

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

FORM 10-K

(Mark One)

ANNUAL REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934.  
For the Fiscal Year Ended **December 31, 2015**

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. 000-16929

**SOLIGENIX, INC.**

(Exact name of registrant as specified in its charter)

**Delaware**

(State or other jurisdiction of  
incorporation or organization)

**41-1505029**

(I.R.S. Employer  
Identification Number)

**29 EMMONS DRIVE, SUITE C-10  
PRINCETON, NJ**

(Address of principal executive offices)

**08540**

(Zip Code)

**(609) 538-8200**

(Registrant's telephone number, including area code)

Securities registered under Section 12 (b) of the Exchange Act:

Title of Each Class  
**Common Stock, par value \$.001 per share**

Name of Each Exchange on Which Registered  
**OTCQB**

Securities registered under Section 12(g) of the Exchange 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 Section 15(d) of the Act. Yes  No

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate 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 10-K or any amendments to this Form 10-K.

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

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

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

The aggregate market value of the common stock held by non-affiliates of the registrant was approximately \$22,060,000 (assuming, for this purpose, that executive officers, directors and holders of 10% or more of the common stock are affiliates), based on the closing price of the registrant's common stock as reported on the Over-the-Counter Bulletin Board on March 18, 2016.

As of March 18, 2016, 31,269,522 shares of the registrant's Common Stock, par value \$0.001 per share, were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE: None.

SOLIGENIX, INC.

ANNUAL REPORT ON FORM 10-K  
For the Year Ended December 31, 2015

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## PART I

### Item 1. Business

*This Annual Report on Form 10-K contains statements of a forward-looking nature relating to future events or our future financial performance. These statements are only predictions and actual events or results may differ materially. In evaluating such statements, you should carefully consider the various factors identified in this report that could cause actual results to differ materially from those indicated in any forward-looking statements, including those set forth in “Risk Factors” in this Annual Report on Form 10-K. See “Cautionary Note Regarding Forward Looking Statements.”*

#### Our Business Overview

We are a late-stage biopharmaceutical company focused on developing and commercializing products to treat rare diseases where there is an unmet medical need. We maintain two active business segments: BioTherapeutics and Vaccines/BioDefense.

Our BioTherapeutics business segment is developing a first-in-class photodynamic therapy (SGX301) utilizing topical synthetic hypericin activated with safe visible light for the treatment of cutaneous T-cell lymphoma (“CTCL”), proprietary formulations of oral beclomethasone 17,21-dipropionate (“BDP”) for the prevention/treatment of gastrointestinal (“GI”) disorders characterized by severe inflammation, including pediatric Crohn’s disease (SGX203) and acute radiation enteritis (SGX201), and our novel innate defense regulator (“IDR”) technology, dusquetide (SGX942) for the treatment of oral mucositis in head and neck cancer.

Our Vaccines/BioDefense business segment includes active development programs for RiVax™, our ricin toxin vaccine candidate, OrbeShield®, our GI acute radiation syndrome (“GI ARS”) therapeutic candidate and SGX943, our melioidosis therapeutic candidate. The development of our vaccine programs currently is supported by our heat stabilization technology, known as ThermoVax®, under existing and on-going government contract funding. With the government contract from the National Institute of Allergy and Infectious Diseases (“NIAID”), we will attempt to advance the development of RiVax™ to protect against exposure to ricin toxin. We plan to use the funds received under our government contracts with the Biomedical Advanced Research and Development Authority (“BARDA”) and NIAID to advance the development of OrbeShield® for the treatment of GI ARS.

An outline for our business strategy follows:

- Complete enrollment and report preliminary results in our pivotal Phase 3 clinical trial of SGX301 for the treatment of CTCL;
- Initiate a Phase 3 clinical trial of SGX203, for the treatment of pediatric Crohn’s disease;
- Continue to collect the long-term follow-up safety data from the SGX942 Phase 2 proof-of-concept study in the treatment of oral mucositis in head and neck cancer patients and publish the findings from this study;
- Obtain FDA agreement on a pivotal Phase 2b/3 protocol of SGX942 in the treatment of oral mucositis in head and neck cancer patients;
- Continue development of RiVax™ in combination with our ThermoVax® technology, to develop new heat stable vaccines in biodefense and infectious diseases with the potential to collaborate and/or partner with other companies in these areas;
- Advance the preclinical and manufacturing development of OrbeShield® as a biodefense medical countermeasure for the treatment of GI ARS;
- Continue to apply for and secure additional government funding for each of our BioTherapeutics and Vaccines/BioDefense programs through grants, contracts and/or procurements;
- Acquire or in-license new clinical-stage compounds for development; and
- Explore other business development and merger/acquisition strategies.

#### Corporate Information

We were incorporated in Delaware in 1987 under the name Biological Therapeutics, Inc. In 1987, the Company merged with Biological Therapeutics, Inc., a North Dakota corporation, pursuant to which we changed our name to “Immunotherapeutics, Inc.” We changed our name to “Endorex Corp.” in 1996, to “Endorex Corporation” in 1998, to “DOR BioPharma, Inc.” in 2001, and finally to “Soligenix, Inc.” in 2009. Our principal executive offices are located at 29 Emmons Drive, Suite C-10, Princeton, New Jersey 08540 and our telephone number is (609) 538-8200.

## Our Product Candidates in Development

The following tables summarize our product candidates under development:

### BioTherapeutic Product Candidates

<u>Soligenix Product Candidate</u>	<u>Therapeutic Indication</u>	<u>Stage of Development</u>
SGX301	Cutaneous T-Cell Lymphoma	Phase 2 trial completed; demonstrated significantly higher response rate compared to placebo; Phase 3 clinical trial initiated in the second half of 2015, with data expected in the second half of 2016
SGX942	Oral Mucositis in Head and Neck Cancer	Phase 2 trial initiated in the second half of 2013, with positive preliminary results reported in the second half of 2015; seek to obtain FDA agreement on the Phase 2b/3 protocol in the second half of 2016
SGX203**	Pediatric Crohn's disease	Phase 1/2 clinical trial completed June 2013, efficacy data, pharmacokinetic (PK)/pharmacodynamic (PD) profile and safety confirmed; Phase 3 clinical trial planned for the second half of 2016, with data expected in the first half of 2018
SGX201**	Acute Radiation Enteritis	Phase 1/2 clinical trial complete; safety and preliminary efficacy demonstrated; Phase 2 trial planned for the first half of 2017

### Vaccine Thermostability Platform\*\*

<u>Soligenix Product Candidate</u>	<u>Indication</u>	<u>Stage of Development</u>
ThermoVax®	Thermostability of aluminum adjuvanted vaccines	Pre-clinical

### BioDefense Products\*\*

<u>Soligenix Product Candidate</u>	<u>Indication</u>	<u>Stage of Development</u>
RiVax™	Vaccine against Ricin Toxin Poisoning	Phase 1B trial complete, safety and neutralizing antibodies for protection demonstrated; Phase 1/2 trial planned for the second half of 2016
OrbeShield®	Therapeutic against GI ARS	Pre-clinical program initiated
SGX943	Melioidosis	Pre-clinical

\*\* Contingent upon continued government contract/grant funding or other funding source.

## **BioTherapeutics Overview**

### ***SGX301 – for Treating Cutaneous T-Cell Lymphoma***

SGX301 is a novel, first-in-class, photodynamic therapy that utilizes safe visible light for activation. The active ingredient in SGX301 is synthetic hypericin, a photosensitizer which is topically applied to skin lesions and then activated by fluorescent light 16 to 24 hours later. Hypericin is also found in several species of *Hypericum* plants, although the drug used in SGX301 is chemically synthesized by a proprietary manufacturing process and not extracted from plants. Importantly, hypericin is optimally activated with visible light thereby avoiding the negative consequences of ultraviolet light. Other light therapies using UVA light result in serious adverse effects including secondary skin cancers.

Combined with photoactivation, in clinical trials hypericin has demonstrated significant anti-proliferative effects on activated normal human lymphoid cells and inhibited growth of malignant T-cells isolated from CTCL patients. In both settings, it appears that the mode of action is an induction of cell death in a concentration as well as a light dose-dependent fashion. These effects appear to result, in part, from the generation of singlet oxygen during photoactivation of hypericin.

Hypericin is one of the most efficient known generators of singlet oxygen, the key component for phototherapy. The generation of singlet oxygen induces necrosis and apoptosis in adjacent cells. The use of topical hypericin coupled with directed visible light results in generation of singlet oxygen only at the treated site. We believe that the use of visible light (as opposed to cancer-causing ultraviolet light) is a major advance in photodynamic therapy. In a published Phase 2 clinical study in CTCL, after six weeks of twice weekly therapy, a majority of patients experienced a statistically significant improvement with topical hypericin treatment whereas the placebo was ineffective: 58.3% compared to 8.3%, respectively.

SGX301 has received orphan drug designation as well as Fast Track designation from the United States Food and Drug Administration (the “FDA”). The Orphan Drug Act is intended to assist and encourage companies to develop safe and effective therapies for the treatment of rare diseases and disorders. In addition to providing a seven year term of market exclusivity for SGX301 upon final FDA approval, orphan drug designation also positions us to be able to leverage a wide range of financial and regulatory benefits, including government grants for conducting clinical trials, waiver of FDA user fees for the potential submission of a New Drug Application (“NDA”) for SGX301, and certain tax credits. In addition, Fast Track is a designation that the FDA reserves for a drug intended to treat a serious or life-threatening condition and one that demonstrates the potential to address an unmet medical need for the condition. Fast Track designation is designed to facilitate the development and expedite the review of new drugs. For instance, should events warrant, we will be eligible to submit a NDA for SGX301 on a rolling basis, permitting the FDA to review sections of the NDA prior to receiving the complete submission. Additionally, NDAs for Fast Track development programs ordinarily will be eligible for priority review. SGX301 also was granted orphan drug designation from the European Medicines Agency Committee for Orphan Medical Products.

We initiated our pivotal Phase 3 clinical study of SGX301 in the treatment of CTCL during December 2015 and anticipate data in the second half of 2016.

We estimate the potential worldwide market for SGX301 is in excess of \$250 million for all applications, including the treatment of CTCL. This potential market information is a forward-looking statement, and investors are urged not to place undue reliance on this statement. While we have determined this potential market size based on assumptions that we believe are reasonable, there are a number of factors that could cause our expectations to change or not be realized.

## Cutaneous T-Cell Lymphoma

CTCL is a class of non-Hodgkin's lymphoma ("NHL"), a type of cancer of the white blood cells that are an integral part of the immune system. Unlike most NHLs, which generally involve B-cell lymphocytes (involved in producing antibodies), CTCL is caused by an expansion of malignant T-cell lymphocytes (involved in cell-mediated immunity) normally programmed to migrate to the skin. These skin-trafficking malignant T-cells migrate to the skin, causing various lesions to appear that may change shape as the disease progresses, typically beginning as a rash and eventually forming plaques and tumors. Mycosis fungoides ("MF") is the most common form of CTCL. It generally presents with skin involvement only, manifested as scaly, erythematous patches. Advanced disease with diffuse lymph node and visceral organ involvement is usually associated with a poorer response rate to standard therapies. A relatively uncommon sub-group of CTCL patients present with extensive skin involvement and circulating malignant cerebriform T-cells, referred to as Sézary syndrome. These patients have substantially graver prognoses than those with MF.

CTCL mortality is related to stage of disease, with median survival generally ranging from about 12 years in the early stages to only 2.5 years when the disease has advanced. There is currently no FDA-approved drug for front-line treatment of early stage CTCL. Treatment of early-stage disease generally involves skin-directed therapies. One of the most common unapproved therapies used for early-stage disease is oral 5 or 8-methoxypsoralen ("Psoralen") given with ultraviolet A ("UVA") light, referred to as PUVA, which is approved for dermatological conditions such as disabling psoriasis not adequately responsive to other forms of therapy, idiopathic vitiligo and skin manifestations of CTCL in persons who have not been responsive to other forms of treatment. Psoralen is a mutagenic chemical that interferes with DNA causing mutations and other malignancies. Moreover, UVA is a carcinogenic light source that when combined with the Psoralen, results in serious adverse effects including secondary skin cancers; therefore, the FDA requires a Black Box warning for PUVA.

CTCL constitutes a rare group of NHLs, occurring in about 4% of the approximate 500,000 individuals living with NHL. We estimate, based upon review of historic published studies and reports and an interpolation of data on the incidence of CTCL, that it affects over 20,000 individuals in the U.S., with approximately 2,800 new cases seen annually.

## SGX94

SGX94 is an innate defense regulator ("IDR") that regulates the innate immune system to simultaneously reduce inflammation, eliminate infection and enhance tissue healing.

SGX94 is based on a new class of short, synthetic peptides known as IDRs that have a novel mechanism of action in that it is simultaneously anti-inflammatory and anti-infective. IDRs have no direct antibiotic activity but modulate host responses, increasing survival after infections with a broad range of bacterial Gram-negative and Gram-positive pathogens including both antibiotic sensitive and resistant strains, as well as accelerating resolution of tissue damage following exposure to a variety of agents including bacterial pathogens, trauma and chemo- or radiation-therapy. IDRs represent a novel approach to the control of infection and tissue damage via highly selective binding to an intracellular adaptor protein, sequestosome-1, also known as p62, which has a pivotal function in signal transduction during activation and control of the innate defense system. Preclinical data indicate that IDRs may be active in models of a wide range of therapeutic indications including life-threatening bacterial infections as well as the severe side-effects of chemo- and radiation-therapy.

SGX94 has demonstrated efficacy in numerous animal disease models including mucositis, colitis, skin infection and other bacterial infections and has been evaluated in a double-blind, placebo-controlled Phase 1 clinical trial in 84 healthy volunteers with both single ascending dose and multiple ascending dose components. SGX94 was shown to be safe and well-tolerated in all dose groups when administered by IV over 7 days and was consistent with safety results seen in pre-clinical studies. SGX94 is the subject of an open Investigational New Drug ("IND") application which has been cleared by the FDA. We believe that market opportunities for SGX94 include mucositis, acute methicillin resistant *Staphylococcus aureus* (MRSA) bacterial infections, acinetobacter, melioidosis, acute radiation syndrome and as a vaccine adjuvant, with potential opportunities for non-dilutive funding to support the development.

## SGX942 – for Treating Oral Mucositis in Head and Neck Cancer

SGX942 is our product candidate containing our IDR technology platform, SGX94, targeting the treatment of oral mucositis in head and neck cancer patients. Oral mucositis in this patient population is an area of unmet medical need where there are currently no approved drug therapies. Accordingly, we received Fast Track designation for the treatment of oral mucositis as a result of radiation and/or chemotherapy treatment in head and neck cancer patients from the FDA.

We initiated a Phase 2 clinical study of SGX942 in the treatment of oral mucositis in head and neck cancer patients in the second half of 2013. We completed enrollment in this trial in the second half of 2015 and in December 2015, released positive preliminary results. In this Phase 2 proof-of-concept clinical study that enrolled 111 patients, SGX942, at a dose of 1.5 mg/kg, successfully reduced the median duration of severe oral mucositis by 50%, from 18 days to 9 days ( $p=0.099$ ) in all patients and by 67%, from 30 days to 10 days ( $p=0.040$ ) in patients receiving the most aggressive chemoradiation therapy (CRT) for treatment of their head and neck cancer. In addition to identifying the optimal dose of 1.5 mg/kg, this study achieved all objectives, including a trend towards increased incidence of “complete response” of tumor at the one month follow up visit (47% in placebo vs. 63% in SGX942 at 1.5 mg/kg). Decreases in mortality and significant decreases in infection rate were also observed with SGX942 treatment, consistent with the preclinical results observed in animal models, and are being further evaluated. SGX942 was found to be generally safe and well tolerated, consistent with the safety profile observed in the prior Phase 1 study conducted in 84 healthy volunteers. Long-term follow-up evaluations are ongoing with final results expected in the fourth quarter of 2016. Data from this Phase 2 trial is expected to be submitted for future presentation and publication.

We estimate the potential worldwide market for SGX942 is in excess of \$500 million for all applications, including the treatment of oral mucositis. This potential market information is a forward-looking statement, and investors are urged not to place undue reliance on this statement. While we have determined this potential market size based on assumptions that we believe are reasonable, there are a number of factors that could cause our expectations to change or not be realized.

### **Oral Mucositis**

Mucositis is the clinical term for damage done to the mucosa by anticancer therapies. It can occur in any mucosal region, but is most commonly associated with the mouth, followed by the small intestine. We estimate, based upon our review of historic studies and reports, and an interpolation of data on the incidence of mucositis, that mucositis affects approximately 500,000 people in the U.S. per year and occurs in 40% of patients receiving chemotherapy. Mucositis can be severely debilitating and can lead to infection, sepsis, the need for parenteral nutrition and narcotic analgesia. The GI damage causes severe diarrhea. These symptoms can limit the doses and duration of cancer treatment, leading to sub-optimal treatment outcomes.

The mechanisms of mucositis have been extensively studied and have been recently linked to the interaction of chemotherapy and/or radiation therapy with the innate defense system. Bacterial infection of the ulcerative lesions is regarded as a secondary consequence of dysregulated local inflammation triggered by therapy-induced cell death, rather than as the primary cause of the lesions.

We estimate, based upon our review of historic studies and reports, and an interpolation of data on the incidence of oral mucositis, that oral mucositis is a subpopulation of approximately 90,000 patients in the U.S., with a comparable number in Europe. Oral mucositis almost always occurs in patients with head and neck cancer treated with radiation therapy (greater than 80% incidence of severe mucositis) and is common in patients undergoing high dose chemotherapy and hematopoietic cell transplantation, where the incidence and severity of oral mucositis depends greatly on the nature of the conditioning regimen used for myeloablation.

### **Oral BDP**

Oral BDP (beclomethasone 17,21-dipropionate) represents a first-of-its-kind oral, locally acting therapy tailored to treat GI inflammation. BDP has been marketed in the U.S. and worldwide since the early 1970s as the active pharmaceutical ingredient in a nasal spray and in a metered-dose inhaler for the treatment of patients with allergic rhinitis and asthma. Oral BDP is specifically formulated for oral administration as a single product consisting of two tablets. One tablet is intended to release BDP in the upper sections of the GI tract and the other tablet is intended to release BDP in the lower sections of the GI tract.

Based on its pharmacological characteristics, oral BDP may have utility in treating other conditions of the gastrointestinal tract having an inflammatory component. We are planning to pursue development programs in the treatment of pediatric Crohn's disease, acute radiation enteritis and GI ARS pending further grant funding. We are also exploring the possibility of testing oral BDP for local inflammation associated with ulcerative colitis, among other indications.

We are pursuing orphan drug designations for relevant indications as appropriate in both the U.S. and Europe. An orphan drug designation provides for seven years and ten years of market exclusivity upon approval in the U.S. and Europe, respectively.

### ***SGX203 –for Treating Pediatric Crohn's Disease***

SGX203 is a two tablet delivery system of BDP specifically designed for oral use that allows for administration of immediate and delayed release BDP throughout the small bowel and the colon. The FDA has given SGX203 orphan drug designation as well as Fast Track designation for the treatment of pediatric Crohn's disease.

We anticipate initiating a Phase 3 clinical study of SGX203 in the treatment of pediatric Crohn's disease in the second half of 2016.

We estimate the potential worldwide market for oral BDP is in excess of \$500 million for all applications, including the treatment of pediatric Crohn's disease. This potential market information is a forward-looking statement, and investors are urged not to place undue reliance on this statement. While we have determined this potential market size based on assumptions that we believe are reasonable, there are a number of factors that could cause our expectations to change or not be realized.

### **Pediatric Crohn's Disease**

Crohn's disease causes inflammation of the GI tract. Crohn's disease can affect any area of the GI tract, from the mouth to the anus, but it most commonly affects the lower part of the small intestine, called the ileum. The swelling caused by the disease extends deep into the lining of the affected organ. The swelling can induce pain and can make the intestines empty frequently, resulting in diarrhea. Because the symptoms of Crohn's disease are similar to other intestinal disorders, such as irritable bowel syndrome and ulcerative colitis, it can be difficult to diagnose. People of Ashkenazi Jewish heritage have an increased risk of developing Crohn's disease.

Crohn's disease can appear at any age, but it is most often diagnosed in adults in their 20s and 30s. However, approximately 30% of people with Crohn's disease develop symptoms before 20 years of age. We estimate, based upon our review of historic published studies and reports, and an interpolation of data on the incidence of Pediatric Crohn's disease, that Pediatric Crohn's disease is a subpopulation of approximately 80,000 patients in the U.S. with a comparable number in Europe. Crohn's disease tends to be both severe and extensive in the pediatric population and a relatively high proportion (approximately 40%) of pediatric Crohn's patients have involvement of their upper gastrointestinal tract.

Crohn's disease presents special challenges for children and teens. In addition to bothersome and often painful symptoms, the disease can stunt growth, delay puberty, and weaken bones. Crohn's disease symptoms may sometimes prevent a child from participating in enjoyable activities. The emotional and psychological issues of living with a chronic disease can be especially difficult for young people.

### ***SGX201 –for Preventing Acute Radiation Enteritis***

SGX201 is a delayed-release formulation of BDP specifically designed for oral use. In 2012, we completed a Phase 1/2 clinical trial testing SGX201 in prevention of acute radiation enteritis. Patients with rectal cancer scheduled to undergo concurrent radiation and chemotherapy prior to surgery were randomized to one of four dose groups. The objectives of the study were to evaluate the safety and maximal tolerated dose of escalating doses of SGX201, as well as the preliminary efficacy of SGX201 for prevention of signs and symptoms of acute radiation enteritis. The study demonstrated that oral administration of SGX201 was safe and well tolerated across all four dose groups. There was also evidence of a potential dose response with respect to diarrhea, nausea and vomiting and the assessment of enteritis according to National Cancer Institute Common Terminology Criteria for Adverse Events for selected gastrointestinal events. In addition, the incidence of diarrhea was lower than that seen in recent published historical control data in this patient population. This program was supported in part by a \$500,000 two-year Small Business Innovation and Research ("SBIR") grant awarded by the National Institutes of Health ("NIH"). We are currently working with our Radiation Enteritis medical advisory board in pursuing additional funding from the NIH to support the clinical development program.



