given, then the Indemnitor shall be relieved of said part of the liabilities. The Indemnitor may not settle or otherwise consent to an adverse judgment in any such claim, demand, action or other proceeding, that diminishes the rights or interests of the Indemnitee without the prior express written consent of the Indemnitee, which consent shall not be unreasonably withheld or delayed. The Indemnitee, its employees and agents, shall reasonably cooperate with the Indemnitor and its legal representatives in the investigation of any claim, demand, action or other proceeding covered by this Section 6.

6.2 Insurance. Each Party shall maintain, at all times during the Term, adequate and appropriate insurance coverage from one or more reputable insurance companies, each rated A- or better by AM Best and licensed to do business in the United States. Such insurance shall include products/completed operations coverage with limits of liability of no less than [redacted]* per occurrence/claim and in the aggregate. Each Party shall, at the other Party's request, furnish to the other Party a certificate of insurance.

6.3 Attorneys' Fees. If suit is filed to enforce any right granted in this Agreement, the substantially prevailing Party shall be entitled to recover its costs, disbursements and reasonable attorneys' fees from the other Party. The Party who is awarded a net recovery against the other shall be deemed the substantially prevailing Party unless such other Party has previously

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

made a bona fide offer of payment in settlement and the amount of recovery is the same or less than the amount offered in settlement. Reasonable attorneys' fees may be recovered regardless of the forum in which the dispute is heard, including an appeal.

6. LIABILITY AND LIMITATIONS

7.1 Actual Damages. EXCEPT WITH RESPECT TO A BREACH OF SECTION 5 OR A PARTY'S GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, IN NO EVENT OR INSTANCE SHALL EITHER PARTY BE LIABLE TO THE OTHER PARTY FOR SPECIAL, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES OR OTHER INDIRECT DAMAGES, INCLUDING, LOSS OF PROFIT OR LOSS OF BUSINESS GOODWILL, ARISING FROM OR RELATING TO THIS AGREEMENT, WHETHER BASED UPON WARRANTY, CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, REGARDLESS OF ANY NOTICE OF SUCH DAMAGES. NOTHING IN THIS SECTION 7.1 IS INTENDED TO LIMIT OR RESTRICT THE OBLIGATION TO PAY INDEMNIFICATION CLAIMS OF EITHER PARTY UNDER THIS AGREEMENT RELATED TO AMOUNTS DUE THIRD PARTIES

7.2 Limitations. IN RECOGNITION OF THE RELATIVE RISKS AND BENEFITS ASSOCIATED WITH THE SERVICES TO BE PROVIDED HEREUNDER, THE RISKS HAVE BEEN ALLOCATED BETWEEN THE PARTIES SUCH THAT CUSTOMER AGREES, TO THE FULLEST EXTENT PERMITTED BY LAW, TO LIMIT THE LIABILITY OF ALBEMARLE TO CUSTOMER FOR ANY AND ALL CLAIMS, LOSSES, COSTS, OR DAMAGES OF ANY NATURE WHATSOEVER, ARISING FROM ANY CAUSE OR CAUSES WHATSOEVER, OTHER THAN ALBEMARLE'S BREACH OF SECTION 5 AND ALBEMARLE'S INDEMNIFICATION OBLIGATIONS UNDER SECTION 6 TO PAY THIRD PARTY CLAIMS, SO THAT THE TOTAL AGGREGATE LIABILITY OF ALBEMARLE HEREUNDER SHALL NOT EXCEED THE PRICE PAID TO ALBEMARLE FOR THE SPECIFIC SUBJECT BATCH OR BATCHES BASED ON THE PER KILOGRAM PRICE AND VOLUME OF THE SUBJECT BATCH OR BATCHES OF PRODUCT. SUCH CLAIMS AND CAUSES INCLUDE NEGLIGENCE, PROFESSIONAL ERRORS OR OMISSIONS, STRICT LIABILITY, BREACH OF CONTRACT OR WARRANTY.

8. **TERM AND TERMINATION**

8.1 Term. Subject to earlier termination as provided herein, the term of this Agreement ("Term") shall commence on the Effective Date and continue for an initial term that is the longer of the period ending on (i) the fifth anniversary of the Effective Date or (ii) the date Customer has fulfilled its delivery obligations under the BARDA Contract, if the BARDA Contract is awarded to the Customer prior to the fifth anniversary of the Effective Date. Thereafter this Agreement shall renew for successive one (1) year renewal terms until either Party provides the other Party with advance written notice of non-renewal at least ninety (90) days prior to the expiration of the then-current term.