We have received Fast Track designation from the FDA for SGX201 for acute radiation enteritis.

We estimate the potential worldwide market for oral BDP is in excess of \$500 million for all applications, including the treatment of acute radiation enteritis. This potential market information is a forward-looking statement, and investors are urged not to place undue reliance on this statement. While we have determined this potential market size based on assumptions that we believe are reasonable, there are a number of factors that could cause our expectations to change or not be realized.

### **Acute Radiation Enteritis**

External radiation therapy is used to treat most types of cancer, including cancer of the bladder, uterine, cervix, rectum, prostate, and vagina. During delivery of treatment, some level of radiation will also be delivered to healthy tissue, including the bowel, leading to acute and chronic toxicities. The large and small bowels are very sensitive to radiation and the larger the dose of radiation the greater the damage to normal bowel tissue. Radiation enteritis is a condition in which the lining of the bowel becomes swollen and inflamed during or after radiation therapy to the abdomen, pelvis, or rectum. Most tumors in the abdomen and pelvis need large doses, and almost all patients receiving radiation to the abdomen, pelvis, or rectum will show signs of acute enteritis.

Patients with acute enteritis may have nausea, vomiting, abdominal pain and bleeding, among other symptoms. Some patients may develop dehydration and require hospitalization. With diarrhea, the gastrointestinal tract does not function normally, and nutrients such as fat, lactose, bile salts, and vitamin B 12 are not well absorbed.

Symptoms will usually resolve within two to six weeks after therapy has ceased. Radiation enteritis is often not a self-limited illness, as over 80% of patients who receive abdominal radiation therapy complain of a persistent change in bowel habits. Moreover, acute radiation injury increases the risk of development of chronic radiation enteropathy, and overall 5% to 15% of the patients who receive abdominal or pelvic irradiation will develop chronic radiation enteritis.

We estimate, based upon our review of historic published studies and reports, and an interpolation of data on the treatment courses and incidence of cancers occurring in the abdominal and pelvic regions, there to be over 100,000 patients annually in the U.S., with a comparable number in Europe, who receive abdominal or pelvic external beam radiation treatment for cancer, and these patients are at risk of developing acute and chronic radiation enteritis.

### **Vaccines/BioDefense Overview**

#### ***ThermoVax<sup>®</sup> – Thermostability Technology***

Our thermostability technology, ThermoVax<sup>®</sup>, is a novel method of rendering aluminum salt, (known colloquially as Alum), adjuvanted vaccines stable at elevated temperatures. Alum is the most widely employed adjuvant technology in the vaccine industry. The value of ThermoVax<sup>®</sup> lies in its potential ability to eliminate the need for cold chain production, transportation, and storage for Alum adjuvanted vaccines. This would relieve companies of the high costs of producing and maintaining vaccines under refrigerated conditions. Based on historical reports from the World Health Organization and other scientific reports, we believe that a meaningful proportion of vaccine doses globally are wasted due to excursions from required cold chain temperature ranges. This is due to the fact that most Alum adjuvanted vaccines need to be maintained at between 2 and 8 degrees Celsius (“C”) and even brief excursions from this temperature range (especially below freezing) usually necessitates the destruction of the product or the initiation of costly stability programs specific for the vaccine lots in question. We believe that the savings realized from the elimination of cold chain costs and related product losses would significantly increase the profitability of vaccine products. We believe that elimination of the cold chain could further facilitate the use of these vaccines in the lesser developed parts of the world. ThermoVax<sup>®</sup> has the potential to facilitate easier storage and distribution of strategic national stockpile vaccines in emergency settings.

ThermoVax<sup>®</sup> development was supported pursuant to our \$9.4 million NIAID grant enabling development of thermo-stable ricin (RiVax<sup>™</sup>) and anthrax (VeloThrax<sup>®</sup>) vaccines. Proof-of-concept preclinical studies with ThermoVax<sup>®</sup> indicate that it is able to produce stable vaccine formulations using adjuvants, protein immunogens, and other components that ordinarily would not withstand long temperature variations exceeding customary refrigerated storage conditions. These studies were conducted with our aluminum-adjuvanted ricin toxin vaccine, RiVax<sup>™</sup> and our aluminum-adjuvanted anthrax vaccine, VeloThrax<sup>®</sup>. Each vaccine was manufactured under precise lyophilization conditions using excipients that aid in maintaining native protein structure of the key antigen. When RiVax<sup>™</sup> was kept at 40 degrees C (104 degrees Fahrenheit) for up to one year, all of the animals vaccinated with the lyophilized RiVax<sup>™</sup> vaccine developed potent and high titer neutralizing antibodies. In contrast, animals that were vaccinated with the liquid RiVax<sup>™</sup> vaccine kept at 40 degrees C did not develop neutralizing antibodies and were not protected against ricin exposure. The ricin A chain is extremely sensitive to temperature and rapidly loses the ability to induce neutralizing antibodies when exposed to temperatures higher than 8 degrees C. When VeloThrax<sup>®</sup> was kept for up to 16 weeks at 70 degrees C, it was able to develop a potent antibody response, unlike the liquid formulation kept at the same temperature. Moreover, we have also demonstrated the compatibility of our thermostabilization technology with other secondary adjuvants such as TLR-4 agonists. Additionally, the University of Colorado conducted a study that demonstrated a heat stable vaccine formulation of a human papillomavirus (HPV) vaccine. The work was conducted by Drs. Randolph and Garcea and demonstrated the successful conversion of a commercial virus-like particle (VLP) based vaccine requiring cold chain storage to a subunit, alum-adjuvanted, vaccine which is stable at ambient temperatures. This work, funded by a University of Colorado Seed grant and the Specialized Program of Research Excellence (SPORE) in cervical cancer, is the first demonstration of the utility of ThermoVax<sup>®</sup> technology for the development of a subunit based commercial vaccine. The HPV vaccine formulation was found to be stable for at least 12 weeks at 50 degrees C. In the study, mice immunized with the ThermoVax<sup>®</sup>-stabilized HPV subunit vaccine were also found to achieve immune responses similar to the commercial HPV vaccine, Cervarix<sup>®</sup>, as measured by either total antibody levels or neutralizing antibody levels. Moreover, whereas the immune responses to Cervarix<sup>®</sup> were reduced after storage for 12 weeks at 50 degrees C, the ThermoVax<sup>®</sup> formulated vaccine retained its efficacy. The results were published online in the European Journal of Pharmaceutics and Biopharmaceutic. See <http://www.sciencedirect.com/science/article/pii/S0939641115002416>).

We also entered into a collaboration agreement with Axel Lehrer, PhD of the Department of Tropical Medicine, Medical Microbiology and Pharmacology, John A. Burns School of Medicine, University of Hawai'i at Mānoa and Hawaii Biotech, Inc. ("HBI") to develop a heat stable subunit Ebola vaccine. Dr. Lehrer, a co-inventor of the Ebola vaccine with HBI, has shown proof of concept efficacy with subunit Ebola vaccines in non-human primates. The most advanced Ebola vaccines involve the use of vesicular stomatitis virus and adenovirus vectors – live, viral vectors which complicate the manufacturing, stability and storage requirements. Dr. Lehrer's vaccine candidate is based on highly purified recombinant protein antigens, circumventing many of these manufacturing difficulties. Dr. Lehrer and HBI have developed a robust manufacturing process for the required proteins. Application of ThermoVax<sup>®</sup> may allow for a product that can avoid the need for cold chain distribution and storage, yielding a vaccine ideal for use in both the developed and developing world.

We intend to seek out potential partnerships with companies marketing FDA/ex-U.S. health authority approved Alum adjuvanted vaccines and currently developing Alum adjuvanted vaccines that are interested in eliminating the need for cold chain for their products. We believe that ThermoVax<sup>®</sup> also will enable us to expand our vaccine development expertise beyond biodefense into the infectious disease space and also has the potential to allow for the development of multivalent vaccines (e.g., combination ricin-anthrax vaccine).

### ***RiVax<sup>™</sup> – Ricin Toxin Vaccine***

RiVax<sup>™</sup> is our proprietary vaccine candidate being developed to protect against exposure to ricin toxin, and if approved would be the first ricin vaccine. The immunogen in RiVax<sup>™</sup> induces a protective immune response in animal models of ricin exposure and functionally active antibodies in humans. The immunogen consists of a genetically inactivated subunit ricin A chain that is enzymatically inactive and lacks residual toxicity of the holotoxin. RiVax<sup>™</sup> has demonstrated statistically significant ( $p < 0.0001$ ) preclinical survival results in a lethal aerosol exposure non-human primate model (Roy et al, 2015, Thermostable ricin vaccine protects rhesus macaques against aerosolized ricin: Epitope-specific neutralizing antibodies correlate with protection, PNAS USA March 24, 2015), and has also been shown to be well tolerated and immunogenic in two Phase 1 clinical trials in healthy volunteers. Results of the first Phase 1 human trial of RiVax<sup>™</sup> established that the immunogen was safe and induced antibodies that we believe may protect humans from ricin exposure. The antibodies generated from vaccination, concentrated and purified, were capable of conferring immunity passively to recipient animals, indicating that the vaccine was capable of inducing functionally active antibodies in humans. The outcome of this study was published in the Proceedings of the National Academy of Sciences (Vitetta et al., 2006, A Pilot Clinical Trial of a Recombinant Ricin Vaccine in Normal Humans, PNAS, 103:2268-2273). The second trial completed in September 2012, sponsored by University of Texas Southwestern Medical Center ("UTSW"), evaluated a more potent formulation of RiVax<sup>™</sup> that contained an aluminum adjuvant (Alum). The results of the Phase 1B study indicated that Alum adjuvanted RiVax<sup>™</sup> was safe and well tolerated, and induced greater ricin neutralizing antibody levels in humans than adjuvant-free RiVax<sup>™</sup>. The outcomes of this second study were published in the *Clinical and Vaccine Immunology* (Vitetta et al., 2012, Recombinant Ricin Vaccine Phase 1B Clinical Trial, Clin. Vaccine Immunol. 10:1697-9). We have adapted the original manufacturing process for the immunogen contained in RiVax<sup>™</sup> for large scale manufacturing and are further establishing correlates of the human immune response in non-human primates. We have initiated a development agreement with Emergent BioSolutions to implement a commercially viable, scalable production technology for the RiVax<sup>™</sup> drug substance protein antigen.

The development of RiVax™ has been sponsored through a series of overlapping challenge grants, UC1, and cooperative grants, U01, from the NIH, granted to Soligenix and to UTSW where the vaccine originated. The second clinical trial was supported by a grant from the FDA's Office of Orphan Products to UTSW. To date, we and UTSW have collectively received approximately \$25 million in grant funding from the NIH for the development of RiVax™. In September 2014, we entered into a contract with the NIH for the development of RiVax™ that would provide up to an additional \$24.7 million of funding in the aggregate if options to extend the contract are exercised by the NIH.

RiVax™ has been granted orphan drug designation by the FDA for the prevention of ricin intoxication.

Assuming development efforts are successful for RiVax™, we believe potential government procurement contract(s) could reach \$200 million. This potential procurement contract information is a forward-looking statement, and investors are urged not to place undue reliance on this statement. While we have determined this potential procurement contract value based on assumptions that we believe are reasonable, there are a number of factors that could cause our expectations to change or not be realized.

### **Ricin Toxin**

Ricin toxin can be cheaply and easily produced, is stable over long periods of time, is toxic by several routes of exposure and thus has the potential to be used as a biological weapon against military and/or civilian targets. As a bioterrorism agent, ricin could be disseminated as an aerosol, by injection, or as a food supply contaminant. The potential use of ricin toxin as a biological weapon of mass destruction has been highlighted in a Federal Bureau of Investigations Bioterror report released in November 2007 titled *Terrorism 2002-2005*, which states that "Ricin and the bacterial agent anthrax are emerging as the most prevalent agents involved in WMD investigations" ([http://www.fbi.gov/stats-services/publications/terrorism-2002-2005/terror02\\_05.pdf](http://www.fbi.gov/stats-services/publications/terrorism-2002-2005/terror02_05.pdf)). In recent years, Al Qaeda in the Arabian Peninsula has threatened the use of ricin toxin to poison food and water supplies and in connection with explosive devices. Domestically, the threat from ricin remains a concern for security agencies. As recently as April 2013, letters addressed to the President, a U.S. Senator and a judge tested positive for ricin.

The Center for Disease Control has classified ricin toxin as a Category B biological agent. Ricin works by first binding to glycoproteins found on the exterior of a cell, and then entering the cell and inhibiting protein synthesis leading to cell death. Once exposed to ricin toxin, there is no effective therapy available to reverse the course of the toxin. The recent ricin threat to government officials has heightened the awareness of this toxic threat. Currently, there is no FDA approved vaccine to protect against the possibility of ricin toxin being used in a terrorist attack, or its use as a weapon on the battlefield nor is there a known antidote for ricin toxin exposure.

### **OrbeShield® –for Treating GI Acute Radiation Syndrome**

OrbeShield® is an oral immediate and delayed release formulation of the topically active corticosteroid BDP and is being developed for the treatment of GI ARS. Corticosteroids are a widely used class of anti-inflammatory drugs. BDP is a corticosteroid with predominantly topical activity that is approved for use in asthma, psoriasis and allergic rhinitis.

OrbeShield® has demonstrated positive preclinical results in a canine GI ARS model which indicate that dogs treated with OrbeShield® demonstrated statistically significant ( $p=0.04$ ) improvement in survival with dosing at either two hours or 24 hours after exposure to lethal doses of total body irradiation (“TBI”) when compared to control dogs. OrbeShield® appears to significantly mitigate the damage to the GI epithelium caused by exposure to high doses of radiation using a well-established canine model of GI ARS.

The GI tract is highly sensitive to ionizing radiation and the destruction of epithelial tissue is one of the first effects of radiation exposure. The rapid loss of epithelial cells leads to inflammation and infection that are often the primary cause of death in acute radiation injury. This concept of GI damage also applies to the clinical setting of oncology, where high doses of radiation cannot be administered effectively to the abdomen because radiation is very toxic to the intestines. We are seeking to treat the same type of toxicity in our acute radiation enteritis clinical program with SGX201. As a result, we believe that OrbeShield® has the potential to be a “dual use” compound, a desirable characteristic which is a specific priority of BARDA for ARS and other medical countermeasure indications. The FDA has cleared the IND application for OrbeShield® for the mitigation of morbidity and mortality associated with GI ARS.

In September 2013, we received two government contracts from BARDA and NIAID for the advanced preclinical and manufacturing development of OrbeShield® leading to FDA approval to treat GI ARS. The BARDA contract contains a two year base period with two contract options, exercisable by BARDA, for a total of five years and up to \$26.3 million. The NIAID contract consists of a one year base period and two contract options, exercisable by NIAID, for a total of three years and up to \$6.4 million. Previously, development of OrbeShield® had been largely supported by a \$1 million NIH grant to Soligenix’s academic partner, the Fred Hutchinson Cancer Research Center. In July 2012, we received an SBIR grant from NIAID of approximately \$600,000 to support further preclinical development of OrbeShield® for the treatment of acute GI ARS. The FDA has given OrbeShield® orphan drug designation and Fast Track designation for the prevention of death following a potentially lethal dose of total body irradiation during or after a radiation disaster.

Assuming development efforts are successful for OrbeShield®, we believe potential government procurement contracts could reach as much as \$450 million. This potential procurement contract information is a forward-looking statement, and investors are urged not to place undue reliance on this statement. While we have determined this potential procurement contract value based on assumptions that we believe are reasonable, there are a number of factors that could cause our expectations to change or not be realized.

### **GI Acute Radiation Syndrome**

ARS occurs after toxic radiation exposure and involves several organ systems, notably the bone marrow, the GI tract and, later, the lungs. In the event of a nuclear disaster or terrorist detonation of a nuclear bomb, casualties exposed to greater than 2 grays (“Gy”) of absorbed radiation are at high risk for development of clinically significant ARS. Exposure to high doses of radiation exceeding 10-12 Gy causes acute GI injury which can result in death. The GI tract is highly sensitive due to the continuous need for crypt stem cells and production of mucosal epithelium. The extent of injury to the bone marrow and the GI tract are the principal determinants of survival after exposure to TBI. Although the hematopoietic syndrome can be rescued by bone marrow transplantation or growth factor administration, there is no established treatment or preventive measure for the GI damage that occurs after high-dose radiation. As a result, we believe there is an urgent medical need for specific medical counter measures against the lethal pathophysiological manifestations of radiation-induced GI injury.

### ***SGX943 – for Treating Melioidosis***

SGX943 uses the same active ingredient as SGX94 and is being developed in preclinical studies as a potential treatment for melioidosis. Because SGX943 directly targets the innate immune system (and does not attempt to kill the bacteria directly), we believe it is particularly relevant for antibiotic-resistant bacteria. The bacteria which causes melioidosis, *Burkholderia pseudomallei*, is known to be resistant to most antibiotics and to require prolonged treatment with the few antibiotics that do work. In February 2014, we were awarded a one-year NIAID SBIR award of approximately \$300,000 to further evaluate SGX943 as a potential treatment for melioidosis. Preclinical results to date have demonstrated that SGX943 treatment, in combination with standard of care antibiotics such as doxycycline, can statistically significantly enhance survival in a lethal murine pneumonic melioidosis model ( $p < 0.001$ ).

## Melioidosis

Melioidosis is a potentially fatal infection caused by the Gram-negative bacillus, *Burkholderia pseudomallei* (“Bp”). Highly resistant to many antibiotics, Bp can cause an acute disease characterized by a fulminant pneumonia and a chronic condition that can recrudescence. There is no preventive vaccine or effective immunotherapy for melioidosis. We believe that there is an unmet medical need for improved prevention and therapy.

Bp infection (melioidosis) is a major public health concern in the endemic regions of Southeast Asia and Northern Australia. In Northeast Thailand, which has the highest incidence of melioidosis, the mortality rate associated with Bp infection is over 40 percent, making it the third most common cause of death from infectious disease in that region after HIV/AIDS and tuberculosis. Bp activity is seen in Southeast Asia, South America, Africa, the Middle East, India, and Australia. The highest pockets of disease activity occur in Northern Australia and Northeast Thailand with increasing recognition of disease activity in coastal regions of India.

Beyond its public health significance, Bp and the closely-related *Burkholderia mallei* (“Bm”) are considered possible biological warfare agents by the DHHS because of the potential for widespread dissemination through aerosol. Bp like its relative Bm, the cause of Glanders, was studied by the U.S. as a potential biological warfare agent, but was never weaponized. It has been reported that the Soviet Union was also experimenting with Bp as a biological warfare agent.

Both Bp and Bm have been designated high priority threats by the DHHS in its PHEMCE Strategy released in 2012 and are classified as Category B Priority Pathogens by NIAID.

## The Drug Approval Process

The FDA and comparable regulatory agencies in state, local and foreign jurisdictions impose substantial requirements on the clinical development, manufacture and marketing of new drug and biologic products. The FDA, through regulations that implement the Federal Food, Drug, and Cosmetic Act, as amended, or FDCA, and other laws and comparable regulations for other agencies, regulate research and development activities and the testing, manufacture, labeling, storage, shipping, approval, recordkeeping, advertising, promotion, sale, export, import and distribution of such products. The regulatory approval process is generally lengthy, expensive and uncertain. Failure to comply with applicable FDA and other regulatory requirements can result in sanctions being imposed on us or the manufacturers of our products, including holds on clinical research, civil or criminal fines or other penalties, product recalls, or seizures, or total or partial suspension of production or injunctions, refusals to permit products to be imported into or exported out of the United States, refusals of the FDA to grant approval of drugs or to allow us to enter into government supply contracts, withdrawals of previously approved marketing applications and criminal prosecutions.

Before human clinical testing in the U.S. of a new drug compound or biological product can commence, an Investigational New Drug, or IND, application is required to be submitted to the FDA. The IND application includes results of pre-clinical animal studies evaluating the safety and efficacy of the drug and a detailed description of the clinical investigations to be undertaken.

Clinical trials are normally done in three phases, although the phases may overlap. Phase 1 trials are smaller trials concerned primarily with metabolism and pharmacologic actions of the drug and with the safety of the product. Phase 2 trials are designed primarily to demonstrate effectiveness and safety in treating the disease or condition for which the product is indicated. These trials typically explore various doses and regimens. Phase 3 trials are expanded clinical trials intended to gather additional information on safety and effectiveness needed to clarify the product’s benefit-risk relationship and generate information for proper labeling of the drug, among other things. The FDA receives reports on the progress of each phase of clinical testing and may require the modification, suspension or termination of clinical trials if an unwarranted risk is presented to patients. When data is required from long-term use of a drug following its approval and initial marketing, the FDA can require Phase 4, or post-marketing, studies to be conducted.

With certain exceptions, once successful clinical testing is completed, the sponsor can submit a New Drug Application, or NDA, for approval of a drug, or a Biologic License Application, or BLA, for biologics such as vaccines, which will be reviewed, and if successful, approved by the FDA, allowing the product to be marketed. The process of completing clinical trials for a new drug is likely to take a number of years and require the expenditure of substantial resources. Furthermore, the FDA or any foreign health authority may not grant an approval on a timely basis, if at all. The FDA may deny the approval of an NDA or BLA, in its sole discretion, if it determines that its regulatory criteria have not been satisfied or may require additional testing or information. Among the conditions for marketing approval is the requirement that the prospective manufacturer's quality control and manufacturing procedures conform to good manufacturing practice regulations. In complying with standards contained in these regulations, manufacturers must continue to expend time, money and effort in the area of production, quality control and quality assurance to ensure full technical compliance. Manufacturing facilities, both foreign and domestic, also are subject to inspections by, or under the authority of, the FDA and by other federal, state, local or foreign agencies.