8.2 Applicability of FAR Clauses. Notwithstanding any other terms of this Agreement, for orders placed under this Agreement that relate to a Government Contract, the following clauses of the Federal Acquisition Regulation ("FAR"), as modified to identify the Parties to this Agreement and carry out the purpose of those clauses, shall govern the rights and obligations of the Parties: 52.242-15 Stop-Work Order, 52.249-2 Termination for Convenience of the Government (Fixed-Price), 52.249-8 Default (Fixed-Price Supply and Service).

8.3 Termination for Default. Subject to the provisions of Section 8.2, a Party may terminate this Agreement by written notice to the other Party after the breach of any provision of this Agreement by the other Party, if the other Party has not cured such breach within sixty (60)

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

days after written notice thereof from the non-breaching Party; *provided that*, if Customer receives a notice of default from a Government Entity pursuant to a Government Contract, and such default was caused by Albemarle or its subcontractors, Customer may terminate this Agreement if Albemarle does not cure the default within the period required by the Government Contract. Customer shall provide satisfactory evidence to Albemarle of any such notice of default (promptly when received by Customer), all information evidencing that any such default was caused by Albemarle or its subcontractor, and satisfactory evidence of any applicable time periods within which a cure must be completed.

8.4 Termination for Insolvency. This Agreement may be terminated by a Party upon written notice to the other Party if (a) the other Party shall make an assignment for the benefit of its creditors, file a petition in bankruptcy, petition or apply to any tribunal for the appointment of a custodian, receiver or trustee for it or a substantial part of its assets, or shall commence any proceeding under any bankruptcy, reorganization, readjustment of debt, dissolution or liquidation law or statute of any jurisdiction, whether now or hereafter in effect; or (b) if there shall have been filed against the other Party any such bona fide petition or application, or any such proceeding shall have been commenced against it, in which an order for relief is entered or that remains undismissed or unstayed for a period of ninety (90) days or more; or (c) if the other Party consents to, approves of or acquiescences in any such petition, application or proceeding or order for relief or the appointment of a custodian, receiver or trustee for it or any substantial part of its assets, or shall suffer any such custodianship, receivership or trusteeship to continue undischarged or unstayed for a period of ninety (90) days or more; or (d) anything analogous to any of the foregoing occurs in any applicable jurisdiction. Termination shall be effective upon the date specified in such notice.

8.5 BARDA Approval of Subcontracts; Suspension or Termination by Action of Government Entity. Under the BARDA Contract, BARDA has the right to approve any subcontract entered into by Customer for goods or services to be supplied for the BARDA Contract, including this Agreement. Customer shall supply a copy of this Agreement to BARDA and endeavor to obtain BARDA's approval of this Agreement as a subcontract to the BARDA Contract. In the event that BARDA does not approve this Agreement, Customer shall so notify Albemarle in writing, specifying the reasons for BARDA's rejection of this Agreement. Albemarle shall then have ninety (90) days from the receipt of said notice to remedy the section(s) of this Agreement that were the subject of BARDA's disapproval. In such an event, Customer agrees to use good faith efforts to modify and/or amend this Agreement with Albemarle for the purpose of meeting BARDA's approval. In the event Albemarle fails to remedy the section(s) of this Agreement that were the subject of BARDA's disapproval within said ninety (90) days of its receipt of written notification from Customer, Customer shall have the right to terminate this Agreement. In addition, subject to the provisions of Section 8.2, if any applicable Government Entity issues a stop work order or otherwise suspends, modifies or terminates Customer's Government Contract, and such action affects the scope of work under this Agreement, Customer may require Albemarle to immediately stop all, or any part, of the work called for by this Agreement as required by the Government Entity's stop work order, modification, suspension or termination, written evidence of which shall be provided to Albemarle promptly upon receipt of same by Customer. Albemarle shall immediately comply with the terms of such order as specified by Customer and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the stop work order or termination. Where work has been suspended, but not terminated, Albemarle shall not resume work unless specifically directed to do so by Customer. Albemarle shall be paid for work and reimbursed for all reasonable costs incurred by Albemarle up to the termination of the Agreement, not to exceed the aggregate Price for the most recent order of Product not yet delivered. Where the Government Entity orders a termination for convenience,

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

that work may be terminated for convenience by Customer upon submission to Albemarle of written evidence of any such termination for convenience. If any suspension hereunder continues for one hundred eighty (180) days, Albemarle shall have the right to terminate this Agreement and to be paid for all work performed and reimbursed for all costs incurred up to the termination date. In the event of a termination pursuant to this Section 8.5, Customer will reimburse Albemarle for all costs reasonably related to decommissioning of the Facility, or its subcontractor's facility, together with all costs for waste disposal, cleaning and mothballing incurred by Albemarle or its subcontractor as a result of said termination.

8.6 Effect of Termination. All rights and obligations under this Agreement shall terminate immediately upon any termination or expiration of this Agreement, except however, the rights and obligations set forth in the following Sections shall survive any termination of this Agreement3.5 (with respect to Product shipped during the Term), 5 ("Confidentiality"), 6.1.1-6.1.3 ("Indemnity"), 7 ("Liability and Limitations"), 8.2 ("Applicability of FAR Clauses"), 8.5 ("Suspension or Termination by Action of Government Entity"), 8.6 ("Effect of Termination"), 9 ("Warranty"), 10 ("Regulatory"), 11 ("Flow Down Provisions") (to the extent required by Applicable Law) and 12 ("General Provisions"). In addition, upon termination, Albemarle will immediately deliver to Customer copies of all records, equipment, and other items or information in its possession that are the property of Customer, as well as, upon providing Albemarle with written evidence of the applicable Government Entity's requirement, all necessary documentation relating to Albemarle's work that Customer may require to perform its Government Contract. Similarly, upon termination, Customer will immediately deliver to Albemarle copies of all records, equipment, and other items or information in its possession that are property of Albemarle. Upon termination or expiration Upon termination or expiration of this Agreement Customer may request of Albemarle to transfer to Customer, any of its Affiliates, the documentation exclusively related to the Product used by Albemarle in the provision of the services for the Product ("Technology Transfer") which Albemarle has not previously shared with Customer. Such Technology Transfer shall include transfer of all the documentation required to manufacture the Product in accordance with the Specifications and the Quality Agreement, but shall exclude only Albemarle Confidential Information related to Albemarle's equipment or process technology. Specifically, batch records are not to be copied for the purposes other than for Customer's regulatory, compliance and government oversight purposes only. Customer shall pay Albemarle for such Technology Transfer (at Albemarle's then-standard rates) and reimburse Albemarle for reasonable out-of-pocket expenses incurred in providing such Technology Transfer).

9. WARRANTY

Albemarle represents and warrants that (a) the Product sold hereunder shall at the time of completion of the manufacture of the Product, as well as immediately prior to shipping to Customer's micronizing subcontractor**,** conform to the Specifications and be manufactured in accordance with Applicable Law and shall not be adulterated, misbranded or mislabeled within the meaning of Applicable Law; (b**)** any services performed by Albemarle hereunder shall be performed in accordance with Applicable Law and in a professional and workmanlike manner in accordance with industry standards; (c) neither Albemarle nor any of its Affiliates or subcontractors or their respective employees, consultants or other personnel have been debarred, is subject to debarment, suspension, proposed for debarment, or voluntarily excluded from participation in transactions by the Federal government nor will use in any capacity, in connection with the performance of its obligations or the exercise of its rights under this Agreement, any individual or entity who has been debarred, suspended or proposed for debarment by the Federal government or pursuant to Section

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

306 of the FFDCA or who is the subject of a conviction described in such section; (d) Customer shall receive good title to the Product, free and clear of liens or other encumbrances; and (e) Albemarle shall manufacture Product exclusively for Customer. However, except as provided in this Section 9 and Section 2.6, Albemarle makes no other warranty of any kind, whether express or implied, including no warranty of merchantability or fitness for any particular purpose. Further, to the extent that the Product conforms to its applicable Specifications, Customer assumes all risk and liability for results obtained by the use of the Product covered by this Agreement, whether used singly or in combination with other products, except as provided in Section 6.1.2 with respect to third party claims.

10. **REGULATORY**

10.1 Upon a request by any properly authorized officer or employee of the FDA or any equivalent state regulatory body or any Regulatory Authority, Albemarle shall permit such officer or employee, at reasonable times, to have access to, copy and verify any records and reports in Albemarle's possession or under Albemarle's custody or control relating to the Product, and shall submit such records or reports (or copies thereof) upon FDA or any other regulatory request, to the FDA or such Regulatory Authority. Albemarle shall provide the Customer with prompt notice of any such request. Albemarle shall maintain all records related to its activities under this Agreement in accordance with Applicable Law or any record keeping obligation as set forth in a Government Contract of which Customer informs Albemarle in writing.