Even after initial FDA or foreign health authority approval has been obtained, further studies, including Phase 4 post-marketing studies, may be required to provide additional data on safety and will be required to gain approval for the marketing of a product as a treatment for clinical indications other than those for which the product was initially tested. For certain drugs intended to treat serious, life-threatening conditions that show great promise in earlier testing, the FDA can also grant conditional approval. However, drug developers are required to study the drug further and verify clinical benefit as part of the conditional approval provision, and the FDA can revoke approval if later testing does not reproduce previous findings. The FDA may also condition approval of a product on the sponsor agreeing to certain mitigation strategies that can limit the unfettered marketing of a drug. Also, the FDA or foreign regulatory authority will require post-marketing reporting to monitor the side effects of the drug. Results of post-marketing programs may limit or expand the further marketing of the product. Further, if there are any modifications to the drug, including any change in indication, manufacturing process, labeling or manufacturing facility, an application seeking approval of such changes will likely be required to be submitted to the FDA or foreign regulatory authority.

In the U.S., the FDCA, the Public Health Service Act, the Federal Trade Commission Act, and other federal and state statutes and regulations govern, or influence the research, testing, manufacture, safety, labeling, storage, record keeping, approval, advertising and promotion of drug, biological, medical device and food products. Noncompliance with applicable requirements can result in, among other things, fines, recall or seizure of products, refusal to permit products to be imported into the U.S., refusal of the government to approve product approval applications or to allow the Company to enter into government supply contracts, withdrawal of previously approved applications and criminal prosecution. The FDA may also assess civil penalties for violations of the FDCA involving medical devices.

For biodefense development, such as with RiVax™ and OrbeShield®, the FDA has instituted policies that are expected to result in shorter pathways to market. This potentially includes approval for commercial use utilizing the results of animal efficacy trials, rather than efficacy trials in humans. However, the Company will still have to establish that the vaccine and countermeasures it is developing are safe in humans at doses that are correlated with the beneficial effect in animals. Such clinical trials will also have to be completed in distinct populations that are subject to the countermeasures; for instance, the very young and the very old, and in pregnant women, if the countermeasure is to be licensed for civilian use. Other agencies will have an influence over the benefit-risk scenarios for deploying the countermeasures and in establishing the number of doses utilized in the Strategic National Stockpile. We may not be able to sufficiently demonstrate the animal correlation to the satisfaction of the FDA, as these correlates are difficult to establish and are often unclear. Invocation of the animal rule may raise issues of confidence in the model systems even if the models have been validated. For many of the biological threats, the animal models are not available and the Company may have to develop the animal models, a time-consuming research effort. There are few historical precedents, or recent precedents, for the development of new countermeasure for bioterrorism agents. Despite the animal rule, the FDA may require large clinical trials to establish safety and immunogenicity before licensure and it may require safety and immunogenicity trials in additional populations. Approval of biodefense products may be subject to post-marketing studies, and could be restricted in use in only certain populations.

Vaccines are approved under the BLA process that exists under the Public Health Service Act. In addition to the greater technical challenges associated with developing biologics, the potential for generic competition is lower for a BLA product than a small molecule product subject to an NDA under the Federal Food, Drug and Cosmetic Act. Under the Patient Protection and Affordable Care Act enacted in 2010, a "generic" version of a biologic is known as a biosimilar and the barriers to entry – whether legal, scientific, or logistical – for a biosimilar version of a biologic approved under a BLA are higher.

### *Orphan drug designation*

Under the Orphan Drug Act, the FDA may grant orphan drug designation to drugs or biologics intended to treat a rare disease or condition—generally a disease or condition that affects fewer than 200,000 individuals in the United States. Orphan drug designation must be requested before submitting an NDA or BLA. After the FDA grants orphan drug designation, the generic identity of the drug or biologic and its potential orphan use are disclosed publicly by the FDA. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process. The first NDA or BLA applicant to receive FDA approval for a particular active ingredient to treat a particular disease with FDA orphan drug designation is entitled to a seven-year exclusive marketing period in the United States for that product, for that indication. During the seven-year exclusivity period, the FDA may not approve any other applications to market the same drug or biologic for the same disease, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity. Orphan drug exclusivity does not prevent the FDA from approving a different drug or biologic for the same disease or condition, or the same drug or biologic for a different disease or condition. Among the other benefits of orphan drug designation are tax credits for certain research and a waiver of the NDA or BLA application user fee.

### *Fast track designation and accelerated approval*

The FDA is required to facilitate the development, and expedite the review, of drugs or biologics that are intended for the treatment of a serious or life-threatening disease or condition for which there is no effective treatment and which demonstrate the potential to address unmet medical needs for the condition. Under the fast track program, the sponsor of a new drug or biologic candidate may request that the FDA designate the candidate for a specific indication as a fast track drug or biologic concurrent with, or after, the filing of the IND for the candidate. The FDA must determine if the drug or biologic candidate qualifies for fast track designation within 60 days of receipt of the sponsor's request. Unique to a fast track product, the FDA may initiate review of sections of a fast track product's NDA or BLA before the application is complete. This rolling review is available if the applicant provides, and the FDA approves, a schedule for the submission of the remaining information and the applicant pays applicable user fees. However, the FDA's time period goal for reviewing an application does not begin until the last section of the NDA or BLA is submitted. Additionally, the fast track designation may be withdrawn by the FDA if the FDA believes that the designation is no longer supported by data emerging in the clinical trial process.

Any product submitted to the FDA for marketing, including under a fast track program, may be eligible for other types of FDA programs intended to expedite development and review, such as accelerated approval. Drug or biological products studied for their safety and effectiveness in treating serious or life-threatening illnesses and that provide meaningful therapeutic benefit over existing treatments may receive accelerated approval, which means the FDA may approve the product based upon a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments.

In clinical trials, a surrogate endpoint is a measurement of laboratory or clinical signs of a disease or condition that substitutes for a direct measurement of how a patient feels, functions, or survives. Surrogate endpoints can often be measured more easily or more rapidly than clinical endpoints. A drug or biologic candidate approved on this basis is subject to rigorous post-marketing compliance requirements, including the completion of Phase 4 or post-approval clinical trials to confirm the effect on the clinical endpoint. Failure to conduct required post-approval studies, or confirm a clinical benefit during post-marketing studies, will allow the FDA to withdraw the drug or biologic from the market on an expedited basis. All promotional materials for drug candidates approved under accelerated regulations are subject to prior review by the FDA.

### *Pediatric information*

Under the Pediatric Research Equity Act, or PREA, NDAs or BLAs or supplements to NDAs or BLAs must contain data to assess the safety and effectiveness of the drug for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the drug is safe and effective. The FDA may grant full or partial waivers, or deferrals, for submission of data. Unless otherwise required by regulation, PREA does not apply to any drug for an indication for which orphan designation has been granted.

### *False Claims Laws*

The federal False Claims Act prohibits, among other things, any person or entity from knowingly presenting, or causing to be presented, a false claim for payment to, or approval by, the federal government or knowingly making, using, or causing to be made or used a false record or statement material to a false or fraudulent claim to the federal government. As a result of a modification made by the Fraud Enforcement and Recovery Act of 2009, a claim includes “any request or demand” for money or property presented to the US government.

### *Anti-Kickback Laws*

The federal Anti-Kickback Statute prohibits, among other things, any person or entity, from knowingly and willfully offering, paying, soliciting or receiving any remuneration, directly or indirectly, overtly or covertly, in cash or in kind, to induce or in return for purchasing, leasing, ordering or arranging for the purchase, lease or order of any item or service reimbursable under Medicare, Medicaid or other federal healthcare programs. The term remuneration has been interpreted broadly to include anything of value. The Anti-Kickback Statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on one hand and prescribers, purchasers, and formulary managers on the other.

### *United States Healthcare Reform*

Federal Physician Payments Sunshine Act and its implementing regulations require that certain manufacturers of drugs, devices, biological and medical supplies for which payment is available under Medicare, Medicaid or the Children’s Health Insurance Program (with certain exceptions) to report information related to certain payments or other transfers of value made or distributed to physicians and teaching hospitals, or to entities or individuals at the request of, or designated on behalf of, the physicians and teaching hospitals and to report annually certain ownership and investment interests held by physicians and their immediate family members.

In addition, we may be subject to data privacy and security regulation by both the federal government and the states in which we conduct our business. The Health Insurance Portability and Accountability Act, or HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, and its implementing regulations, imposes certain requirements relating to the privacy, security and transmission of individually identifiable health information. Among other things, HITECH makes HIPAA’s privacy and security standards directly applicable to “business associates”—independent contractors or agents of covered entities that receive or obtain protected health information in connection with providing a service on behalf of a covered entity. HITECH also created four new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates and possibly other persons, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorneys’ fees and costs associated with pursuing federal civil actions. In addition, state laws govern the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

### **Third-Party Suppliers and Manufacturers**

Drug substance and drug product manufacturing is outsourced to qualified suppliers. We do not have manufacturing capabilities/infrastructure and do not intend to develop the capacity to manufacture drug products substances. We have agreements with third-party manufacturers to supply bulk drug substances for our product candidates and with third parties to formulate, package and distribute our product candidates. Our employees include professionals with expertise in pharmaceutical manufacturing development, quality assurance and third party supplier management who oversee work conducted by third-party companies. We believe that we have on hand or can easily obtain sufficient amounts of product candidates to complete our currently contemplated clinical trials. All of the drug substances used in our product candidates currently are manufactured by single suppliers. While we have not experienced any supply disruptions, the number of manufacturers of the drug substances is limited. In the event it is necessary or advisable to acquire supplies from alternative suppliers, assuming commercially reasonable terms could be reached, the challenge would be the efficient transfer of technology and know-how from current manufactures to the new supplier. Formulation and distribution of our finished product candidates also currently are conducted by single suppliers but we believe that alternative sources for these services are readily available on commercially reasonable terms, subject to the efficient transfer of technology and know-how from current suppliers to the new supplier.



All of the current agreements for the supply bulk drug substances for our product candidates and for the formulation or distribution of our product candidates relate solely to the development (including preclinical and clinical) of our product candidates. Under these contracts, our product candidates are manufactured upon our order of a specific quantity. In the event that we obtain marketing approval for a product candidate, we will qualify secondary suppliers for all key manufacturing activities supporting the marketing application.

### **Marketing and Collaboration**

We do not currently have any sales and marketing capability, other than to potentially market our biodefense vaccine products directly to government agencies. With respect to other commercialization efforts, we currently intend to seek distribution and other collaboration arrangements for the sales and marketing of any product candidate that is approved, while also evaluating the potential to commercialize on our own in orphan disease indications. From time to time, we have had and are having strategic discussions with potential collaboration partners for our biodefense vaccine product candidates, although no assurance can be given that we will be able to enter into one or more collaboration agreements for our product candidate on acceptable terms, if at all. We believe that both military and civilian health authorities of the U.S. and other countries will increase their stockpiling of therapeutics and vaccines to treat and prevent diseases and conditions that could ensue following a bioterrorism attack.

On December 20, 2012, we re-acquired the North American and European commercial rights to oral BDP through an amendment of our collaboration and supply agreement with Sigma-Tau Pharmaceuticals, Inc. (“Sigma-Tau”). The amendment requires us to make certain approval and commercialization milestone payments to Sigma-Tau which could reach up to \$6 million. In addition, the Company has agreed to pay Sigma-Tau: (a) a royalty amount equal to 3% of all net sales of oral BDP made directly by the Company, and any third-party partner and/or their respective affiliates in the U.S., Canada, Mexico and in each country in the European Territory for the later to occur of: (i) a period of ten years from the first commercial sale of oral BDP in each country, or (ii) the expiration of the Company’s patents and patent applications relating to oral BDP in such country (the “Payment Period”); and (b) 15% of all up-front payments, milestone payments and any other consideration (exclusive of equity payments) received by the Company and/or a potential partner from the Company’s and/or potential partner’s licensees, distributors and agents for oral BDP in each relevant country in the territory, which amount will be paid on a product-by-product and a country-by-country basis for the Payment Period.

### **Competition**

Our competitors are pharmaceutical and biotechnology companies, most of whom have considerably greater financial, technical, and marketing resources than we do. Universities and other research institutions, including the U.S. Army Medical Research Institute of Infectious Diseases, also compete in the development of treatment technologies, and we face competition from other companies to acquire rights to those technologies.

#### ***SGX301 Competition***

The FDA has approved several treatments for later stages (IIB-IV) of CTCL and/or in conditions that are unresponsive to prior treatment. Two are targeted therapies (Targretin<sup>®</sup>-caps and Ontak<sup>®</sup>), two are histone deacetylases inhibitors (Zolima<sup>®</sup> and Istodax<sup>®</sup>) and the remaining two are topical therapies (Valchor<sup>®</sup> and Targretin<sup>®</sup>-gel). There are currently no FDA approved therapies for the treatment of front-line, early stage (I-IIA) CTCL; however certain topical chemotherapies and topical, radiation, photo and other therapies which are approved for indications other than CTCL are prescribed off-label for the treatment of early stage CTCL. These include psoralen combined with ultraviolet A (UVA) light therapy (“PUVA”); however, PUVA treatments are usually limited to three times per week and 200 times in total due to the potentially carcinogenic side effects. There are other drugs currently in development that may have the potential to be used in early stage (I-IIA) CTCL – one in phase 2 (vorinostat) and others in phase 1. Vorinostat has been approved by the FDA to treat CTCL patients who have conditions that are unresponsive to other therapies. It currently is being studied in a phase 2 trial for the treatment of all stages of CTCL, with an estimated completion date for the phase 2 trial in September 2016.

### ***SGX94/942 Competition***

Because SGX94 uses a novel mechanism of action in combating bacterial infections, there are no direct competitors at this time. Bacterial infections are routinely treated with antibiotics and SGX94 treatment is anticipated to be utilized primarily where antibiotics are insufficient (e.g., due to antibiotic resistance) or contra-indicated (e.g., in situations where the development of antibiotic resistance is a significant concern). Many groups are working on the antibiotic resistance problem and research into the innate immune system is intensifying, making emerging competition likely (from companies such as Celtaxsys Inc., Innaxon Therapeutics and Innate Pharma SA).

There is currently one drug approved for the treatment of oral mucositis in hematological cancer (palifermin). There are currently no approved drugs for treatment of oral mucositis in cancers with solid tumors (e.g., head and neck cancer). There are several drugs in clinical development for oral mucositis – one in Phase 3 (under development by Daewoong Pharmaceutical Co., Ltd), four in Phase 2 (under development by Cellceutix Corporation, BioAlliance Pharma S.A., Onexeo, and Alder Biopharmaceuticals Inc.) and one in Phase 1 (under development by ActoGenix N.V.). In addition, there are medical devices approved for the treatment of oral mucositis including MuGard, GelClair, Episil and Caphosol. These devices attempt to create a protective barrier around the oral ulceration.

### ***Oral BDP Competition***

There are a number of approved treatments for Crohn's disease and additional compounds are in late-stage development.

Remicade (infliximab) and Humira (adalimumab) are currently approved for the treatment of pediatric Crohn's disease; however, both carry significant Black Box warnings in their labeling for increased risk of serious infection and malignancy, and therefore are approved for treatment of moderate to severe patients. There is one other marketed biologic, Tysabri (natalizumab), in a Phase 2 study for pediatric Crohn's. Entocort (enteric-coated budesonide) also has completed Phase 3 trials in pediatric Crohn's disease.

### ***ThermoVax<sup>®</sup> Competition***

Multiple groups and companies are working to address the unmet need of vaccine thermostability using a variety of technologies. In addition, other organizations, such as the Bill and Melinda Gates Foundation and PATH, have programs designed to advance technologies to address this need.

Several stabilization technologies currently being developed involve mixing vaccine antigen +/- adjuvant with various proprietary excipients or co-factors that either serve to stabilize the vaccine or biological product in a liquid or dried (lyophilized) form. Examples of these approaches include the use of various plant-derived sugars and macromolecules being developed by companies such as Stabilitech Ltd. Variation Biotechnologies, Inc. ("VBI") is developing a lipid system (resembling liposomes) to stabilize viral antigens, including virus-like particles (VLPs), and for potential application to a conventional influenza vaccine among others.

Other approaches involve process variations to freeze-dry live virus vaccines. For example, PaxVax, Inc. is seeking to employ a spray drying technology in concert with enteric coating to achieve formulations for room temperature stability of live virus vaccines using adenovirus vectors. VBI is seeking to utilize their proprietary stabilization technology for a number of vaccines (as a co-development service, similar to the business model being developed by Stabilitech Ltd.), whereas PaxVax is applying the technology to their own proprietary vaccine development programs. Stabilitech uses combinations of excipients, which include glassifying sugars similar to the ThermoVax<sup>®</sup> technology, and variations in drying cycles during lyophilization, as does the ThermoVax<sup>®</sup> technology.

Additionally, companies like Pharmathene, Inc., Panacea Biotec Ltd., and Compass Biotech Inc. are developing proprietary vaccines with the application of some form of stabilization technology.

## ***Vaccines/BioDefense Competition***

We face competition in the area of biodefense product development from various public and private companies, universities and governmental agencies, such as the U.S. Army, some of whom may have their own proprietary technologies which may directly compete with our technologies.

The U.S. Army Medical Research Institute of Infectious Diseases, the DoD's lead laboratory for medical research to counter biological threats is also developing a ricin vaccine candidate, RVEc™. RVEc™ has been shown to be fully protective in mice exposed to lethal doses of ricin toxin by the aerosol route. Further studies, in both rabbits and nonhuman primates, were conducted to evaluate RVEc™'s safety as well as its immunogenicity, with positive results observed.

In the area of radiation-protective antidotes such as OrbeShield®, various companies, such as Cleveland Biolabs, Inc., Aeolus Pharmaceuticals, Inc., Boulder Biotechnology, Inc., RxBio, Inc., Avaxia Biologics, Inc., Exponential Biotherapies Inc., Osiris Therapeutics, Inc., ImmuneRegen BioSciences, Inc., Neumedicines, Inc., Cellerant Therapeutics, Inc., Onconova Therapeutics, Inc., Araim Pharmaceuticals, Inc., EVA Pharmaceuticals, Terapio Corporation, Cangene Corporation, Humanetics Corporation and the University of Arkansas Medical Sciences Center are developing biopharmaceutical products that may directly compete with OrbeShield®, even though their approaches to such treatment are different.

RxBio, Avaxia Biologics and the University of Arkansas have programs specifically for GI ARS. RxBio's Rx100 is a stem cell protectant designed as a single dose (oral or injection) which has shown promise in nonhuman primate studies. Avaxia is developing an orally delivered anti-TNF antibody as a treatment agent for exposure to radiation following a nuclear accident, attack or explosion. Pasireotide, a drug in development by Novartis for Cushing's disease, is being developed at the University of Arkansas to protect the intestine by reducing pancreatic secretions that exacerbate intestinal inflammation.

## **Patents and Other Proprietary Rights**

Our goal is to obtain, maintain and enforce patent protection for our products, formulations, processes, methods and other proprietary technologies, preserve our trade secrets, and operate without infringing on the proprietary rights of other parties, both in the U.S. and in other countries. Our policy is to actively seek to obtain, where appropriate, the broadest intellectual property protection possible for our product candidates, proprietary information and proprietary technology through a combination of contractual arrangements and patents, both in the U.S. and elsewhere in the world.

We also depend upon the skills, knowledge and experience of our scientific and technical personnel, as well as that of our advisors, consultants and other contractors, none of which is patentable. To help protect our proprietary knowledge and experience that is not patentable, and for inventions for which patents may be difficult to enforce, we rely on trade secret protection and confidentiality agreements to protect our interests. To this end, we require all employees, consultants, advisors and other contractors to enter into confidentiality agreements, which prohibit the disclosure of confidential information and, where applicable, require disclosure and assignment to us of the ideas, developments, discoveries and inventions important to our business.

We have issued U.S. patents 8,263,582 and 6,096,731 that cover the use of oral BDP for treating inflammatory disorders of the gastrointestinal tract and the prevention and treatment of GI GVHD, respectively. U.S. patent numbers 8,263,582 and 6,096,731 are expected to expire in March 2022 and June 2018, respectively. We also have European patent EP 1392321 claiming the use of topically active corticosteroids in orally administered dosage forms that act concurrently to treat inflammation in the upper and lower gastrointestinal tract, as well as European patent EP 2242477 claiming the use of orally ingested BDP for treatment of interstitial lung disease. European patents EP 1392321 and EP 2242477 are expected to expire in March 2022 and January 2029.

The subject of U.S. patent application number 12/633,631 filed December 8, 2009 and corresponding European patent application number 09836727.9 is the use of topically active BDP in radiation and chemotherapeutics injury. Additionally, we have numerous patent filings currently issued or pending in foreign jurisdictions covering this subject matter, including Australia, Canada, China, Hong Kong, Israel, India, Japan, South Korea and New Zealand.

ThermoVax<sup>®</sup> is the subject of U.S. patent 8,444,991 issued on May 21, 2013 titled “Method of Preparing an Immunologically-Active Adjuvant-Bound Dried Vaccine Composition” and also U.S. patent application number 13/474,661 filed May 17, 2012 titled “Thermostable Vaccine Compositions and Methods of Preparing Same.” The patent application and the corresponding foreign filings for both patents are pending and licensed to us by the University of Colorado (“UC”) and they address the use of adjuvants in conjunction with vaccines that are formulated to resist thermal inactivation. The license agreement covers thermostable vaccines for biodefense as well as other potential vaccine indications. U.S. patent 8,444,991 is expected to expire in December 2031.

RiVax<sup>™</sup> is the subject of three issued U.S. patent numbers 6,566,500, 6,960,652, and 7,829,668, all titled “Compositions and methods for modifying toxic effects of proteinaceous compounds.” This patent family includes composition of matter claims for the modified ricin toxin A chain which is the immunogen contained in RiVax<sup>™</sup>, and issued in 2003, 2005 and 2010 respectively. The initial filing date of these patents is March 2000 and they are expected to expire in March 2020. The issued patents contain claims that describe alteration of sequences within the ricin A chain that affect vascular leak, one of the deadly toxicities caused by ricin toxin. Another U.S. patent number 7,175,848 titled “Ricin A chain mutants lacking enzymatic activity as vaccines to protect against aerosolized ricin,” was filed in October of 2000 and is expected to expire in October 2020.