10.2 Each Party shall promptly advise the other of any safety or toxicity problem of which either Party becomes aware regarding the Product. Customer shall have the sole right to initiate a recall or take any other action with respect to Product once delivered by Albemarle to Customer or its designee.

10.3 Albemarle shall not file, support or maintain a DMF or any foreign equivalent for the Product except with Customer's prior written consent.

10.4 Albemarle shall, upon Customer's reasonable request, promptly assist Customer with any regulatory matters related to the Product or this Agreement, which may include responding to Customer's reasonable requests, providing all CMC information, assisting Customer by providing any information reasonably available to Albemarle, and granting Customer a right of reference or use to relevant data.

6. FLOW DOWN PROVISIONS

With regard to any Firm Order under this Agreement that relates to a Government Contract, Customer and Albemarle agree that the FAR clauses and other provisions contained in Exhibit F, as well as any other clauses required by law or regulation, shall be binding on Albemarle and shall be enforceable against Albemarle by Customer, either directly or acting on behalf of the applicable Government Entity. Clauses incorporated by reference shall have the same force and effect as if they were given in full text. The provisions of this Section 11 and such flowdown clauses shall take precedence over any conflicting provision of this Agreement. In addition, Albemarle agrees that it will use reasonable effort to supply Customer with information or support from Albemarle required in order for Customer to comply with its obligations under the relevant Government Contract. Together with any such request for information submitted to Albemarle, Customer will provide Albemarle with a copy of the documentation pursuant to which it believes it requires Albemarle's assistance in meeting its obligations under the relevant Government Contract.

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

7. GENERAL PROVISIONS

7.1 Notices. Any consent, notice or report required or permitted to be given or made under this Agreement by one of the Parties to the other shall be in writing and addressed to such other Party at its address indicated below, or to such other address as the addressee shall have last furnished in writing to the addressor, and shall be effective upon receipt by the addressee.

If to SIGA: If to Albemarle:

SIGA Technologies, Inc. Albemarle Corporation
4575 SW Research Way, Suite 110 4350 Congress Street, Suite 700
Corvallis, Oregon 97333 Charlotte, North Carolina 28209
Attention: Contracts Attention: VP Fine Chemicals

With a copy to: With a copy to:
SIGA Technologies, Inc. Albemarle Corporation
27 East 62nd Street 451 Florida Street
New York, NY 10065 Baton Rouge, Louisiana 70801
Attention: General Counsel Attention: General Counsel

7.2 Assignment. Neither Party may assign or otherwise transfer this Agreement or any right or obligation hereunder (whether voluntarily, by operation of law or otherwise), without the prior express written consent of the other Party, which consent shall not be unreasonably withheld or delayed. Any instance of a Party selling all or substantially all of its assets (including, without limitation, Customer selling all or substantially all of its rights to the marketing or production of the Product or the FDP), or all or substantially all of the assets of all divisions and departments providing or receiving Product or services (as applicable) hereunder, shall not be construed as an assignment of this Agreement. Additionally, the sale by a Party's shareholders of a controlling interest in the outstanding stock of such Party shall similarly not be considered an assignment of this Agreement, and in either instance, this Agreement shall remain in full force and effect and shall be binding upon, and inure to the benefit of, the successor or assignee of such Party, provided that, any permitted successor or assignee shall assume all obligations of its assignor under this Agreement and prior to any such sale of assets or of ownership interest, such proposed successor or assignee confirms in writing to the non-assigning Party that it can meet the obligations of the assigning Party under this Agreement). Any purported assignment or transfer in violation of this Section 12.2 shall be void.

7.3 Applicable Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware, without regard to the conflicts of law principles thereof.

7.4 Construction. This Agreement will be fairly interpreted in accordance with its terms and without any strict construction in favor of or against any Party.

7.5 Severability. Whenever possible, each provision of this Agreement~~,~~ shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be prohibited by or invalid under applicable law, such provision shall be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of such provisions or the remaining provisions of this Agreement.

7.6 Counterparts; Facsimile. This Agreement may be executed in counterparts, all of which together shall constitute one and the same instrument. Signing and delivery of this

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

Agreement may be evidenced by a facsimile/telecopy/PDF transmission of the signed signature page to the other Party.

7.7 Headings. The captions to the sections hereof are not a part of this Agreement, but are merely guides or labels to assist in locating and reading the sections hereof.