In 2013, we expanded our patent portfolio to include innate defense regulation through the acquisition of the novel drug technology, known as SGX94. By binding to the pivotal regulatory protein p62, also known as sequestosome-1, SGX94 regulates the innate immune system to reduce inflammation, eliminate infection and enhance healing. As part of the acquisition, we acquired all rights, including composition of matter patents for SGX94 as well as other analogs and crystal structures of SGX94 with its protein target p62, including U.S. patent 8,124,721 and additional pending applications, both in the US and abroad. SGX94 was developed pursuant to discoveries made by Professors B. Brett Finlay and Robert Hancock of UBC. U.S. patent 8,124,721 is expected to expire in April 2028.

In 2014, we acquired a novel, first-in-class, photodynamic therapy that utilizes safe visible light for activation, which we refer to as SGX301. The active ingredient in SGX301 is synthetic hypericin, a photosensitizer which is topically applied to skin lesions and then activated by fluorescent light 16 to 24 hours later. As part of the acquisition, we acquired a license agreement relating to the use of photo-activated hypericin, composition of matter patent for SGX301 (U.S. patent 8,629,302) and additional issued and pending applications, both in the US and abroad. U.S. patent 8,629,302 is expected to expire in June 2032.

In addition to issued and pending patents, we also have “Orphan Drug” designations for SGX301 in the U.S. and the EU for CTCL, SGX203 in the U.S. for pediatric Crohn’s disease, and OrbeShield<sup>®</sup> in the U.S. for GI ARS, as well as for RiVax<sup>™</sup> in the U.S. Our Orphan Drug designations provide for seven years of post-approval marketing exclusivity in the U.S. and ten years exclusivity in Europe. We have pending patent applications for this indication that, if granted, may extend our anticipated marketing exclusivity beyond the U.S. seven year or E.U. ten year post-approval exclusivity provided by Orphan Drug legislation.

#### ***Oral BDP License Agreement***

On November 24, 1998, the Company, known at the time as Enteron Pharmaceuticals, Inc. (“Enteron”) and George B. McDonald (“Dr. McDonald”) entered into an exclusive license agreement for the rights to intellectual property, including know-how, relating to oral BDP. The Company has an exclusive license to commercially exploit the covered products worldwide, subject to Dr. McDonald’s right to make and use the technology for research purposes and the U.S. Government’s right to use the technology for government purposes. Pursuant to the license agreement, as amended, the Company is required to (i) reimburse Dr. McDonald for certain out-of-pocket expenses incurred by Dr. McDonald in connection with the patent applications and issued patents, (ii) pay Dr. McDonald \$400,000 upon approval by the FDA of the Company’s first NDA incorporating oral BDP; (iii) pay Dr. McDonald royalty payments equal to 3% of net sales of the covered products and (iv) pay Dr. McDonald \$400,000 in cash upon an approval of oral BDP by the European Medicines Agency.

Additionally, in the event that the Company sublicenses its rights under the license agreement, the Company will be required to pay Dr. McDonald 10% of any sublicense fees and royalty payments paid by the sublicense to the Company.

The term of the license agreement expires upon the expiration of the licensed patent applications or patents. After seven years from the date of the agreement, Dr. McDonald has the right to terminate the license agreement in its entirety or to terminate exclusivity under the agreement if the Company or its sublicensee has not commercialized or are not actively attempting to commercialize a covered product.

Additionally, the agreement terminates: (i) automatically upon the Company becoming insolvent; (ii) upon 30 days' notice, if the Company breaches any obligation under the agreement without curing such breach during the notice period; and (iii) upon 90 days' notice by the Company. After any termination, the Company will have the right to sell its inventory for a period not to exceed three months following the date of termination, subject to the payment of the amounts owed under the agreement.

#### ***SGX94 License Agreements***

On December 18, 2012, we announced the acquisition of a novel drug technology, known as SGX94, representing a novel approach to modulation of the innate immune system. SGX94 is an IDR that regulates the innate immune system to reduce inflammation, eliminate infection and enhance tissue healing by binding to the pivotal regulatory protein p62, also known as sequestosome-1. As part of the acquisition, Soligenix acquired all rights, including composition of matter patents, preclinical and Phase 1 clinical study datasets for SGX94. We also assumed a license agreement with UBC to advance the research and development of the SGX94 technology. The license agreement with UBC provides us with exclusive worldwide rights to manufacture, distribute, market sell and/or license or sublicense products derived or developed from this technology. Under the license agreement we are obligated to pay UBC (i) an annual license maintenance fee of CAN \$1,000, and (ii) milestone payments which could reach up to CAN \$1.2 million.

#### ***ThermoVax<sup>®</sup> License Agreement***

On September 1, 2009, we executed a worldwide exclusive option to license patent applications with the UC for ThermoVax<sup>®</sup> which is the subject of U.S. patent number 8,444,991 issued on May 21, 2013 titled "Method of Preparing an Immunologically-Active Adjuvant-Bound Dried Vaccine Composition." This patent and its corresponding foreign filings are licensed to Soligenix by the UC and they address the use of adjuvants in conjunction with vaccines that are formulated to resist thermal inactivation. U.S. Patent 8,444,991 is expected to expire in December 2031. The license agreement also covers thermostable vaccines for biodefense as well as other potential vaccine indications. In addition, Soligenix in conjunction with UC, filed domestic and foreign patent applications claiming priority back to a provisional application filed on May 17, 2011 titled: "Thermostable Vaccine Compositions and Methods of Preparing Same."

#### ***RiVax<sup>™</sup> License Agreement***

In January 2003, we executed a worldwide exclusive option to license patent applications with UTSW for the nasal, pulmonary and oral uses of a non-toxic ricin vaccine. In June 2004, we entered into a license agreement with UTSW for the injectable rights to the ricin vaccine and, in October 2004, we negotiated the remaining oral rights to the ricin vaccine. To maintain this license we are obligated to pay \$50,000 in annual license fees. Through this license, we have rights to the issued patent number 7,175,848 titled "Ricin A chain mutants lacking enzymatic activity as vaccines to protect against aerosolized ricin." This patent includes methods of use and composition claims for RiVax<sup>™</sup>.

#### ***SGX301 License Agreement***

In September 2014, we acquired a worldwide exclusive license agreement with New York University and Yeda Research and Development Company Ltd. for the rights to a novel, first-in-class, photodynamic therapy that utilizes safe visible light for activation, which we refer to as SGX301. To maintain this license we are obligated to pay \$25,000 in annual license fees. In addition, we will pay the licensors: (a) a royalty amount equal to 3% of all net sales of SGX301 made directly by us and/or any affiliates; (b) a royalty amount equal to 2.5% of all net sales of SGX301 made by our sublicensees, subject to stated maximums and (c) 20% of all payments, not based on net sales, received by us from our sublicensees. The exclusive license includes rights to several issued US patents, including U.S. patent numbers 6,867,235 and 7,122,518, among other domestic and foreign patent applications. U.S. Patent numbers 6,867,235 and 7,122,518 are expected to expire in January 2020 and November 2023, respectively.

We acquired the license agreement for SGX301 and related intangible assets, properties and rights pursuant to an asset purchase agreement with Hy Biopharma Inc. (“Hy Biopharma”). As consideration for the assets acquired, we paid \$250,000 in cash and issued 1,849,113 shares of common stock with a market value of \$3,750,000. Provided all future success-orientated milestones are attained, we will be required to make payments of up to \$10.0 million, if and when achieved, payable in common stock of the Company.

### **Research and Development Expenditure**

We spent approximately \$5.4 million and \$9.1 million in the years ended December 31, 2015 and 2014, respectively, on research and development. The amounts we spent on research and development per product during the years ended December 31, 2015, and 2014 are set forth in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in this Annual Report on Form 10-K.

### **Employees**

As of December 31, 2015, we had 16 full-time employees, 8 of whom are MDs/PhDs.

### **Available Investor Information**

We file electronically with the Securities and Exchange Commission (“SEC”) our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) of 15(d) of the Securities Exchange Act of 1934, as amended. We make available through our website, free of charge, copies of these reports as soon as reasonably practicable after we electronically file or furnish them to the SEC. Our website is located at <http://www.soligenix.com>. You can also request copies of such documents by contacting the company at (609) 538-8200 or sending an email to [info@soligenix.com](mailto:info@soligenix.com).

### **Item 1A. Risk factors**

*An investment in our securities involves a high degree of risk. You should carefully consider the following information about these risks, together with the other information about these risks contained in this Annual Report, as well as the other information contained in this Annual Report generally, before deciding to buy our securities. Any of the risks we describe below could adversely affect our business, financial condition, operating results or prospects. The market prices for our securities could decline if one or more of these risks and uncertainties develop into actual events and you could lose all or part of your investment. Additional risks and uncertainties that we do not yet know of, or that we currently think are immaterial, may also impair our business operations. You should also refer to the other information contained in this Annual Report, including our financial statements and the related notes.*

#### **Risks Related to our Business**

*We have had significant losses and anticipate future losses; if additional funding cannot be obtained, we may reduce or discontinue our product development and commercialization efforts.*

We have experienced significant losses since inception and, at December 31, 2015, had an accumulated deficit of approximately \$146.9 million. We expect to incur additional operating losses in the future and expect our cumulative losses to increase. As of December 31, 2015, we had approximately \$4.9 million in cash available. Based on our projected budgetary needs, funding from existing contracts and grants over the next two years and sales to the purchasers under our existing equity lines, we expect to be able to maintain the current level of our operations for at least the next 12 months.

We have sufficient funds through our existing biodefense grant facilities from the NIAID, a division of the NIH, and BARDA to finance our biodefense projects for the next six years. In September 2014, we entered into a contract with the NIH for the development of RiVax™ to protect against exposure to ricin toxin that would provide up to \$24.7 million of funding in the aggregate if options to extend the contract are exercised by the NIH. In September 2013, we entered into contracts with the NIH and BARDA for the development of OrbeShield® that would provide up to \$32.7 million of funding in the aggregate if options to extend the contracts are exercised by BARDA and the NIH. In September 2009, we received a NIAID grant for approximately \$9.4 million for the development of our biodefense programs. In July 2012, we received an additional SBIR grant from NIAID for \$600,000 and in February 2014, we were awarded a one-year NIAID SBIR grant award of approximately \$300,000 to further evaluate SGX943 as a treatment for melioidosis. Our biodefense grants have an overhead component that allows us an agency-approved percentage over our incurred costs. We estimate that the overhead component associated with our existing contracts and grants will fund some fixed costs for direct employees working on these contracts and grants as well as other administrative costs. As of December 2015, we have approximately \$43.0 million in active contract funding.

Our product candidates are positioned for or are currently in clinical trials, and we have not yet generated any significant revenues from sales or licensing of these product candidates. From inception through December 2015, we have expended approximately \$66.2 million developing our current product candidates for pre-clinical research and development and clinical trials, and we currently expect to spend at least \$12.9 million over the next 12 months in connection with the development of our therapeutic and vaccine products, licenses, employment agreements, and consulting agreements of which approximately \$7.6 million will be reimbursed through our existing government contracts and grants. Unless and until we are able to generate sales or licensing revenue from one of our product candidates, we will require additional funding to meet these commitments, sustain our research and development efforts, provide for future clinical trials, and continue our operations. There can be no assurance we can raise such funds. If additional funds are raised through the issuance of equity securities, stockholders may experience dilution of their ownership interests, and the newly issued securities may have rights superior to those of the common stock. If additional funds are raised by the issuance of debt, we may be subject to limitations on our operations. If we cannot raise such additional funds, we may have to delay or stop some or all of our drug development programs.

***If we are unable to develop our product candidates, our ability to generate revenues and viability as a company will be significantly impaired.***

In order to generate revenues and profits, our organization must, along with corporate partners and collaborators, positively research, develop and commercialize our technologies or product candidates. Our current product candidates are in various stages of early clinical and pre-clinical development and will require significant further funding, research, development, pre-clinical and/or clinical testing, regulatory approval and commercialization, and are subject to the risks of failure inherent in the development of products based on innovative or novel technologies. Specifically, each of the following is possible with respect to any of our product candidates:

- we may not be able to maintain our current research and development schedules;
- we may be unable to secure procurement contracts on beneficial economic terms or at all from the U.S. government or others for our biodefense products;
- we may encounter problems in clinical trials; or
- the technology or product may be found to be ineffective or unsafe, or may fail to obtain marketing approval.

If any of the risks set forth above occur, or if we are unable to obtain the necessary regulatory approvals as discussed below, we may be unable to develop our technologies and product candidates and our business will be seriously harmed. Furthermore, for reasons including those set forth below, we may be unable to commercialize or receive royalties from the sale of any other technology we develop, even if it is shown to be effective, if:

- it is not economical or the market for the product does not develop or diminishes;
- we are not able to enter into arrangements or collaborations to manufacture and/or market the product;
- the product is not eligible for third-party reimbursement from government or private insurers;
- others hold proprietary rights that preclude us from commercializing the product;
- we are not able to manufacture the product reliably;
- others have brought to market similar or superior products; or
- the product has undesirable or unintended side effects that prevent or limit its commercial use.

***We expect a number of factors to cause our operating results to fluctuate on a quarterly and annual basis, which may make it difficult to predict our future performance.***

We are a late-stage biopharmaceutical company. Our operations to date have been primarily limited to developing our technology and undertaking clinical studies and clinical trials of our product candidates in our two active business segments, BioTherapeutics and Vaccines/BioDefense. We have not yet obtained regulatory approvals for any of our product candidates. Consequently, any predictions made about our future success or viability may not be as accurate as they could be if we had commercialized products. Our financial condition has varied significantly in the past and will continue to fluctuate from quarter-to-quarter or year-to-year due to a variety of factors, many of which are beyond our control. Factors relating to our business that may contribute to these fluctuations include other factors described elsewhere in this Annual Report and also include:

- our ability to obtain additional funding to develop our product candidates;
- delays in the commencement, enrollment and timing of clinical trials;
- the success of our product candidates through all phases of clinical development;
- any delays in regulatory review and approval of product candidates in clinical development;
- our ability to obtain and maintain regulatory approval for our product candidates in the United States and foreign jurisdictions;
- potential side effects of our product candidates that could delay or prevent commercialization, limit the indications for any approved drug, require the establishment of risk evaluation and mitigation strategies, or cause an approved drug to be taken off the market;
- our dependence on third-party contract manufacturing organizations (“CMOs”) to supply or manufacture our products;
- our dependence on contract research organizations to conduct our clinical trials;
- our ability to establish or maintain collaborations, licensing or other arrangements;
- market acceptance of our product candidates;
- our ability to establish and maintain an effective sales and marketing infrastructure, either through the creation of a commercial infrastructure or through strategic collaborations;
- competition from existing products or new products that may emerge;
- the ability of patients or healthcare providers to obtain coverage of or sufficient reimbursement for our products;
- our ability to discover and develop additional product candidates;
- our ability and our licensors’ abilities to successfully obtain, maintain, defend and enforce intellectual property rights important to our business;
- our ability to attract and retain key personnel to manage our business effectively;
- our ability to build our finance infrastructure and improve our accounting systems and controls;
- potential product liability claims;
- potential liabilities associated with hazardous materials; and
- our ability to obtain and maintain adequate insurance policies.

Accordingly, the results of any quarterly or annual periods should not be relied upon as indications of future operating performance.

***We have no approved products on the market and therefore do not expect to generate any revenues from product sales in the foreseeable future, if at all.***

To date, we have no approved product on the market and have not generated any significant product revenues. We have funded our operations primarily from sales of our securities and from government grants. We have not received, and do not expect to receive for at least the next several years, if at all, any revenues from the commercialization of our product candidates. To obtain revenues from sales of our product candidates, we must succeed, either alone or with third parties, in developing, obtaining regulatory approval for, manufacturing and marketing drugs with commercial potential or successfully obtain government procurement or stockpiling agreements. We may never succeed in these activities, and we may not generate sufficient revenues to continue our business operations or achieve profitability.



***Our business is subject to extensive governmental regulation, which can be costly, time consuming and subjects us to unanticipated delays.***

Our business is subject to very stringent federal, foreign, state and local government laws and regulations, including the Federal Food, Drug and Cosmetic Act, the Environmental Protection Act, the Occupational Safety and Health Act, and state and local counterparts to these acts. These laws and regulations may be amended, additional laws and regulations may be enacted, and the policies of the FDA and other regulatory agencies may change.

The regulatory process applicable to our products requires pre-clinical and clinical testing of any product to establish its safety and efficacy. This testing can take many years is uncertain as to outcome, and requires the expenditure of substantial capital and other resources. We estimate that the clinical trials of our product candidates that we have planned will take at least several years to complete. Furthermore, failure can occur at any stage of the trials, and we could encounter problems that cause us to abandon or repeat clinical trials. Favorable results in early studies or trials, if any, may not be repeated in later studies or trials. Even if our clinical trials are initiated and completed as planned, we cannot be certain that the results will support our product candidate claims. Success in preclinical testing, Phase 1 and Phase 2 clinical trials does not ensure that later Phase 2 or Phase 3 clinical trials will be successful. In addition, we, the FDA or other regulatory authorities may suspend clinical trials at any time if it appears that we are exposing participants to unacceptable health risks or the FDA or other regulatory authorities find deficiencies in our submissions or conduct of our trials.

We may not be able to obtain, or we may experience difficulties and delays in obtaining, necessary domestic and foreign governmental clearances and approvals to market a product. Also, even if regulatory approval of a product is granted, that approval may entail limitations on the indicated uses for which the product may be marketed.

Following any regulatory approval, a marketed product and its manufacturer are subject to continual regulatory review. Later discovery of problems with a product or manufacturer may result in restrictions on such product or manufacturer. These restrictions may include product recalls and suspension or withdrawal of the marketing approval for the product. Furthermore, the advertising, promotion and export, among other things, of a product are subject to extensive regulation by governmental authorities in the U.S. and other countries. If we fail to comply with applicable regulatory requirements, we may be subject to fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and/or criminal prosecution.

***There may be unforeseen challenges in developing our biodefense products.***

For development of biodefense vaccines and therapeutics, the FDA has instituted policies that are expected to result in accelerated approval. This includes approval for commercial use using the results of animal efficacy trials, rather than efficacy trials in humans, referred to as the Animal Rule. However, we will still have to establish that the vaccines we are developing are safe in humans at doses that are correlated with the beneficial effect in animals. Such clinical trials will also have to be completed in distinct populations that are subject to the countermeasures; for instance, the very young and the very old, and in pregnant women, if the countermeasure is to be licensed for civilian use. Other agencies will have an influence over the risk benefit scenarios for deploying the countermeasures and in establishing the number of doses utilized in the Strategic National Stockpile. We may not be able to sufficiently demonstrate the animal correlation to the satisfaction of the FDA, as these correlates are difficult to establish and are often unclear. Invocation of the Animal Rule may raise issues of confidence in the model systems even if the models have been validated. For many of the biological threats, the animal models are not available and we may have to develop the animal models, a time-consuming research effort. There are few historical precedents, or recent precedents, for the development of new countermeasure for bioterrorism agents. Despite the Animal Rule, the FDA may require large clinical trials to establish safety and immunogenicity before licensure and it may require safety and immunogenicity trials in additional populations. Approval of biodefense products may be subject to post-marketing studies, and could be restricted in use in only certain populations. The government's biodefense priorities can change, which could adversely affect the commercial opportunity for the products we are developing. Further, other countries have not, at this time, established criteria for review and approval of these types of products outside their normal review process, i.e., there is no Animal Rule equivalent, and consequently there can be no assurance that we will be able to make a submission for marketing approval in foreign countries based on such animal data.

Additionally, few facilities in the United States and internationally have the capability to test animals with anthrax or ricin, or otherwise assist us in qualifying the requisite animal models. We have to compete with other biodefense companies for access to this limited pool of highly specialized resources. We therefore may not be able to secure contracts to conduct the testing in a predictable timeframe or at all.

***We are dependent on government funding, which is inherently uncertain, for the success of our biodefense operations.***

We are subject to risks specifically associated with operating in the biodefense industry, which is a new and unproven business area. We do not anticipate that a significant commercial market will develop for our biodefense products. Because we anticipate that the principal potential purchasers of these products, as well as potential sources of research and development funds, will be the U.S. government and governmental agencies, the success of our biodefense division will be dependent in large part upon government spending decisions. The funding of government programs is dependent on budgetary limitations, congressional appropriations and administrative allotment of funds, all of which are inherently uncertain and may be affected by changes in U.S. government policies resulting from various political and military developments. Our receipt of government funding is also dependent on our ability to adhere to the terms and provisions of the original grant documents and other regulations. We can provide no assurance that we will receive or continue to receive funding for grants we have been awarded. The loss of government funds could have a material adverse effect on our ability to progress our biodefense business.

***If the parties we depend on for supplying our drug substance raw materials and certain manufacturing-related services do not timely supply these products and services, it may delay or impair our ability to develop, manufacture and market our products. We do not have or anticipate having internal manufacturing capabilities.***

We rely on suppliers for our drug substance raw materials and third parties for certain manufacturing-related services to produce material that meets appropriate content, quality and stability standards, which material will be used in clinical trials of our products and, after approval, for commercial distribution. To succeed, clinical trials require adequate supplies of drug substance and drug product, which may be difficult or uneconomical to procure or manufacture. We and our suppliers and vendors may not be able to (i) produce our drug substance or drug product to appropriate standards for use in clinical studies, (ii) perform under any definitive manufacturing, supply or service agreements with us or (iii) remain in business for a sufficient time to be able to develop, produce, secure regulatory approval of and market our product candidates. If we do not maintain important manufacturing and service relationships, we may fail to find a replacement supplier or required vendor or develop our own manufacturing capabilities which could delay or impair our ability to obtain regulatory approval for our products and substantially increase our costs or deplete profit margins, if any. If we do find replacement manufacturers and vendors, we may not be able to enter into agreements with them on terms and conditions favorable to us and, there could be a substantial delay before a new facility could be qualified and registered with the FDA and foreign regulatory authorities.

***The manufacturing of our products is a highly exacting process, and if we or one of our materials suppliers encounter problems manufacturing our products, our business could suffer.***

The FDA and foreign regulators require manufacturers to register manufacturing facilities. The FDA and foreign regulators also inspect these facilities to confirm compliance with current Good Manufacturing Practice (“cGMP”) or similar requirements that the FDA or foreign regulators establish. We, or our materials suppliers, may face manufacturing or quality control problems causing product production and shipment delays or a situation where we or the supplier may not be able to maintain compliance with the FDA’s cGMP requirements, or those of foreign regulators, necessary to continue manufacturing our drug substance. Any failure to comply with cGMP requirements or other FDA or foreign regulatory requirements could adversely affect our clinical research activities and our ability to market and develop our products.