7.8 Independent Contractors. Each Party hereby acknowledges that the Parties shall be independent contractors and that the relationship between the Parties shall not constitute a partnership, joint venture or agency. Neither Party shall have the authority to make any statements, representations or commitments of any kind, or to take any action, which shall be binding on the other Party, without the prior consent of the other Party to do so.

7.9 Waiver. The waiver by a Party of any right hereunder, or of any failure to perform or breach by the other Party hereunder, shall not be deemed a waiver of any other right hereunder or of any other breach or failure by the other Party hereunder whether of a similar nature or otherwise.

7.10 Entire Agreement. This Agreement (which includes its Exhibits and the Quality Agreement) contain the entire understanding of the Parties with respect to the subject matter hereof. All other express or implied representations, understandings and agreements with respect to the subject matter hereof, either oral or written, heretofore made, including without limitation the Prior CDA, are expressly superseded by this Agreement; provided, however, that the CDA (amended as provided herein),the Prior Commercial Manufacturing Agreement shall expressly survive. This Agreement may be amended, or any term hereof modified, only by a written instrument duly executed by both Parties.

7.11 Dispute Resolution. In the event there is a dispute between the Parties with respect to this Agreement, the Parties, prior to instituting any court action, shall, if requested by either Party in writing, mediate their dispute before one mutually agreed upon impartial mediator in a mutually agreed upon location, within thirty (30) days after such request. Mediation fees, if any, shall be divided equally between the Parties. If the dispute is not resolved within thirty (30) days of initiation of mediation, either Party may bring suit in any court of competent jurisdiction**.**

-

[Remainder of Page Intentionally Left Blank]

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the Effective Date.

SIGA TECHNOLOGIES, INC.

By: /s/ Daniel J. Luckshire

Name: Daniel J. Luckshire

Title: CFO

Date: 10/5/2018

ALBEMARLE CORPORATION

By: /s/ Scott Martin

Name: Scott Martin

Title: President, FCS

Date: 10/12/2018

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

EXHIBIT A

PRODUCT CHEMICAL STRUCTURE

Name: Tecovirimat Monohydrate

Chemical Name: [redacted]*

Chemical Structure:

[redacted]*

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

EXHIBIT B

Micronized Product Testing

Samples for analysis by FP14.SG, only, will be provided by Customer through its drug product service provider and data will be provided to Customer in the form of a COA.

Table 1: Micronized Product Anaylsis

Test	Method	Acceptance Criteria

[redacted]*

Albemarle will perform stability testing on micronized Product.
Samples of micronized Product will be provided to Albemarle where they will be staged according to established protocols and analyzed based on the specifications outlined in Table 2. The results will be provided on a quarterly basis.

Table 2: Micronized Product Specification for Stability

Test	Method	Acceptance Criteria

[redacted]*

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

[redacted]*

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

EXHIBIT C

Specifications

ST-246 Drug Substance Specification for Commercial Production

PRODUCT SPECIFICATIONS

Table 1: Un-Micronized

Test	Method	Acceptance Criteria

[redacted]*

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

[redacted]*

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

Table 2: Un-Micronized Product Specification for Stability

Test	Method	Acceptance Criteria

[redacted]*

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

EXHIBIT D

Stability Study

Stability Program Per ICH Guidelines for 84 months

1) The [redacted]* Stability Testing activities as per established protocols would be undertaken for the micronized Product from [redacted]* batch of the micronized Product produced each calendar year. Customer has responsibility to provide Albemarle with micronized Product. The responsibilities of Albemarle would include:
    a. Protocol writing, with corresponding Customer approval in accordance with the Quality Agreement;
    b. Sample preparation/staging in stability chamber ovens, with corresponding Customer approval in accordance with the Quality Agreement;
    c. Analysis per the stability protocols within time period in accordance with the Albemarle SOPs and the Quality Agreement;
    d. Report writing using format mutually agreed upon with the Customer.

2) The [redacted]* Stability Testing activities as per established protocols would be undertaken for the unmicronized Product from [redacted]* batch of the unmicronized Product produced each calendar year. The responsibilities of Albemarle would include:
    a. Protocol writing, with corresponding Customer approval in accordance with the Quality Agreement;
    b. Sample preparation/staging in stability chamber ovens, with corresponding Customer approval in accordance with the Quality Agreement;
    c. Analysis per the stability protocols within time period in accordance with the Albemarle SOPs and the Quality Agreement;
    d. Report writing using format mutually agreed upon with the Customer.