***We may use our financial and human resources to pursue a particular research program or product candidate and fail to capitalize on programs or product candidates that may be more profitable or for which there is a greater likelihood of success.***

Because we have limited financial and human resources, we are currently focusing on the regulatory approval of certain product candidates. As a result, we may forego or delay pursuit of opportunities with other product candidates or for other indications that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on existing and future product candidates for specific indications may not yield any commercially viable products. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through strategic alliance, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate, or we may allocate internal resources to a product candidate in an area in which it would have been more advantageous to enter into a partnering arrangement.

***Even if approved, our products will be subject to extensive post-approval regulation.***

Once a product is approved, numerous post-approval requirements apply. Among other things, the holder of an approved New Drug Application (“NDA”) is subject to periodic and other FDA monitoring and reporting obligations, including obligations to monitor and report adverse events and instances of the failure of a product to meet the specifications in the NDA. Application holders must submit new or supplemental applications and obtain FDA approval for certain changes to the approved product, product labeling, or manufacturing process. Application holders must also submit advertising and other promotional material to the FDA and report on ongoing clinical trials.

Depending on the circumstances, failure to meet these post-approval requirements can result in criminal prosecution, fines, injunctions, recall or seizure of products, total or partial suspension of production, denial or withdrawal of pre-marketing product approvals, or refusal to allow us to enter into supply contracts, including government contracts. In addition, even if we comply with FDA and other requirements, new information regarding the safety or effectiveness of a product could lead the FDA to modify or withdraw product approval.

***Even if we obtain regulatory approval to market our product candidates, our product candidates may not be accepted by the market.***

Even if the FDA approves one or more of our product candidates, physicians and patients may not accept it or use it. Even if physicians and patients would like to use our products, our products may not gain market acceptance among healthcare payors such as managed care formularies, insurance companies or government programs such as Medicare or Medicaid. Acceptance and use of our products will depend upon a number of factors including: perceptions by members of the health care community, including physicians, about the safety and effectiveness of our drug or device product; cost-effectiveness of our product relative to competing products; availability of reimbursement for our product from government or other healthcare payers; and effectiveness of marketing and distribution efforts by us and our licensees and distributors, if any.

The degree of market acceptance of any product that we develop will depend on a number of factors, including:

- cost-effectiveness;
- the safety and effectiveness of our products, including any significant potential side effects, as compared to alternative products or treatment methods;
- the timing of market entry as compared to competitive products;
- the rate of adoption of our products by doctors and nurses;
- product labeling or product insert required by the FDA for each of our products;
- reimbursement policies of government and third-party payors;
- effectiveness of our sales, marketing and distribution capabilities and the effectiveness of such capabilities of our collaborative partners, if any; and
- unfavorable publicity concerning our products or any similar products.

Our product candidates, if successfully developed, will compete with a number of products manufactured and marketed by major pharmaceutical companies, biotechnology companies and manufacturers of generic drugs. Our products may also compete with new products currently under development by others. Physicians, patients, third-party payors and the medical community may not accept and utilize any of our product candidates. If our products do not achieve market acceptance, we will not be able to generate significant revenues or become profitable.

Because we expect sales of our current product candidates, if approved, to generate substantially all of our product revenues for the foreseeable future, the failure of these products to find market acceptance would harm our business and could require us to seek additional financing.

***We do not have extensive sales and marketing experience and our lack of experience may restrict our success in commercializing some of our product candidates.***

We do not have extensive experience in marketing or selling pharmaceutical products whether in the U.S. or internationally. To obtain the expertise necessary to successfully market and sell any of our products, the development of our own commercial infrastructure and/or collaborative commercial arrangements and partnerships will be required. Our ability to make that investment and also execute our current operating plan is dependent on numerous factors, including, the performance of third party collaborators with whom we may contract.

***Our products, if approved, may not be commercially viable due to change in health care practice and third party reimbursement limitations.***

Recent initiatives to reduce the federal deficit and to change health care delivery are increasing cost-containment efforts. We anticipate that Congress, state legislatures and the private sector will continue to review and assess alternative benefits, controls on health care spending through limitations on the growth of private health insurance premiums and Medicare and Medicaid spending, price controls on pharmaceuticals, and other fundamental changes to the health care delivery system. Any changes of this type could negatively impact the commercial viability of our products, if approved. Our ability to successfully commercialize our product candidates, if they are approved, will depend in part on the extent to which appropriate reimbursement codes and authorized cost reimbursement levels of these products and related treatment are obtained from governmental authorities, private health insurers and other organizations, such as health maintenance organizations. In the absence of national Medicare coverage determination, local contractors that administer the Medicare program may make their own coverage decisions. Any of our product candidates, if approved and when commercially available, may not be included within the then current Medicare coverage determination or the coverage determination of state Medicaid programs, private insurance companies or other health care providers. In addition, third-party payers are increasingly challenging the necessity and prices charged for medical products, treatments and services.

***Our product candidates may cause serious adverse events or undesirable side effects which may delay or prevent marketing approval, or, if approval is received, require them to be taken off the market, require them to include safety warnings or otherwise limit their sales.***

Serious adverse events or undesirable side effects from any of our product candidates could arise either during clinical development or, if approved, after the approved product has been marketed. The results of future clinical trials may show that our product candidates cause serious adverse events or undesirable side effects, which could interrupt, delay or halt clinical trials, resulting in delay of, or failure to obtain, marketing approval from the FDA and other regulatory authorities.

If any of our product candidates cause serious adverse events or undesirable side effects:

- regulatory authorities may impose a clinical hold which could result in substantial delays and adversely impact our ability to continue development of the product;
- regulatory authorities may require the addition of labeling statements, specific warnings, a contraindication or field alerts to physicians and pharmacies;
- we may be required to change the way the product is administered, conduct additional clinical trials or change the labeling of the product;
- we may be required to implement a risk minimization action plan, which could result in substantial cost increases and have a negative impact on our ability to commercialize the product;
- we may be required to limit the patients who can receive the product;
- we may be subject to limitations on how we promote the product;
- sales of the product may decrease significantly;
- regulatory authorities may require us to take our approved product off the market;
- we may be subject to litigation or product liability claims; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of the affected product or could substantially increase commercialization costs and expenses, which in turn could delay or prevent us from generating significant revenues from the sale of our products.

***Federal and/or state health care reform initiatives could negatively affect our business.***

The availability of reimbursement by governmental and other third-party payers affects the market for any pharmaceutical product. These third-party payers continually attempt to contain or reduce the costs of healthcare. There have been a number of legislative and regulatory proposals to change the healthcare system and further proposals are likely. Medicare's policies may decrease the market for our products. Significant uncertainty exists with respect to the reimbursement status of newly approved healthcare products.

In addition, third-party payers are increasingly challenging the price and cost-effectiveness of medical products and services. Once approved, we might not be able to sell our products profitably or recoup the value of our investment in product development if reimbursement is unavailable or limited in scope, particularly for product candidates addressing small patient populations. On July 15, 2008, the Medicare Improvements for Patients and Providers Act of 2008 became law with a number of Medicare and Medicaid reforms to establish a bundled Medicare payment rate that includes services and drug/labs that were separately billed at that time. Bundling initiatives that have been implemented in other healthcare settings have occasionally resulted in lower utilization of services that had not previously been a part of the bundled payment.

In addition, in some foreign countries, the proposed pricing for a drug must be approved before it may be lawfully marketed. The requirements governing drug pricing vary widely from country to country. We expect that there will continue to be a number of U.S. federal and state proposals to implement governmental pricing controls. While we cannot predict whether such legislative or regulatory proposals will be adopted, the adoption of such proposals could have a material adverse effect on our business, financial condition and profitability.

***We may not be able to retain rights licensed to us by third parties to commercialize key products or to develop the third party relationships we need to develop, manufacture and market our products.***

We currently rely on license agreements from New York University, Yeda Research and Development Company Ltd., the University of Texas Southwestern Medical Center, the University of British Columbia, Harvard University, the University of Colorado, and George B. McDonald, MD for the rights to commercialize key product candidates. We may not be able to retain the rights granted under these agreements or negotiate additional agreements on reasonable terms, if at all.

Furthermore, we currently have very limited product development capabilities and no manufacturing, marketing or sales capabilities. For us to research, develop and test our product candidates, we need to contract or partner with outside researchers, in most cases with or through those parties that did the original research and from whom we have licensed the technologies. If products are successfully developed and approved for commercialization, then we will need to enter into additional collaboration and other agreements with third parties to manufacture and market our products. We may not be able to induce the third parties to enter into these agreements, and, even if we are able to do so, the terms of these agreements may not be favorable to us. Our inability to enter into these agreements could delay or preclude the development, manufacture and/or marketing of some of our product candidates or could significantly increase the costs of doing so. In the future, we may grant to our development partners rights to license and commercialize pharmaceutical and related products developed under the agreements with them, and these rights may limit our flexibility in considering alternatives for the commercialization of these products. Furthermore, third-party manufacturers or suppliers may not be able to meet our needs with respect to timing, quantity and quality for the products.

Additionally, if we do not enter into relationships with additional third parties for the marketing of our products, if and when they are approved and ready for commercialization, we would have to build our own sales force or enter into commercialization agreements with other companies. Development of an effective sales force in any part of the world would require significant financial resources, time and expertise. We may not be able to obtain the financing necessary to establish a sales force in a timely or cost effective manner, if at all, and any sales force we are able to establish may not be capable of generating demand for our product candidates, if they are approved.

***We may suffer product and other liability claims; we maintain only limited product liability insurance, which may not be sufficient.***

The clinical testing, manufacture and sale of our products involves an inherent risk that human subjects in clinical testing or consumers of our products may suffer serious bodily injury or death due to side effects, allergic reactions or other unintended negative reactions to our products. As a result, product and other liability claims may be brought against us. We currently have clinical trial and product liability insurance with limits of liability of \$10 million, which may not be sufficient to cover our potential liabilities. Because liability insurance is expensive and difficult to obtain, we may not be able to maintain existing insurance or obtain additional liability insurance on acceptable terms or with adequate coverage against potential liabilities. Furthermore, if any claims are brought against us, even if we are fully covered by insurance, we may suffer harm such as adverse publicity.

***We may use hazardous chemicals in our business. Potential claims relating to improper handling, storage or disposal of these chemicals could affect us and be time consuming and costly.***

Our research and development processes and/or those of our third party contractors may involve the controlled use of hazardous materials and chemicals. These hazardous chemicals are reagents and solvents typically found in a chemistry laboratory. Our operations also may produce hazardous waste products. Federal, state and local laws and regulations govern the use, manufacture, storage, handling and disposal of hazardous materials. While we attempt to comply with all environmental laws and regulations, including those relating to the outsourcing of the disposal of all hazardous chemicals and waste products, we cannot eliminate the risk of contamination from or discharge of hazardous materials and any resultant injury. In the event of such an accident, we could be held liable for any resulting damages and any liability could materially adversely affect our business, financial condition and results of operations.

Compliance with environmental laws and regulations may be expensive. Current or future environmental regulations may impair our research, development or production efforts. We might have to pay civil damages in the event of an improper or unauthorized release of, or exposure of individuals to, hazardous materials. We are not insured against these environmental risks.

We may agree to indemnify our collaborators in some circumstances against damages and other liabilities arising out of development activities or products produced in connection with these collaborations.

In addition, the federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of hazardous or radioactive materials and waste products may require us to incur substantial compliance costs that could materially adversely affect our business, financial condition and results of operations.

***We may not be able to compete with our larger and better financed competitors in the biotechnology industry.***

The biotechnology industry is intensely competitive, subject to rapid change and sensitive to new product introductions or enhancements. Most of our existing competitors have greater financial resources, larger technical staffs, and larger research budgets than we have, as well as greater experience in developing products and conducting clinical trials. Our competition is particularly intense in the gastroenterology and transplant areas and is also intense in the therapeutic area of inflammatory bowel diseases. We face intense competition in the biodefense area from various public and private companies and universities as well as governmental agencies, such as the U.S. Army, which may have their own proprietary technologies that may directly compete with our technologies. In addition, there may be other companies that are currently developing competitive technologies and products or that may in the future develop technologies and products that are comparable or superior to our technologies and products. We may not be able to compete with our existing and future competitors, which could lead to the failure of our business.

Additionally, if a competitor receives FDA approval before we do for a drug that is similar to one of our product candidates, FDA approval for our product candidate may be precluded or delayed due to periods of non-patent exclusivity and/or the listing with the FDA by the competitor of patents covering its newly-approved drug product. Periods of non-patent exclusivity for new versions of existing drugs such as our current product candidates can extend up to three and one-half years. See “Business—The Drug Approval Process.”

These competitive factors could require us to conduct substantial new research and development activities to establish new product targets, which would be costly and time consuming. These activities would adversely affect our ability to commercialize products and achieve revenue and profits.

***Competition and technological change may make our product candidates and technologies less attractive or obsolete.***

We compete with established pharmaceutical and biotechnology companies that are pursuing other forms of treatment for the same indications we are pursuing and that have greater financial and other resources. Other companies may succeed in developing products earlier than us, obtaining FDA approval for products more rapidly, or developing products that are more effective than our product candidates. Research and development by others may render our technology or product candidates obsolete or noncompetitive, or result in treatments or cures superior to any therapy we develop. We face competition from companies that internally develop competing technology or acquire competing technology from universities and other research institutions. As these companies develop their technologies, they may develop competitive positions that may prevent, make futile, or limit our product commercialization efforts, which would result in a decrease in the revenue we would be able to derive from the sale of any products.

There can be no assurance that any of our product candidates will be accepted by the marketplace as readily as these or other competing treatments. Furthermore, if our competitors’ products are approved before ours, it could be more difficult for us to obtain approval from the FDA. Even if our products are successfully developed and approved for use by all governing regulatory bodies, there can be no assurance that physicians and patients will accept our product(s) as a treatment of choice.

Furthermore, the pharmaceutical research industry is diverse, complex, and rapidly changing. By its nature, the business risks associated therewith are numerous and significant. The effects of competition, intellectual property disputes, market acceptance, and FDA regulations preclude us from forecasting revenues or income with certainty or even confidence.

***Our business could be harmed if we fail to retain our current personnel or if they are unable to effectively run our business.***

We currently have 19 employees and we depend upon these employees (in particular Dr. Christopher Schaber, our President and Chief Executive Officer) to manage the day-to-day activities of our business. Because we have such limited personnel, the loss of any of them or our inability to attract and retain other qualified employees in a timely manner would likely have a negative impact on our operations. We may be unable to effectively manage and operate our business, and our business may suffer, if we lose the services of our employees.

***Instability and volatility in the financial markets could have a negative impact on our business, financial condition, results of operations, and cash flows.***

During recent years, there has been substantial volatility in financial markets due at least in part to the uncertainty with regard to the global economic environment. In addition, there has been substantial uncertainty in the capital markets and access to additional financing is uncertain. Moreover, customer spending habits may be adversely affected by current and future economic conditions. These conditions could have an adverse effect on our industry and business, including our financial condition, results of operations, and cash flows.

To the extent that we do not generate sufficient cash from operations, we may need to issue stock or incur indebtedness to finance our plans for growth. Recent turmoil in the credit markets and the potential impact on the liquidity of major financial institutions may have an adverse effect on our ability to fund our business strategy through borrowings, under either existing or newly created instruments in the public or private markets on terms we believe to be reasonable, if at all.

## **Risks Related to our Intellectual Property**

***We may be unable to commercialize our products if we are unable to protect our proprietary rights, and we may be liable for significant costs and damages if we face a claim of intellectual property infringement by a third party.***

Our near and long term prospects depend in part on our ability to obtain and maintain patents, protect trade secrets and operate without infringing upon the proprietary rights of others. In the absence of patent and trade secret protection, competitors may adversely affect our business by independently developing and marketing substantially equivalent or superior products and technology, possibly at lower prices. We could also incur substantial costs in litigation and suffer diversion of attention of technical and management personnel if we are required to defend ourselves in intellectual property infringement suits brought by third parties, with or without merit, or if we are required to initiate litigation against others to protect or assert our intellectual property rights. Moreover, any such litigation may not be resolved in our favor.

Although we and our licensors have filed various patent applications covering the uses of our product candidates, patents may not be issued from the patent applications already filed or from applications that we might file in the future. Moreover, the patent position of companies in the pharmaceutical industry generally involves complex legal and factual questions, and recently has been the subject of much litigation. Any patents we own or license, now or in the future, may be challenged, invalidated or circumvented. To date, no consistent policy has been developed in the U.S. Patent and Trademark Office (the "PTO") regarding the breadth of claims allowed in biotechnology patents.

In addition, because patent applications in the U.S. are maintained in secrecy until patent applications publish or patents issue, and because publication of discoveries in the scientific or patent literature often lags behind actual discoveries, we cannot be certain that we and our licensors are the first creators of inventions covered by any licensed patent applications or patents or that we or they are the first to file. The PTO may commence interference proceedings involving patents or patent applications, in which the question of first inventorship is contested. Accordingly, the patents owned or licensed to us may not be valid or may not afford us protection against competitors with similar technology, and the patent applications licensed to us may not result in the issuance of patents.

It is also possible that our owned and licensed technologies may infringe on patents or other rights owned by others, and licenses to which may not be available to us. We may be unable to obtain a license under such patent on terms favorable to us, if at all. We may have to alter our products or processes, pay licensing fees or cease activities altogether because of patent rights of third parties.

In addition to the products for which we have patents or have filed patent applications, we rely upon unpatented proprietary technology and may not be able to meaningfully protect our rights with regard to that unpatented proprietary technology. Furthermore, to the extent that consultants, key employees or other third parties apply technological information developed by them or by others to any of our proposed projects, disputes may arise as to the proprietary rights to this information, which may not be resolved in our favor.

***We may be involved in lawsuits to protect or enforce our patents, which could be expensive and time consuming.***

The pharmaceutical industry has been characterized by extensive litigation regarding patents and other intellectual property rights, and companies have employed intellectual property litigation to gain a competitive advantage. We may become subject to infringement claims or litigation arising out of patents and pending applications of our competitors, or additional interference proceedings declared by the PTO to determine the priority of inventions. The defense and prosecution of intellectual property suits, PTO proceedings, and related legal and administrative proceedings are costly and time-consuming to pursue, and their outcome is uncertain. Litigation may be necessary to enforce our issued patents, to protect our trade secrets and know-how, or to determine the enforceability, scope, and validity of the proprietary rights of others. An adverse determination in litigation or interference proceedings to which we may become a party could subject us to significant liabilities, require us to obtain licenses from third parties, or restrict or prevent us from selling our products in certain markets. Although patent and intellectual property disputes might be settled through licensing or similar arrangements, the costs associated with such arrangements may be substantial and could include our paying large fixed payments and ongoing royalties. Furthermore, the necessary licenses may not be available on satisfactory terms or at all.



Competitors may infringe our patents, and we may file infringement claims to counter infringement or unauthorized use. This can be expensive, particularly for a company of our size, and time-consuming. In addition, in an infringement proceeding, a court may decide that a patent of ours is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover its technology. An adverse determination of any litigation or defense proceedings could put one or more of our patents at risk of being invalidated or interpreted narrowly.

Also, a third party may assert that our patents are invalid and/or unenforceable. There are no unresolved communications, allegations, complaints or threats of litigation related to the possibility that our patents are invalid or unenforceable. Any litigation or claims against us, whether or not merited, may result in substantial costs, place a significant strain on our financial resources, divert the attention of management and harm our reputation. An adverse decision in litigation could result in inadequate protection for our product candidates and/or reduce the value of any license agreements we have with third parties.

Interference proceedings brought before the PTO may be necessary to determine priority of invention with respect to our patents or patent applications. During an interference proceeding, it may be determined that we do not have priority of invention for one or more aspects in our patents or patent applications and could result in the invalidation in part or whole of a patent or could put a patent application at risk of not issuing. Even if successful, an interference proceeding may result in substantial costs and distraction to our management.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation or interference proceedings, there is a risk that some of our confidential information could be compromised by disclosure. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If investors perceive these results to be negative, the price of our common stock could be adversely affected.

***If we infringe the rights of third parties we could be prevented from selling products, forced to pay damages, and defend against litigation.***

If our products, methods, processes and other technologies infringe the proprietary rights of other parties, we could incur substantial costs and we may have to: obtain licenses, which may not be available on commercially reasonable terms, if at all; abandon an infringing product candidate; redesign our products or processes to avoid infringement; stop using the subject matter claimed in the patents held by others; pay damages; and/or defend litigation or administrative proceedings which may be costly whether we win or lose, and which could result in a substantial diversion of our financial and management resources.

#### **Risks Related to our Common Stock**

***Our common stock price is highly volatile.***

The market price of our common stock, like that of many other research and development public pharmaceutical and biotechnology companies, has been highly volatile and may continue to be so in the future due to a wide variety of factors, including:

- announcements by us or others of results of pre-clinical testing and clinical trials;
- announcements of technological innovations, more important bio-threats or new commercial therapeutic products by us, our collaborative partners or our present or potential competitors;
- our quarterly operating results and performance;
- developments or disputes concerning patents or other proprietary rights;
- acquisitions;
- litigation and government proceedings;
- adverse legislation;
- changes in government regulations;
- our available working capital;
- economic and other external factors; and
- general market conditions.

Since January 1, 2015, the closing stock price of our common stock has fluctuated between a high of \$2.50 per share to a low of \$0.52 per share. On March 18, 2016, the last quoted sale price of our common stock as reported on the OTCQB was \$0.82 per share. The fluctuation in the price of our common stock has sometimes been unrelated or disproportionate to our operating performance. In addition, potential dilutive effects of future sales of shares of common stock by the Company, as well as potential sale of common stock by the holders of warrants and options, could have an adverse effect on the market price of our shares.

***Our common stock trades on the Over-the-Counter Bulletin Board.***

Our common stock trades on the OTCQB securities market under the symbol “SNGX.” The OTCQB is a decentralized market regulated by the Financial Industry Regulatory Authority in which securities are traded via an electronic quotation system that serves more than 3,000 companies, but provides significantly less liquidity than national market systems such as the NYSE MKT. On the OTCQB, securities are traded by a network of brokers or dealers who carry inventories of securities to facilitate the buy and sell orders of investors, rather than providing the order matchmaking service seen in specialist exchanges. OTCQB securities include national, regional, and foreign equity issues. Companies traded on the OTCQB must be current in their reports filed with the SEC and other regulatory authorities.

Since our common stock is not listed on a national exchange or market, the trading market for our common stock may become illiquid. Our common stock is subject to the penny stock rules of the SEC, which generally are applicable to equity securities with a price of less than \$5.00 per share, other than securities registered on certain national securities exchanges provided that current price and volume information with respect to transactions in such securities is provided by the exchange or system. The penny stock rules require a broker-dealer, before a transaction in a penny stock not otherwise exempt from the rules, to deliver a standardized risk disclosure document prepared by the SEC that provides information about penny stocks and the nature and level of risks in the penny stock market. The broker-dealer also must provide the customer with bid and ask quotations for the penny stock, the compensation of the broker-dealer and its salesperson in the transaction and monthly account statements showing the market value of each penny stock held in the customer’s account. In addition, the penny stock rules require that, before a transaction in a penny stock that is not otherwise exempt from such rules, the broker-dealer must make a special written determination that the penny stock is a suitable investment for the purchaser and receive the purchaser’s written agreement to the transaction. As a result of these requirements, our common stock could be priced at a lower price and our stockholders could find it more difficult to sell their shares.

***Shareholders may suffer substantial dilution related to issued stock warrants and options.***

As of December 31, 2015, we had a number of agreements or obligations that may result in dilution to investors. These include:

- warrants to purchase a total of approximately 4,926,119 shares of our common stock at a current weighted average exercise price of approximately \$0.74; and
- options to purchase approximately 2,768,612 shares of our common stock at a current weighted average exercise price of approximately \$2.13.

We also have an incentive compensation plan for our management, employees and consultants. We have granted, and expect to grant in the future, options to purchase shares of our common stock to our directors, employees and consultants. To the extent that warrants or options are exercised, our stockholders will experience dilution and our stock price may decrease.

Additionally, the sale, or even the possibility of the sale, of the shares of common stock underlying these warrants and options could have an adverse effect on the market price for our securities or on our ability to obtain future financing.

***Anti-takeover provisions in our stockholder rights plan and under Delaware law could make a third party acquisition of the Company difficult.***

Our stockholder rights plan contains provisions that could make it more difficult for a third party to acquire us, even if doing so might be deemed beneficial by our stockholders. These provisions could limit the price that investors might be willing to pay in the future for shares of our common stock. We are also subject to certain provisions of Delaware law that could delay, deter or prevent a change in control of the Company. The rights issued pursuant to our stockholder rights plan will become exercisable the tenth day after a person or group announces acquisition of 15% or more of our common stock or commences, or announces an intention to make, a tender or exchange offer the consummation of which would result in ownership by the person or group of 15% or more of our common stock. If the rights become exercisable, the holders of the rights (other than the person acquiring 15% or more of our common stock) will be entitled to acquire, in exchange for the rights' exercise price, shares of our common stock or shares of any company in which we are merged, with a value equal to twice the rights' exercise price.

***Our shares of common stock are thinly traded, so stockholders may be unable to sell at or near ask prices or at all if they need to sell shares to raise money or otherwise desire to liquidate their shares.***

Our common stock has from time to time been "thinly-traded," meaning that the number of persons interested in purchasing our common stock at or near ask prices at any given time may be relatively small or non-existent. This situation is attributable to a number of factors, including the fact that we are a small company that is relatively unknown to stock analysts, stock brokers, institutional investors and others in the investment community that generate or influence sales volume, and that even if we came to the attention of such persons, they tend to be risk-averse and would be reluctant to follow an unproven company such as ours or purchase or recommend the purchase of our shares until such time as we become more seasoned and viable. As a consequence, there may be periods of several days or more when trading activity in our shares is minimal or non-existent, as compared to a seasoned issuer which has a large and steady volume of trading activity that will generally support continuous sales without an adverse effect on share price. We cannot give stockholders any assurance that a broader or more active public trading market for our common shares will develop or be sustained, or that current trading levels will be sustained.

***Since our common stock is not listed on a national securities exchange, U.S. holders of warrants may not be able to exercise their warrants without compliance with applicable state securities laws and the value of your warrants may be significantly reduced.***

Since our securities are not listed for trading on a national exchange, the exercise of the warrants by U.S. holders may not be exempt from state securities laws. As a result, depending on the state of residence of a holder of the warrants, a U.S. holder may not be able to exercise its warrants unless we comply with any state securities law requirements necessary to permit such exercise or an exemption applies. Although we plan to use our reasonable efforts to assure that U.S. holders will be able to exercise their warrants under applicable state securities laws if no exemption exists, there is no assurance that we will be able to do so. As a result, your ability to exercise your warrants may be limited. The value of the warrants may be significantly reduced if U.S. holders are not able to exercise their warrants under applicable state securities laws.

***Our common stock is deemed to be a "penny stock," which may make it more difficult for investors to sell their shares due to suitability requirements.***

Our common stock is subject to Rule 15g-1 through 15g-9 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), which imposes certain sales practice requirements on broker-dealers which sell our common stock to persons other than established customers and "accredited investors" (generally, individuals with a net worth in excess of \$1,000,000 or annual incomes exceeding \$200,000 (or \$300,000 together with their spouses)). For transactions covered by this rule, a broker-dealer must make a special suitability determination for the purchaser and have received the purchaser's written consent to the transaction prior to the sale. This rule adversely affects the ability of broker-dealers to sell our common stock and the ability of our stockholders to sell their shares of common stock.

Additionally, our common stock is subject to the SEC regulations for “penny stock.” Penny stock includes any equity security that is not listed on a national exchange and has a market price of less than \$5.00 per share, subject to certain exceptions. The regulations require that prior to any non-exempt buy/sell transaction in a penny stock, a disclosure schedule set forth by the SEC relating to the penny stock market must be delivered to the purchaser of such penny stock. This disclosure must include the amount of commissions payable to both the broker-dealer and the registered representative and current price quotations for the common stock. The regulations also require that monthly statements be sent to holders of penny stock that disclose recent price information for the penny stock and information of the limited market for penny stocks. These requirements adversely affect the market liquidity of our common stock.

***We do not currently intend to pay dividends on our common stock in the foreseeable future, and consequently, our stockholders’ ability to achieve a return on their investment will depend on appreciation in the price of our common stock.***

We have never declared or paid cash dividends on our common stock and do not anticipate paying any cash dividends to holders of our common stock in the foreseeable future. Consequently, our stockholders must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investments. There is no guarantee that shares of our common stock will appreciate in value or even maintain the price at which our stockholders have purchased their shares.

***Upon dissolution of the Company, our stockholders may not recoup all or any portion of their investment.***

In the event of a liquidation, dissolution or winding-up of the Company, whether voluntary or involuntary, the proceeds and/or assets of the Company remaining after giving effect to such transaction, and the payment of all of our debts and liabilities will be distributed to the holders of common stock on a pro rata basis. There can be no assurance that we will have available assets to pay to the holders of common stock, or any amounts, upon such a liquidation, dissolution or winding-up of the Company. In this event, our stockholders could lose some or all of their investment.

***The sale or issuance of our common stock to Lincoln Park may cause dilution and the sale of the shares of common stock acquired by Lincoln Park, or the perception that such sales may occur, could cause the price of our common stock to fall.***

On November 18, 2013, we entered into a purchase agreement (the “2013 Purchase Agreement”) with Lincoln Park Capital Fund, LLC (“Lincoln Park”), pursuant to which Lincoln Park has committed to purchase up to \$10.6 million of our common stock. Concurrently with the execution of the 2013 Purchase Agreement, we issued 97,656 shares of our common stock to Lincoln Park as a partial fee for its commitment to purchase shares of our common stock under the 2013 Purchase Agreement and 285,714 shares of common stock for an aggregate price of \$600,000. From November 18, 2013 through December 31, 2015, we sold 1,050,000 additional shares to Lincoln Park and issued 22,091 additional shares to Lincoln Park as additional commitment shares under the 2013 Purchase Agreement and received proceeds of \$1,809,652. The shares that may be sold pursuant to the 2013 Purchase Agreement in the future may be sold by us to Lincoln Park at our discretion from time to time over the remaining term of approximately nine months from the date of this report. The purchase price for the shares that we may sell to Lincoln Park under the 2013 Purchase Agreement will fluctuate based on the price of our common stock. We generally have the right to control the timing and amount of any sales of our shares to Lincoln Park, except that, pursuant to the terms of the 2013 Purchase Agreement, we would be unable to sell shares to Lincoln Park if and when the closing sale price of our common stock is below \$1.00 per share, subject to adjustment as set forth in the 2013 Purchase Agreement.

We entered into an additional purchase agreement (the “2016 Purchase Agreement”) with Lincoln Park on March 22, 2016, with the intention that the 2016 Purchase Agreement will replace the 2013 Purchase Agreement once the registration statement registering the resale of the shares of common stock sold to Lincoln Park under the 2016 Purchase Agreement is declared effective by the SEC. Pursuant to the 2016 Purchase Agreement, Lincoln Park has committed to purchase up to \$12 million of our common stock. Concurrently with the execution of the 2016 Purchase Agreement, we issued 100,000 shares of our common stock to Lincoln Park as a partial fee for its commitment to purchase shares of our common stock under the 2016 Purchase Agreement. The shares that may be sold pursuant to the 2016 Purchase Agreement may be sold by us to Lincoln Park at our sole discretion from time to time over the remaining term of approximately 36 months from the date the registration statement registering the resale of the shares of common stock sold to Lincoln Park under the 2016 Purchase Agreement is declared effective by the SEC. The purchase price for the shares that we may sell to Lincoln Park under the 2016 Purchase Agreement will fluctuate based on the price of our common stock. We have the right to control the timing and amount of any sales of our shares to Lincoln Park, except that, pursuant to the terms of our agreements with Lincoln Park, we would be unable to sell shares to Lincoln Park that would cause Lincoln Park to beneficially own more than 4.99% of our issued and outstanding common stock.

Depending on market liquidity at the time, sales of shares under the 2013 Purchase Agreement or the 2016 Purchase Agreement may cause the trading price of our common stock to fall. Additionally, further sales of our common stock, if any, to Lincoln Park under the 2013 Purchase Agreement or the 2016 Purchase Agreement will depend upon market conditions and other factors to be determined by us. Lincoln Park may ultimately purchase all, some or none of the shares of our common stock that may be sold pursuant to the 2013 Purchase Agreement or the 2016 Purchase Agreement and, after it has acquired shares, Lincoln Park may sell all, some or none of those shares. Therefore, sales to Lincoln Park by us could result in substantial dilution to the interests of other holders of our common stock. Additionally, the sale of a substantial number of shares of our common stock to Lincoln Park, or the anticipation of such sales, could make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise wish to effect sales.

***The issuance of our common stock pursuant to the terms of the asset purchase agreement with Hy Biopharma Inc. may cause dilution and the issuance of such shares of common stock, or the perception that such issuances may occur, could cause the price of our common stock to fall.***

On April 1, 2014, we entered into an option agreement pursuant to which Hy Biopharma Inc. granted us an option to purchase certain assets, properties and rights (the "Hypericin Assets") related to the development of Hy Biopharma's synthetic hypericin product candidate for the treatment of CTCL, which we refer to as SGX301, from Hy Biopharma. In exchange for the option, we paid \$50,000 in cash and issued 43,067 shares of common stock in the aggregate to Hy Biopharma and its assignees. We subsequently exercised the option, and on September 3, 2014, we entered into an asset purchase agreement with Hy Biopharma, pursuant to which we purchased the Hypericin Assets. Pursuant to the purchase agreement, we paid \$250,000 in cash and issued 1,849,113 shares of common stock in the aggregate to Hy Biopharma and its assignees, and may issue up to an aggregate of \$10 million worth of our common stock (subject to a cap equal to 19.99% of our issued and outstanding common stock) in the aggregate upon attainment of specified milestones. Also on September 3, 2014, we entered into the Registration Rights Agreement with Hy Biopharma, pursuant to which we have filed a registration statement with the SEC.

The number of shares that we may issue under the purchase agreement will fluctuate based on the market price of our common stock. Depending on market liquidity at the time, the issuance of such shares may cause the trading price of our common stock to fall.

We may ultimately issue all, some or none of the additional shares of our common stock that may be issued pursuant to the purchase agreement. We are required to register any shares issued pursuant to the purchase agreement for resale under the Securities Act. After any such shares are registered, the holders will be able to sell all, some or none of those shares. Therefore, issuances by us under the purchase agreement could result in substantial dilution to the interests of other holders of our common stock. Additionally, the issuance of a substantial number of shares of our common stock pursuant to the purchase agreement, or the anticipation of such issuances, could make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise wish to effect sales.

**Item 1B. Unresolved Staff Comments**

None.

**Item 2. Properties**

We currently lease approximately 5,200 square feet of office space at 29 Emmons Drive, Suite C-10, Princeton, New Jersey 08540. This office space currently serves as our corporate headquarters. In December 2014, we entered into a lease agreement through May 31, 2018 for existing and expanded office space. The rent for the first 12 months was approximately \$12,300 per month, or approximately \$20.85 per square foot. The rent increased to approximately \$12,375 per month, or approximately \$20.95 per square foot, for the next 12 months, and thereafter to approximately \$12,460 per month, or approximately \$21.13 per square foot for the remainder of the lease. Our office space is sufficient to satisfy our current needs.

**Item 3. Legal Proceedings**

From time to time, we are a party to claims and legal proceedings arising in the ordinary course of business. Our management evaluates our exposure to these claims and proceedings individually and in the aggregate and allocates additional monies for potential losses on such litigation if it is possible to estimate the amount of loss and if the amount of the loss is probable.

## PART II

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

Our common stock is quoted on the OTCQB under the symbol "SNGX." The following table sets forth for the periods indicated, the high and low sales prices per share of our common stock as reported by the OTCQB.

Period	Price Range	
	High	Low
<b>Year Ended December 31, 2014:</b>		
First Quarter	\$ 2.50	\$ 1.75
Second Quarter	\$ 2.29	\$ 1.65
Third Quarter	\$ 2.25	\$ 1.67
Fourth Quarter	\$ 2.09	\$ 0.91
<b>Year Ended December 31, 2015:</b>		
First Quarter	\$ 2.30	\$ 0.98
Second Quarter	\$ 2.95	\$ 1.36
Third Quarter	\$ 2.48	\$ 0.91
Fourth Quarter	\$ 1.44	\$ 0.44
<b>Year Ending December 31, 2016:</b>		
First Quarter (through March 18, 2016)	\$ [1.25]	\$ [0.62]

On March 18, 2016, the last reported price of our common stock quoted on the OTCQB was \$0.82 per share. The OTCQB prices set forth above represent inter-dealer quotations, without adjustment for retail mark-up, mark-down or commission, and may not represent the prices of actual transactions.

#### Transfer Agent

Shares of our common stock are issued in registered form. American Stock Transfer & Trust Company, LLC, 6201 15<sup>th</sup> Avenue, Brooklyn, NY 11219 (Telephone: (718) 921-8200; Facsimile: (718) 765-8719) is the registrar and transfer agent for shares of our common stock.

#### Holders of Common Stock

As of March 18, 2016, there were 404 holders of record of our common stock. As of such date, 31,268,522 shares of our common stock were issued and outstanding.

#### Dividends

We have never declared nor paid any cash dividends, and currently intend to retain all our cash and any earnings for use in our business and, therefore, do not anticipate paying any cash dividends in the foreseeable future. Any future determination to pay cash dividends will be at the discretion of the Board of Directors and will be dependent upon our consolidated financial condition, results of operations, capital requirements and such other factors as the Board of Directors deems relevant.

#### Item 6. Selected Financial Data

Not applicable.

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

### Cautionary Note Regarding Forward-Looking Statements – Industry Data and Market Information

*This Annual Report on Form 10-K contains forward-looking statements that reflect our current expectations about our future results, performance, prospects and opportunities. These forward-looking statements are subject to significant risks, uncertainties, and other factors, including those identified in "Risk Factors" above, which may cause actual results to differ materially from those expressed in, or implied by, any forward-looking statements. The forward-looking statements within this Form 10-K may be identified by words such as "believes," "anticipates," "expects," "intends," "may," "would," "will" and other similar expressions. However, these words are not the exclusive means of identifying these statements. In addition, any statements that refer to expectations, projections or other characterizations of future events or circumstances are forward-looking statements. Except as expressly required by the federal securities laws, we undertake no obligation to publicly update or revise any forward-looking statements to reflect events or circumstances occurring subsequent to the filing of this Form 10-K with the SEC or for any other reason. You should carefully review and consider the various disclosures we make in this report and our other reports filed with the SEC that attempt to advise interested parties of the risks, uncertainties and other factors that may affect our business.*

### Our Business Overview

We were incorporated in Delaware in 1987. We are a late-stage biopharmaceutical company focused on developing and commercializing products to treat rare diseases where there is an unmet medical need. We maintain two active business segments: BioTherapeutics and Vaccines/BioDefense.

Our BioTherapeutics business segment is developing a first-in-class photodynamic therapy (SGX301) utilizing topical synthetic hypericin activated with safe visible light for the treatment of cutaneous T-cell lymphoma ("CTCL"), proprietary formulations of oral beclomethasone 17,21-dipropionate ("BDP") for the prevention/treatment of gastrointestinal ("GI") disorders characterized by severe inflammation, including pediatric Crohn's disease (SGX203) and acute radiation enteritis (SGX201), and our novel innate defense regulator ("IDR") technology, dusquetide (SGX942) for the treatment of oral mucositis in head and neck cancer.

Our Vaccines/BioDefense business segment includes active development programs for RiVax™, our ricin toxin vaccine candidate, OrbeShield®, our GI acute radiation syndrome ("GI ARS") therapeutic candidate and SGX943, our melioidosis therapeutic candidate. The development of our vaccine programs currently is supported by our heat stabilization technology, known as ThermoVax®, under existing and on-going government contract funding. With the government contract from the National Institute of Allergy and Infectious Diseases ("NIAID"), we will attempt to advance the development of RiVax™ to protect against exposure to ricin toxin. We plan to use the funds received under our government contracts with the Biomedical Advanced Research and Development Authority ("BARDA") and NIAID to advance the development of OrbeShield® for the treatment of GI ARS.

An outline for our business strategy follows:

- Complete enrollment and report preliminary results in our pivotal Phase 3 clinical trial of SGX301 for the treatment of CTCL;
- Initiate a Phase 3 clinical trial of SGX203, for the treatment of pediatric Crohn's disease;
- Continue to collect the long-term follow-up safety data from the SGX942 Phase 2 proof-of-concept study in the treatment of oral mucositis in head and neck cancer patients and publish the findings from the SGX942 Phase 2 proof-of-concept study in the treatment of oral mucositis in head and neck cancer patients;
- Obtain FDA agreement on a pivotal Phase 2b/3 protocol of SGX942 in the treatment of oral mucositis in head and neck cancer patients;
- Continue development of RiVax™ in combination with our ThermoVax® technology, to develop new heat stable vaccines in biodefense and infectious diseases with the potential to collaborate and/or partner with other companies in these areas;
- Advance the preclinical and manufacturing development of OrbeShield® as a biodefense medical countermeasure for the treatment of GI ARS;
- Continue to apply for and secure additional government funding for each of our BioTherapeutics and Vaccines/BioDefense programs through grants, contracts and/or procurements;
- Acquire or in-license new clinical-stage compounds for development; and
- Explore other business development and merger/acquisition strategies.



## Critical Accounting Policies

Our discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the U.S. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities and expenses, and related disclosure of contingent assets and liabilities. We evaluate these estimates and judgments on an on-going basis.

### Intangible Assets

One of the most significant estimates or judgments that we make is whether to capitalize or expense patent and license costs. We make this judgment based on whether the technology has alternative future uses, as defined in Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) 730, *Research and Development*. Based on this consideration, we capitalized payments made to legal firms that are engaged in filing and protecting rights to intellectual property for our current product candidates in both the domestic and international markets. We believe that patent rights are one of our most valuable assets. Patents and patent applications are key components of intellectual property, especially in the early stage of product development, as their purchase and maintenance gives us access to key product development rights from our academic and industry partners. These rights can also be sold or sub-licensed as part of our strategy to partner our product candidates at each stage of development as the intangible assets have alternative future use. The legal costs incurred for these patents consist of work associated with filing new patents designed to protect, preserve and maintain our rights, and perhaps to extend the lives of the patents. We capitalize such costs and amortize intangibles on a straight-line basis over their expected useful life – generally a period of 11 to 16 years.

These intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable or if the underlying program is no longer being pursued. If the sum of the expected undiscounted cash flows is less than the carrying value of the related asset or group of assets, a loss is recognized for the difference between the fair value and carrying value of the related asset or group of assets.

### Fair Value of Financial Instruments

FASB ASC 820 — *Fair Value Measurements and Disclosures*, defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. FASB ASC 820 requires disclosures about the fair value of all financial instruments, whether or not recognized, for financial statement purposes. Disclosures about the fair value of financial instruments are based on pertinent information available to us on December 31, 2015. Accordingly, the estimates presented in these financial statements are not necessarily indicative of the amounts that could be realized on disposition of the financial instruments.

FASB ASC 820 specifies a hierarchy of valuation techniques based on whether the inputs to those valuation techniques are observable or unobservable. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect market assumptions. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurement) and the lowest priority to unobservable inputs (Level 3 measurement).