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

EXHIBIT E

QUALITY AGREEMENT

[Quality Agreement will be referenced here]

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

EXHIBIT F

Flow-down Provisions

The following Federal Acquisitions Regulation (FAR) clauses are incorporated by reference as if in full text. By acceptance of this Agreement, Albemarle certifies that it is supplying only Commercial Items as that term is defined in FAR 2.101 and understands that Customer has relied on that certification. The effective version of each provision shall be the same version as that which appears in Customer's prime contract, or higher-tier subcontract under which this is a subcontract. In all clauses listed herein, the terms "Government," "Contracting Officer" and "Contractor" shall be revised to suitably identify the contracting parties herein and affect the proper intent of the provision. "Subcontractor", however, shall mean "Albemarle's Subcontractor" under this subcontract. Notwithstanding the foregoing, in the clauses whose subject matter is intellectual property including, but not limited to patents and rights in data, and "Security Requirements," the terms "Government," "Contracting Officer" and equivalent phrases shall retain the means as set forth in FAR.

52.203-13, Contractor Code of Business Ethics and Conduct
52.203-16 Preventing Personal Conflicts of Interest
52.219-8, Utilization of Small Business Concerns
52.222-21 Prohibition of Segregated Facilities
52.222-26, Equal Opportunity
52.222-35, Equal Opportunity for Veterans
52.222-36, Affirmative Action for Workers with Disabilities
52.222-37 Employment Reports on Veterans
52.222-40, Notification of Employee Rights Under the National Labor Relations Act
52.222-50, Combating Trafficking in Persons
52.227-2 Notice and Assistance Regarding Patent and Copyright Infringement
52.232-40 Providing Accelerated Payments to Small Business Subcontractors
52.244-6 Subcontracts for Commercial Items

B. HHS Clauses:

HHSAR 352.203-70 Anti Lobbying
HHSAR 352.222-70 Contractor Cooperation in Equal Employment Opportunity Investigations
HHSAR 352.223-70 Safety and Health

PROHIBITION ON CONTRACTOR INVOLVEMENT WITH TERRORIST ACTIVITIES
Albemarle acknowledges that U.S. Executive Orders and Laws, including but not limited to E.O. 13224 and Pub. L. 107-56, prohibit transactions with, and the provision of resources and support to, individuals and organizations associated with terrorism. It is the legal responsibility of the Albemarle to ensure compliance with these Executive Orders and Laws. This clause must be included in all subcontracts issued under this Agreement.

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

EXHIBIT G

List of Approved Laboratories per Section 2.6

[redacted]*

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

EXHIBIT H

List of Qualified Raw Material Vendors per Section 2.8

Approved Raw Material Vendors for tecovirimat monohydrate Drug Substance

Raw Material	Approved Vendor

[redacted]*

*** Certain material has been omitted pursuant to a request for confidential treatment. Such omitted material has been filed separately with the Securities and Exchange Commission.**

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-218507, 333-183101, 333-167329, 333-112935, 333-56216, and 333-35992) of SIGA Technologies, Inc. of our report dated March 5, 2019 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PRICEWATERHOUSECOOPERS LLP
Florham Park, New Jersey
March 5, 2019

Exhibit 31.1

Certification by Chief Executive Officer Pursuant to

Section 302 of the Sarbanes-Oxley Act of 2002

I, Phillip L. Gomez, certify that:

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

Date: March 5, 2019

/s/ Phillip L. Gomez

Phillip L. Gomez

Chairman and Chief Executive Officer

Exhibit 31.2

Certification by Chief Executive Officer Pursuant to
Section 302 of the Sarbanes-Oxley Act of 2002

I, Daniel J. Luckshire, certify that:

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

Date: March 5, 2019

/s/ Daniel J. Luckshire

Daniel J. Luckshire

Executive Vice President and
Chief Financial Officer

Exhibit 31.2

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of SIGA Technologies, Inc. (the "Company") on Form 10-K for the period ended December 31, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Phillip L. Gomez, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

/s/ Phillip L. Gomez

Phillip L. Gomez
Chairman and Chief Executive Officer
March 5, 2019

Exhibit 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of SIGA Technologies, Inc. (the "Company") on Form 10-K for the period ended December 31, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Daniel J. Luckshire, Executive Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

/s/ Daniel J. Luckshire

Daniel J. Luckshire
Executive Vice President and Chief Financial Officer
March 5, 2019