The three levels of the fair value hierarchy are as follows:

- Level 1 — Quoted prices in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date. Level 1 primarily consists of financial instruments whose value is based on quoted market prices such as exchange-traded instruments and listed equities.
- Level 2 — Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. Level 2 includes financial instruments that are valued using models or other valuation methodologies. These models consider various assumptions, including volatility factors, current market prices and contractual prices for the underlying financial instruments. Substantially all of these assumptions are observable in the marketplace, can be derived from observable data or are supported by observable levels at which transactions are executed in the marketplace.
- Level 3 — Unobservable inputs for the asset or liability. Financial instruments are considered Level 3 when their fair values are determined using pricing models, discounted cash flows or similar techniques and at least one significant model assumption or input is unobservable.

The carrying amounts reported in the consolidated balance sheet for cash and cash equivalents, contract and grants receivable, accounts payable and accrued compensation approximate their fair value based on the short-term maturity of these instruments. We recognize all derivative financial instruments as assets or liabilities in the financial statements and measure them at fair value with changes in fair value reflected as current period income or loss unless the derivatives qualify as hedges. As a result, certain warrants issued in connection with our June 2013 offering were accounted for as derivatives.

#### Revenue Recognition

Our revenues are primarily generated from government contracts and grants. The revenue from government contracts and grants is based upon subcontractor costs and internal costs incurred that are specifically covered by the contracts and grants, plus a facilities and administrative rate that provides funding for overhead expenses and management fees. These revenues are recognized when expenses have been incurred by subcontractors or when we incur reimbursable internal expenses that are related to the government contracts and grants.

#### Research and Development Costs

Research and development costs are charged to expense when incurred in accordance with FASB ASC 730, *Research and Development*. Research and development includes costs such as clinical trial expenses, contracted research and license agreement fees with no alternative future use, supplies and materials, salaries, share-based compensation, employee benefits, equipment depreciation and allocation of various corporate costs. Purchased in-process research and development expense represents the value assigned or paid for acquired research and development for which there is no alternative future use as of the date of acquisition.

#### Accounting for Warrants

We considered FASB ASC 815, *Evaluating Whether an Instrument is Considered Indexed to an Entity's Own Stock*, which provides guidance for determining whether an equity-linked financial instrument (or embedded feature) issued by an entity is indexed to the entity's stock and therefore, qualifying for the first part of the scope exception in paragraph 815-10-15. We evaluated the provisions in our outstanding warrants and determined that warrants issued in connection with our June 2013 registered public offering contain provisions that protect holders from a decline in the issue price of our common stock (or "down-round" provisions) and contain net settlement provisions. Consequently, these warrants are recognized as liabilities at their fair value on the date of grant and remeasured at fair value on each reporting date. All other warrants issued were indexed to our own stock and therefore are accounted for as equity instruments for 2015 and 2014.

#### Share-Based Compensation

Stock options are issued with an exercise price equal to the market price on the date of grant. Stock options issued to directors upon re-election vest quarterly for a period of one year (new director issuances are fully vested upon issuance). Stock options issued to employees vest 25% on the grant date, then 25% each subsequent year for a period of three years. Stock options vest over each three-month period from the date of issuance to the end of the three year period. These options have a ten year life for as long as the individuals remain employees or directors. In general, when an employee or director terminates their position the options will expire within three months, unless otherwise extended by the Board.

From time to time, we issue restricted shares of our common stock to vendors and consultants as compensation for services performed. Typically these instruments vest upon issuance and therefore the entire stock compensation expense is recognized upon issuance to the vendors and/or consultants.

Share-based compensation expense for options, warrants and shares of common stock granted to non-employees has been determined in accordance with FASB ASC 505-50, *Equity-Based Payments to Non-Employees*, and represents the fair value of the consideration received, or the fair value of the equity instruments issued, whichever may be more reliably measured. For options that vest over future periods, the fair value of options granted to non-employees is amortized as the options vest.

The weighted average fair value of each option grant made during 2015 and 2014 was estimated on the date of each grant using the Black-Scholes option pricing model and amortized ratably over the option vesting periods, which approximates the service period.

### Income Taxes

Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. A valuation allowance is established when it is more likely than not that all or a portion of a deferred tax asset will not be realized. A review of all available positive and negative evidence is considered, including the Company's current and past performance, the market environment in which the Company operates, the utilization of past tax credits, and the length of carryback and carryforward periods. Deferred tax assets and liabilities are measured utilizing tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. No current or deferred income taxes have been provided through December 31, 2015 due to the net operating losses incurred by the Company since its inception. The Company recognizes accrued interest and penalties associated with uncertain tax positions, if any, as part of income tax expense. There were no tax related interest and penalties recorded for 2015 and 2014. Additionally, the Company has not recorded an asset for unrecognized tax benefits or a liability for uncertain tax positions at December 31, 2015 and 2014.

### Earnings Per Share

Basic earnings per share ("EPS") excludes dilution and is computed by dividing income (loss) available to common stockholders by the weighted-average number of common shares outstanding for the period. Diluted EPS reflects the potential dilution that could occur if securities or other contracts to issue common stock were exercised or converted into common stock or resulted in the issuance of common stock that shared in the earnings of the entity. Since there is a significant number of options and warrants outstanding, fluctuations in the actual market price can have a variety of results for each period presented.

### Use of Estimates and Assumptions

The preparation of financial statements in conformity with accounting principles generally accepted in the U.S. requires management to make estimates and assumptions such as the fair value of warrants and stock options and the useful life of intangibles that affect the reported amounts in the financial statements and accompanying notes. Actual results could differ from those estimates.

### Material Changes in Results of Operations

#### ***Year Ended December 31, 2015 Compared to 2014***

For the year ended December 31, 2015, we had a net loss of \$7,831,230 as compared to a net loss of \$6,706,972 for the prior year, representing an increased loss of \$1,124,258 or 17%. Included in the net loss for December 31, 2015 is a non-cash expense of \$1,201,870 versus a non-cash gain of \$3,436,195 for December 31, 2014 which represents the change in the fair value of the warrant liability related to warrants issued in connection with our registered public offering in June 2013.

For the year ended December 31, 2015 and 2014, revenues and associated costs relate to government contracts and grants awarded in support of the development of ThermoVax<sup>®</sup>, RiVax<sup>™</sup> GI-ARS and OrbeShield<sup>®</sup> in GI ARS. For the year ended December 31, 2015, we had revenues of \$8,768,390 as compared to \$7,043,016 for the prior year, representing an increase of \$1,725,374 or 24%. The increase in revenues was a result of research and development activities performed under our government contracts associated with OrbeShield<sup>®</sup> and RiVax<sup>™</sup>.

We incurred costs related to contract and grant revenues in the year ended December 31, 2015 and 2014 of \$6,882,204 and \$5,313,855, respectively, representing an increase of \$1,568,349 or 30%. These costs primarily relate to payments made to subcontractors and allocated employee costs in connection with research performed pursuant to contracts and grants. The fluctuations are due to the development activity performed on the contracts and grants discussed above.

Our gross profit for the year ended December 31, 2015 was \$1,886,186 as compared to \$1,729,161 for the prior year, representing an increase of \$157,025 or 9%. This increase is due primarily to the increased activity in our OrbeShield<sup>®</sup> and RiVax<sup>™</sup> contracts.

Research and development, including acquired in-process research and development costs, decreased by \$3,686,696 or 41%, to \$5,399,839 for the year ended December 31, 2015 as compared to \$9,086,535 for the prior year. This decrease is primarily related to the 2014 acquisition of Hypericin, SGX 301, for which we issued common stock with a value of \$3,750,000 and paid cash of \$250,000 which was recognized as acquired in-process research and development expense. During 2015, we also completed the Phase 2 clinical trial with SGX942 for patients suffering from oral mucositis associated with their CRT for head and neck cancer and in December 2015, initiated the pivotal Phase 3 clinical trial of SGX301 for the treatment of CTCL.

General and administrative expenses increased by \$192,648 or 6%, to \$3,596,623 for the year ended December 31, 2015, as compared to \$3,403,975 for the prior year. This increase is primarily related to an increase in outside professional services.

Other income (expense) for the year ended December 31, 2015 was \$(1,209,887) as compared to \$3,437,505 for the prior year. The change is primarily related to non-cash expense of \$(1,201,870) which represents the change in the fair value of the warrant liability related to warrants issued in connection with our June 2013 registered public offering for the year ended December 31, 2015 as compared to non-cash income of \$3,436,195 from the change for the year ended December 31, 2014.

The State of New Jersey's Technology Business Tax Certificate Program allows certain high technology and biotechnology companies to sell unused net operating loss ("NOL") carryforwards to other New Jersey-based corporate taxpayers. In accordance with this program, during the year ended December 31, 2015, we sold New Jersey NOL carryforwards, resulting in the recognition of \$488,933 of income tax benefit, net of transaction costs as compared to \$616,872 for the year ended December 31, 2014. There can be no assurance as to the continuation or magnitude of this program in future years.

### **Business Segments**

We maintain two active business segments for the year ended December 31, 2015 and December 31, 2014: Vaccines/BioDefense and BioTherapeutics.

Revenues for the Vaccines/BioDefense business segment for the year ended December 31, 2015 were \$8,754,418 as compared to \$6,756,388 for the year ended December 31, 2014, representing an increase of \$1,998,030 or 30%. This increase in revenues was a result of our OrbeShield<sup>®</sup> and RiVax<sup>™</sup> contracts. Revenues for the BioTherapeutics business segment for the year ended December 31, 2015 were \$13,972 as compared to \$286,628 for the year ended December 31, 2014, representing a decrease of \$272,656 or 95%. This decrease is primarily related to work performed under our oral mucositis grant which expired in early 2015.

Income from operations for the Vaccines/BioDefense business segment for the year ended December 31, 2015 was \$1,263,709 as compared to \$807,164 for the year ended December 31, 2014. Income from operations is primarily attributable to our gross margins related to our government contracts. Loss from operations for the BioTherapeutics business segment for the year ended December 31, 2015 was \$4,487,988 as compared to \$7,674,381 for the year ended December 31, 2014, representing a decrease of \$3,186,393. This decreased loss is due primarily to the 2014 acquisition of Hypericin, SGX 301, for which we issued common stock with a value of \$3,750,000 and paid cash of \$250,000 which was recognized as acquired in-process research and development expense, offset by expenses in 2015 related to the Phase 2 clinical trial with SGX942 for patients suffering from oral mucositis associated with their CRT for head and neck cancer and the initiation of the pivotal Phase 3 clinical trial of SGX301 for the treatment of CTCL.

Amortization and depreciation expense for the Vaccines/BioDefense business segment for the year ended December 31, 2015 was \$39,925 as compared to \$39,625 for the year ended December 31, 2014. Amortization and depreciation expense for the BioTherapeutics business segment for the year ended December 31, 2015 was \$199,661 as compared to \$199,196 for the year ended December 31, 2014.

## **Financial Condition and Liquidity**

### ***Cash and Working Capital***

As of December 31, 2015, we had cash and cash equivalents of \$4,921,545 as compared to \$5,525,094 as of December 31, 2014, representing a decrease of \$603,549 or 11%. As of December 31, 2015, we had working capital of \$2,179,694 which excludes a non-cash warrant liability of \$2,434,101 as compared to working capital of \$3,174,214 as of December 31, 2014, representing a decrease of \$994,520 or 31%. The decrease in working capital was primarily the result of expenditures in 2015 related to support the completion of our Phase 2 clinical trial of SGX942 and the initiation of the pivotal Phase 3 clinical trial of SGX301 for the treatment of CTCL offset by \$4,804,857 in various financing activities.

Based on our current rate of cash outflows, cash on hand, proceeds from government contract and grant programs, proceeds available from our equity lines and proceeds from the State of New Jersey Technology Business Tax Certificate Transfer Program, management believes that its current cash will be sufficient to meet the anticipated cash needs for working capital and capital expenditures for at least the next twelve months.

Our plans with respect to our liquidity management include, but are not limited to, the following:

- We have up to \$43.0 million in active government contract funding still available to support our associated research programs through 2016 and beyond. We plan to submit additional contract and grant applications for further support of these programs with various funding agencies.
- We have continued to use equity instruments to provide a portion of the compensation due to vendors and collaboration partners and expect to continue to do so for the foreseeable future.
- We will pursue NOL sales in the state of New Jersey pursuant to our Technology Business Tax Certificate Transfer Program. Based on the receipt of \$488,933 in proceeds from the sale of NJ NOL in 2015, we expect to participate in this program during 2016 and beyond;
- We have an aggregate of \$20.2 million available from equity facilities through 2019; and
- We may seek additional capital in the private and/or public equity markets, pursue government contracts and grants as well as business development activities to continue our operations, respond to competitive pressures, develop new products and services, and to support new strategic partnerships. We are currently evaluating additional equity financing opportunities on an ongoing basis and may execute them when appropriate. However, there can be no assurances that we can consummate such a transaction, or consummate a transaction at favorable pricing.

### ***Expenditures***

Under our budget and based upon our existing product development agreements and license agreements pursuant to letters of intent and option agreements, we expect our total research and development expenditures for the next 12 months to be approximately \$12.9 million before any grant reimbursements, of which \$5.3 million relates to the BioTherapeutics business and \$7.6 million relates to the Vaccines/BioDefense business. We anticipate contract reimbursements in the next 12 months of approximately \$7.6 million to offset research and development expenses in the Vaccines/BioDefense business segment.

The table below details our costs for research and development by program and amounts reimbursed for the years ended December 31, 2015 and 2014:

	<u>2015</u>	<u>2014</u>
<b><i>Research &amp; Development Expenses</i></b>		
Oral BDP	\$ 74,543	\$ 561,655
RiVax™ & ThermoVax® Vaccines	622,908	846,870
SGX94	2,216,632	2,820,807
SGX943/101	10,671	19,378
SGX301	2,141,175	4,369,585
Other	333,910	468,240
Total	<u>\$ 5,399,839</u>	<u>\$ 9,086,535</u>
<b><i>Reimbursed under Government Contracts and Grants</i></b>		
OrbeShield®	<u>\$ 5,240,377</u>	<u>\$ 4,100,663</u>
RiVax™ & ThermoVax® Vaccines	1,557,082	930,573
Other	84,745	282,619
Total	<u>\$ 6,882,204</u>	<u>\$ 5,313,855</u>
Grand Total	<u>\$ 12,282,043</u>	<u>\$ 14,400,390</u>

## **Contractual Obligations**

We have commitments of approximately \$500,000 at December 31, 2015 for several licensing agreements with consultants and universities. Additionally, we have collaboration and license agreements, which upon clinical or commercialization success, may require the payment of milestones of up to \$7.9 million and/or royalties up to 6% of net sales of covered products, if and when achieved. However, there can be no assurance that clinical or commercialization success will occur.

In December 2014, we entered into a lease agreement through May 31, 2018 for existing and expanded office space. The rent for the first 12 months was approximately \$12,300 per month, or approximately \$20.85 per square foot. This rent increased to approximately \$12,375 per month, or approximately \$20.95 per square foot, for the next 12 months, and thereafter will increase to approximately \$12,460 per month, or approximately \$21.13 per square foot for the remainder of the lease.

On September 3, 2014, we entered into an asset purchase agreement with Hy Biopharma, Inc. (“Hy Biopharma”) pursuant to which we acquired certain intangible assets, properties and rights of Hy Biopharma related to the development of Hy BioPharma’s synthetic hypericin product. As consideration for the assets acquired, we paid \$250,000 in cash and issued 1,849,113 shares of common stock with a fair value based on our stock price on the date of grant of \$3,750,000. These amounts were charged to research and development expense during the third quarter of 2014 as the assets will be used in our research and development activities and do not have alternative future use pursuant to generally accepted accounting principles in the United States. Provided all future success-oriented milestones are attained, we will be required to make additional payments of up to \$10.0 million, if and when achieved. Payments will be payable in restricted securities of the Company; provided that Hy BioPharma’s ownership of our securities is not to exceed 19.9% of our outstanding stock.

In February 2007, our Board of Directors authorized the issuance of 50,000 shares to Dr. Schaber immediately prior to the completion of a transaction, or series or a combination of related transactions negotiated by our Board of Directors whereby, directly or indirectly, a majority of our capital stock or a majority of our assets are transferred from us and/or our stockholders to a third party. Dr. Schaber’s amended employment agreement includes our obligation to issue such shares if such event occurs.

Employees with employment contracts have severance agreements that will provide separation benefits from the Company if they are involuntarily separated from employment.

As a result of the above agreements, we have future contractual obligations over the next five years as follows:

<b>Year</b>	<b>Research and Development</b>	<b>Property and Other Leases</b>	<b>Total</b>
2016	\$ 100,000	\$ 157,000	\$ 257,000
2017	100,000	151,000	251,000
2018	100,000	52,000	152,000
2019	100,000	-	100,000
2020	100,000	-	100,000
Total	<u>\$ 500,000</u>	<u>\$ 360,000</u>	<u>\$ 860,000</u>

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

The information required by this Item 8 is contained on pages F-1 through F-22 of this Annual Report on Form 10-K and is incorporated herein by reference.

**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**

Disclosure controls and procedures are the Company's controls and other procedures that are designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Securities Exchange Act of 1934, as amended (the "Exchange Act") is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports that we file under the Exchange Act is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure. Our management recognizes that any 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 possible controls and procedures.

Our management has evaluated, with the participation of our principal executive officer and principal financial officer, the effectiveness of our disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this report. Based upon that evaluation, our management, including our principal executive officer and principal financial officer, has concluded that, as of the end of the period covered by this report, the Company's disclosure controls and procedures were effective at the reasonable assurance level.

## Management's Annual Report on Internal Control over Financial Reporting

Company management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed by, or under the supervision of, our principal executive and principal financial officers and effected by the Company's Board of Directors, management and other personnel 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 and includes those policies and procedures that:

- pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Company;
- 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
- 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 inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risks that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2015. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in *Internal Control-Integrated Framework, 2013*.

Based on our assessment, management has concluded that, as of December 31, 2015, the Company's internal control over financial reporting is effective.

### Changes in Internal Control over Financial Reporting

There were no changes in the Company's internal control over financial reporting identified in connection with the evaluation of such internal control that occurred during the Company's last fiscal quarter that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

### Item 9B. Other Information

On March 22, 2016, we entered into a purchase agreement with Lincoln Park Capital Fund, LLC ("Lincoln Park"), pursuant to which Lincoln Park has agreed to purchase up to \$12 million of shares of our common stock from us, from time to time and subject to certain limitations. Also on March 22, 2016, we entered into a Registration Rights Agreement (the "Registration Rights Agreement") with Lincoln Park, pursuant to which we agreed to file with the U.S. Securities and Exchange Commission (the "SEC") a registration statement (the "Registration Statement") to register for resale under the Securities Act of 1933, as amended (the "Securities Act"), the shares of our common stock that have been or may be issued to Lincoln Park under the Purchase Agreement.

After the SEC has declared the Registration Statement effective, we have the right at our sole discretion, over a 36-month period, to sell up to \$12 million of shares of our common stock to Lincoln Park in amounts up to \$750,000 per sale, provided certain conditions in the Purchase Agreement are met. In addition, we may direct Lincoln Park to purchase additional shares in accordance with the terms of the Purchase Agreement.

If, and/or when, we sell stock, we will control the timing and amount of sales, if any, of our common stock to Lincoln Park under the Purchase Agreement; provided that in no event will such shares be sold to Lincoln Park where such sale would result in Lincoln Park's beneficial ownership exceeding 4.99% of the then outstanding shares of our common stock. The purchase price of the shares related to the \$12 million of funding will be based on prevailing market prices of our common stock, calculated using the formula set forth in the Purchase Agreement.

In consideration for entering into the Purchase Agreement, we issued to Lincoln Park 100,000 shares of our common stock as a commitment fee and will issue up to 500,000 additional shares pro rata, when and if, Lincoln Park purchases at our request the \$12 million commitment. We may terminate the Purchase Agreement at any time at our discretion without any cost to us. The proceeds we receive pursuant to the Purchase Agreement are expected to be used to further develop our product candidates and for general corporate purposes.

The securities issued pursuant to the Purchase Agreement were exempt from registration pursuant to the provisions of Section 4(a)(2) of the Securities Act and Rule 506 of Regulation D promulgated thereunder. Lincoln Park represented to us that it is an "accredited investor" as defined in Rule 501(a) of Regulation D promulgated under the Securities Act; is knowledgeable, sophisticated and experienced in making investment decisions of this kind; and received adequate information about us or had adequate access to information about us.



### PART III

#### Item 10. Directors, Executive Officers and Corporate Governance

The table below contains information regarding the current members of the Board of Directors and executive officers. The ages of individuals are provided as of March 18, 2016:

Name	Age	Position
<b>Christopher J. Schaber, PhD</b>	49	Chairman of the Board, Chief Executive Officer and President
<b>Keith L. Brownlie, CPA</b>	63	Director
<b>Marco M. Brughera, DVM</b>	60	Director
<b>Gregg A. Lapointe, CPA</b>	57	Director
<b>Robert J. Rubin, MD</b>	70	Director
<b>Jerome B. Zeldis, MD, PhD</b>	65	Director
<b>Oreola Donini, PhD</b>	44	Chief Scientific Officer and Senior Vice President
<b>Richard Straube, MD</b>	64	Chief Medical Officer and Senior Vice President
<b>Joseph M. Warusz, CPA</b>	59	Vice President of Finance, Acting Chief Financial Officer and Corporate Secretary

**Christopher J. Schaber, PhD** has over 26 years of experience in the pharmaceutical and biotechnology industry. Dr. Schaber has been our President and Chief Executive Officer and a director since August 2006. He was appointed Chairman of the Board on October 8, 2009. He also serves on the board of directors of the Biotechnology Council of New Jersey (“BioNJ”) since January 2009 and the Alliance for Biosecurity since October 2014, and has been a member of the corporate councils of both the National Organization for Rare Diseases (“NORD”) and the American Society for Blood and Marrow Transplantation (“ASBMT”) since October 2009 and July 2009, respectively. Prior to joining Soligenix, Dr. Schaber served from 1998 to 2006 as Executive Vice President and Chief Operating Officer of Discovery Laboratories, Inc., where he was responsible for overall pipeline development and key areas of commercial operations, including regulatory affairs, quality control and assurance, manufacturing and distribution, pre-clinical and clinical research, and medical affairs, as well as coordination of commercial launch preparation activities. From 1996 to 1998, Dr. Schaber was a co-founder of Acute Therapeutics, Inc., and served as its Vice President of Regulatory Compliance and Drug Development. From 1994 to 1996, Dr. Schaber was employed by Ohmeda PPD, Inc., as Worldwide Director of Regulatory Affairs and Operations. From 1989 to 1994, Dr. Schaber held a variety of regulatory, development and operations positions with The Liposome Company, Inc., and Elkins-Sinn Inc., a division of Wyeth-Ayerst Laboratories. Dr. Schaber received his BA degree from Western Maryland College, his MS degree in Pharmaceutics from Temple University School of Pharmacy and his PhD degree in Pharmaceutical Sciences from the Union Graduate School. Dr. Schaber was selected to serve as a member of our Board of Directors because of his extensive experience in drug development and pharmaceutical operations, including his experience as an executive senior officer with our Company and Discovery Laboratories, Inc., and as a member of the board of directors of BioNJ; because of his proven ability to raise funds and provide access to capital; and because of his advanced degrees in science and business.

**Keith L. Brownlie, CPA** has been a director since June 2011. Mr. Brownlie currently serves on the Board of Directors of Rxi Pharmaceuticals Corporation, a publicly traded biotechnology company involved in the research and development of RNAi products for the diagnosis, prevention and treatment of human diseases, a position he has held since June 2012. From July 2013 until December 2014, Mr. Brownlie served on the Board of Directors of Cancer Genetics, Inc., a publicly traded, early stage diagnostics company. Mr. Brownlie served as a member of the Board of Directors of Epicept Corporation, a publicly traded, specialty pharmaceutical company focused on the clinical development and commercialization of pharmaceutical products for the treatment of cancer and pain, from April 2011 to August 2013 when Epicept Corporation merged with Immune Pharmaceuticals, Inc. From 1974 to 2010, Mr. Brownlie worked with the accounting firm of Ernst & Young LLP where he served as audit partner for numerous public companies and was the Life Sciences Industry Leader for the New York metro area. Mr. Brownlie received a BS in Accounting from Lehigh University and is a Certified Public Accountant in the state of New Jersey. Mr. Brownlie co-founded the New Jersey Entrepreneur of the Year Program and was Vice President and Trustee of the New Jersey Society of CPAs. In addition, he served as accounting advisor to the board of the Biotechnology Council of New Jersey. Mr. Brownlie was selected to serve as a member of our Board of Directors because of his vast experience as an audit partner for numerous public companies and as a director of publicly traded specialty pharmaceutical and biotechnology companies.

**Marco Maria Brughera, DVM** joined the Board of Directors in October 2013. He is the Global Head of the Rare Disease Business Unit for Sigma-Tau Finanziaria S.p.A. Group. He currently serves as President in Sigma-Tau Pharmaceuticals, Inc. and in Sigma-Tau Research Switzerland S.A. and as Chief Executive Officer in Sigma-Tau Rare Disease Ltd. From December 2011 through January 2014, Dr. Brughera served on the Board of Directors of Gentium S.p.A., a publicly traded biopharmaceutical company. From January 2011 through October 2012, Dr. Brughera held several other positions with the Sigma-Tau Group, including Corporate Research and Development Managing Director of Sigma-Tau Industrie Farmaceutiche Riunite S.p.A. From 2004 to 2010, Dr. Brughera served as the Vice President of Preclinical Development at Nerviano Medical Sciences S.r.l. (“NMS Group”), a pharmaceutical oncology-focused integrated discovery and development company. He also served as the Managing Director at Accelera, S.r.l., an independent contract research organization affiliated with the NMS Group. From 1999 to 2004, Dr. Brughera held several senior level positions in the areas of discovery and development toxicology with Pharmacia Corporation and Pfizer, Inc. Prior to 1999, he held various positions at Pharmacia & Upjohn Company, Inc., and Farmitalia Carlo Erba S.p.A., an Italian pharmaceutical company. Dr. Brughera earned his degree in veterinary medicine from the University of Milan and is a European Registered Toxicologist. Pursuant to our February 11, 2009 stock purchase agreement with Sigma-Tau Pharmaceuticals, Inc., we were required to use our best efforts to secure the election of a Sigma-Tau designee to our Board of Directors until such time as Sigma-Tau beneficially owned less than 10% of our issued and outstanding shares of Common Stock. As of March 18, 2016, Sigma Tau beneficially owned 9.7% of our outstanding Common Stock, and our obligation with respect to the election of a Sigma-Tau designee to our Board of Directors has expired. In view of Dr. Brughera’s background in the areas of drug discovery and development and his experience as an executive officer and a director in the pharmaceutical industry, the Nominating Committee accepted Dr. Brughera as Sigma-Tau’s designee for election to the Board of Directors.

**Gregg Lapointe, CPA, MBA** has been a director since March 2009. Mr. Lapointe is currently CEO of Cerium Pharmaceuticals, Inc. and serves on the Board of Directors of SciClone Pharmaceuticals, Inc., Raptor Pharmaceuticals, Inc., ImmunoCellular Therapeutics Ltd. and the Board of Trustees of the Keck Graduate Institute of Applied Life Sciences. He has previously served on the Board of Directors of the Pharmaceuticals Research and Manufacturers of America (PhRMA) and Questcor Pharmaceuticals, Inc. He previously served in varying roles for Sigma-Tau Pharmaceuticals, Inc., a private biopharmaceutical company, from September 2001 through February 2012, including Chief Operating Officer from November 2003 to April 2008 and Chief Executive Officer from April 2008 to February 2012. From May, 1996 to August 2001, he served as Vice President of Operations and Vice President, Controller of AstenJohnson, Inc. (formerly JWI Inc.). Prior to that, Mr. Lapointe spent several years in the Canadian medical products industry in both distribution and manufacturing. Mr. Lapointe began his career at Price Waterhouse. Mr. Lapointe received his B.A. degree in Commerce from Concordia University in Montreal, Canada, a graduate diploma in Accountancy from McGill University and his M.B.A. degree from Duke University. He is a C.P.A. in the state of Illinois. Mr. Lapointe was selected to serve as a member of our Board of Directors because of his significant experience in the areas of global strategic planning and implementation, business development, corporate finance, and acquisitions, and his experience as an executive officer and board member in the pharmaceutical and medical products industries.

**Robert J. Rubin, MD** has been a director since October 2009. Dr. Rubin was a clinical professor of medicine at Georgetown University from 1995 until 2012 when he was appointed a Distinguished Professor of Medicine. From 1987 to 2001, he was president of the Lewin Group (purchased by Quintiles Transnational Corp. in 1996), an international health policy and management consulting firm. From 1994 to 1996, Dr. Rubin served as Medical Director of ValueRx, a pharmaceutical benefits company. From 1992 to 1996, Dr. Rubin served as President of Lewin-VHI, a health care consulting company. From 1987 to 1992, he served as President of Lewin-ICF, a health care consulting company. From 1984 to 1987, Dr. Rubin served as a principal of ICF, Inc., a health care consulting company. From 1981 to 1984, Dr. Rubin served as the Assistant Secretary for Planning and Evaluation at the Department of Health and Human Services and as an Assistant Surgeon General in the United States Public Health Service. Dr. Rubin has served on the Board of BioTelemetry, Inc. (formerly known as CardioNet, Inc.) since 2007. He is a board certified nephrologist and internist. Dr. Rubin received an undergraduate degree in Political Science from Williams College and his medical degree from Cornell University Medical College. Dr. Rubin was selected to serve as a member of our Board of Directors because of his vast experience in the health care industry, including his experience as a nephrologist, internist, clinical professor of medicine and Assistant Surgeon General, and his business experience in the pharmaceutical industry.

**Jerome B. Zeldis, MD, PhD** has been a director since June 2011. Dr. Zeldis is currently Chief Executive Officer of Celgene Global Health and Chief Medical Officer of Celgene Corporation, a publicly traded, fully integrated biopharmaceutical company, where he has been employed since 1997. From September 1994 to February 1997, Dr. Zeldis worked at Sandoz Research Institute and the Janssen Research Institute in both clinical research and medical development. He has been a board member of several biotechnology companies and is currently on the boards of the NJ Chapter of the Arthritis Foundation, the Castleman's Disease Organization and PTC Therapeutics, Inc. and Alliqua, Inc. Additionally, he has served as Assistant Professor of Medicine at the Harvard Medical School (from July 1987 to September 1988), Associate Professor of Medicine at University of California, Davis from (September 1988 to September 1994), Clinical Associate Professor of Medicine at Cornell Medical School (January 1995 to December 2003) and Professor of Clinical Medicine at the Robert Wood Johnson Medical School (July 1998 to June 2010). Dr. Zeldis received a BA and an MS from Brown University, and an MD, and a PhD in Molecular Biophysics and Biochemistry from Yale University. Dr. Zeldis trained in Internal Medicine at the UCLA Center for the Health Sciences and in Gastroenterology at the Massachusetts General Hospital and Harvard Medical School. Dr. Zeldis was selected to serve as a member of our Board of Directors because of his experience as an executive officer of a publicly traded biopharmaceutical company and in clinical research and medical development, and his experience in the health care industry, including his experience as an internist, gastroenterologist and professor of medicine.

**Oreola Donini, PhD**, has been with our company since August 15, 2013 and is currently our Chief Scientific Officer and Senior Vice President, a position she has held since December 5, 2014. Dr. Donini served as our Vice President of Preclinical Research and Development from August 15, 2013 until December 4, 2014. She has more than 15 years' experience in drug discovery and preclinical development with start-up biotechnology companies. From 2012 to 2013, Dr. Donini worked with ESSA Pharma Inc. as Vice President Research and Development. From 2004 to 2013, Dr. Donini worked with Inimex Pharmaceuticals Inc., ("Inimex"), lastly as Senior Director of Preclinical R&D from 2007-2013. Prior to joining Inimex, she worked with Kinetek Pharmaceuticals Inc., developing therapies for infectious disease, cancer and cancer supportive care. Dr. Donini is a co-inventor and leader of the Company's SGX94 innate defense regulator technology, developed by Inimex and subsequently acquired by the Company. She was responsible for overseeing the manufacturing and preclinical testing of SGX94, which demonstrated efficacy in combating bacterial infections and mitigating the effects of tissue damage due to trauma, infection, radiation and/or chemotherapy treatment. These preclinical studies resulted in a successful Phase 1 clinical study and clearance of Phase 2 protocols for oral mucositis in head and neck cancer and acute bacterial skin and skin structure infections. While with ESSA Pharma Inc. as the Vice President of Research and Development, Dr. Donini led the preclinical testing of a novel N-terminal domain inhibitor of the androgen receptor for the treatment of prostate cancer. While with Kinetek Pharmaceuticals Inc., her work related to the discovery of novel kinase and phosphatase inhibitors for the treatment of cancer. Dr. Donini received her PhD from Queen's University in Kingston, Ontario, Canada and completed her post-doctoral work at the University of California, San Francisco. Her research has spanned drug discovery, preclinical development, manufacturing and clinical development in infectious disease, cancer and cancer supportive care.

**Richard Straube, MD** has been with our company since January 2014 and is currently our Senior Vice President and Chief Medical Officer. Dr. Straube is a board-certified pediatrician with 35 years' experience in both academia and industry, including clinical research experience in host-response modulation. From 2009 until joining our company, he was Chief Medical Officer of Stealth Peptides Incorporated, a privately-held, clinical stage, biopharmaceutical company. Prior to joining the Company, Dr. Straube served from 1988 to 1993 in various capacities, including most recently as Senior Director, Infectious Diseases and Immunology, Clinical Research, for Centocor, Inc., a privately-held biopharmaceutical company focused on developing monoclonal antibody-based diagnostics. While at Centocor, Inc., Dr. Straube was responsible for the initial anti-cytokine and anti-endotoxin programs targeted at ameliorating inappropriate host responses to infectious and immunologic challenges. Programs that he managed at Centocor, Inc. include assessments of immunomodulation using monoclonal removal of inciting molecular triggers, removal of internal immune-messengers, augmentation of normal host defenses, and maintenance of normal sub-cellular function in the face of injury. From 1993 to 1995, Dr. Straube was Director of Medical Affairs at T-cell Sciences, Inc., a privately-held biotechnology company. From 1995 to 1997, he was Director of Clinical Investigations of the Pharmaceutical Products Division of Ohmeda Corp., a privately-held biopharmaceutical company. He served from 1998 to 2007 as Executive Vice President of Research and Development and Chief Scientific Officer at INO Therapeutics LLC, a privately-held biotherapeutics company, where he was responsible for the clinical trials and subsequent approval of inhaled nitric oxide for the treatment of persistent pulmonary hypertension of the newborn. From 2007 to 2009, Dr. Straube was the Chief Medical Officer at Critical Biologics Corporation, a privately-held biotechnology company. Dr. Straube received his medical degree and residency training at the University of Chicago, completed a joint adult and pediatric infectious diseases fellowship at the University of California, San Diego ("UCSD"), and as a Milbank Scholar completed training in clinical trial design at the London School of Hygiene and Tropical Medicine. While on the faculty at the UCSD Medical Center, his research focused on interventional studies for serious viral infections.

**Joseph M. Warusz, CPA** has been with the company since June 2011 and is currently our Vice President of Finance and Acting Chief Financial Officer, a position he has held since February 2012. He has more than 30 years of financial management experience in public and private life science companies as well as large pharma. Prior to joining Soligenix on June 1, 2011 as Vice President of Administration and Controller, he held senior financial positions with Amicus Therapeutics, Inc. from 2004 to 2005, Orchid Cellmark, Inc. from 2000 to 2004, and NexMed, Inc. from 1998 to 1999. From 2005 to 2011, Mr. Warusz performed consulting assignments at Ardea BioSciences, Inc., NovaDel Pharma, Inc. and Melior Discovery, all R&D-focused companies in the biotechnology and specialty pharmaceuticals arenas. Prior to 1998, Mr. Warusz also held management positions in financial analysis, accounting, reporting and auditing at Bristol-Myers Squibb and Peat Marwick Main & Company. He received his BS in accounting and MBA in finance at Drexel University and is a Certified Public Accountant.

### **Board Leadership Structure**

Our Board of Directors believes that Dr. Schaber's service as both the Chairman of our Board of Directors and our Chief Executive Officer is in the best interest of our Company and our stockholders. Dr. Schaber possesses detailed and in-depth knowledge of the issues, opportunities and challenges facing our Company and our business and, therefore, is best positioned to develop agendas that ensure that the Board of Directors' time and attention are focused on the most important matters. His combined role enables decisive leadership, ensures clear accountability, and enhances our ability to communicate our message and strategy clearly and consistently to our stockholders, employees, and collaborative partners.

Messrs. Brownlie and Lapointe, Dr. Rubin, and Dr. Zeldis are independent and the Board of Directors believes that the independent directors provide effective oversight of management. Moreover, in addition to feedback provided during the course of meetings of the Board of Directors, the independent directors hold executive sessions. Following an executive session of independent directors, the independent directors' report back to the full Board of Directors regarding any specific feedback or issues, provide the Chairman with input regarding agenda items for Board of Directors and Committee meetings, and coordinate with the Chairman regarding information to be provided to the independent directors in performing their duties. The Board of Directors believes that this approach appropriately and effectively complements the combined Chairman/Chief Executive Officer structure.

Although the Company believes that the combination of the Chairman and Chief Executive Officer roles is appropriate under the current circumstances, our corporate governance guidelines do not establish this approach as a policy, and the Board of Directors may determine that it is more appropriate to separate the roles in the future.










### **Section 16(a) Beneficial Ownership Reporting Compliance**



We are required to identify each person who was an officer, director or beneficial owner of more than 10% of our registered equity securities during our most recent fiscal year and who failed to file on a timely basis reports required by Section 16(a) of the Exchange Act.

To our knowledge, based solely on review of these filings and written representations from the certain reporting persons, we believe that during the year ended December 31, 2015, our officers, directors and significant stockholders have timely filed the appropriate form under Section 16(a) of the Exchange Act.

## Committees of the Board of Directors

Our Board of Directors has the following three committees: (1) Compensation, (2) Audit and (3) Nominating and Corporate Governance. Our Board of Directors has adopted a written charter for each of these committees, which are available on our website at [www.soligenix.com](http://www.soligenix.com) under the “Investors” section.

Director	Audit Committee	Compensation Committee	Nominating and Corporate Governance Committee
Keith L. Brownlie, CPA			
Marco M. Brughera, DVM			
Gregg A. Lapointe, CPA			
Robert J. Rubin, MD			
Jerome B. Zeldis, MD, PhD			

 – Committee Chair  
 – Member

### Audit Committee

Our Board of Directors has an Audit Committee, which is comprised of Mr. Brownlie (Chair), Mr. Lapointe and Dr. Rubin. The Audit Committee assists our Board of Directors in monitoring the financial reporting process, the internal control structure and the independent registered public accountants. Its primary duties are to serve as an independent and objective party to monitor the financial reporting process and internal control system, to review and appraise the audit effort of the independent registered public accountants and to provide an open avenue of communication among the independent registered public accountants, financial and senior management, and our Board of Directors. Our Board of Directors has determined that Mr. Brownlie, Mr. Lapointe and Dr. Rubin are “independent” directors, within the meaning of applicable listing standards of Nasdaq and the Exchange Act and the rules and regulations thereunder. Our Board of Directors has also determined that the members of the Audit Committee are qualified to serve on the committee and have the experience and knowledge to perform the duties required of the committee and that Mr. Brownlie qualifies as an “audit committee financial expert” as that term is defined in the applicable regulations of the Exchange Act.

### Compensation Committee

Our Board of Directors has a Compensation Committee, which is comprised of Dr. Rubin (Chair), Dr. Brughera and Dr. Zeldis. The Compensation Committee is responsible for reviewing and approving the executive compensation program, assessing executive performance, setting salary, making grants of annual incentive compensation and approving certain employment agreements. Our Board of Directors has determined that Dr. Rubin and Dr. Zeldis are “independent” directors within the meaning of applicable listing standards of The NASDAQ Stock Market LLC (“Nasdaq”) and the Exchange Act and the rules and regulations thereunder. Our Board of Directors reviewed Dr. Brughera’s relationship as the Global Head of the Rare Disease Franchise for Sigma-Tau SpA., an affiliate of Sigma-Tau Pharmaceuticals, Inc., which owns approximately 9.4% of the issued and outstanding shares of our common stock. Our Board of Directors determined that Dr. Brughera’s position with Sigma-Tau SpA. would not impair his ability to exercise independent judgment.

### Nominating and Corporate Governance Committee

Our Board of Directors has a Nominating and Corporate Governance Committee (“Nominating Committee”), which is comprised of Dr. Zeldis (Chair), Mr. Brownlie and Mr. Lapointe. The Nominating Committee makes recommendations to the Board of Directors regarding the size and composition of our Board of Directors, establishes procedures for the nomination process, identifies and recommends candidates for election to our Board of Directors. Our Board of Directors has determined that Dr. Zeldis, Mr. Brownlie and Mr. Lapointe are “independent” directors, as such term is defined by the applicable Nasdaq listing standards.

## Code of Ethics

We have adopted a code of ethics that applies to all of our executive officers and senior financial officers (including our chief executive officer, chief financial officer, chief accounting officer and any person performing similar functions). A copy of our code of ethics is publicly available on our website at [www.soligenix.com](http://www.soligenix.com) under the “Investors” section. If we make any substantive amendments to our code of ethics or grant any waiver, including any implicit waiver, from a provision of the code to our chief executive officer, chief financial officer or chief accounting officer, we will disclose the nature of such amendment or waiver in a Current Report on Form 8-K.

## Diversity Considerations in Identifying Director Nominees

We do not have a formal diversity policy or set of guidelines in selecting and appointing directors that comprise our Board of Directors. However, when making recommendations to our Board of Directors regarding the size and composition of our Board of Directors, our Nominating Committee does consider each individual director’s qualifications, skills, business experience and capacity to serve as a director and the diversity of these attributes for the Board of Directors as a whole.

## Compensation Committee Interlocks and Insider Participation

No member of our Compensation Committee is or has at any time during the past year been one of our officers or employees. None of our executive officers currently serves or in the past year has served as a member of the Board of Directors or Compensation Committee of any entity that has one or more executive officers serving on our Board of Directors or Compensation Committee.

## Item 11. Executive Compensation

### Summary Compensation

The following table contains information concerning the compensation paid during each of the two years ended December 31, 2015 to our Chief Executive Officer and each of the two other most highly compensated executive officers during 2015 (collectively, the “Named Executive Officers”).

#### Summary Compensation

Name	Position	Year	Salary	Bonus	Option Awards	All Other Compensation	Total
<b>Christopher J. Schaber</b> <sup>1</sup>	CEO & President	2015	\$ 424,360	\$ 101,846	\$ 158,200	\$ 36,201	\$ 720,607
		2014	\$ 412,000	\$ 115,000	\$ 150,000	\$ 29,580	\$ 706,580
<b>Joseph M. Warusz</b> <sup>2</sup>	VP & Acting CFO	2015	\$ 196,730	\$ 38,362	\$ 62,150	\$ 24,676	\$ 321,918
		2014	\$ 191,000	\$ 41,000	\$ 67,500	\$ 21,197	\$ 320,697
<b>Richard C. Straube</b> <sup>3</sup>	CMO & Senior VP	2015	\$ 309,000	\$ 58,401	\$ 79,100	\$ 25,656	\$ 472,157
		2014	\$ 300,000	\$ 62,000	\$ 276,000	\$ 21,328	\$ 659,328

<sup>1</sup> Dr. Schaber deferred the payment of his 2015 bonus of \$101,846 until January 15, 2016. Option award figures include the value of common stock option awards at grant date as calculated under FASB ASC 718. Other compensation represents health insurance costs paid by the Company.

<sup>2</sup> Mr. Warusz deferred the payment of his 2015 bonus of \$38,362 until January 15, 2016. Option award figures include the value of common stock option awards at grant date as calculated under FASB ASC 718. Other compensation represents health insurance costs paid by the Company.

<sup>3</sup> Dr. Straube joined the Company on January 1, 2014. He deferred the payment of his 2015 bonus of \$58,401 until January 15, 2016. Option award figures include the value of common stock option awards at grant date as calculated under FASB ASC 718. Other compensation represents health insurance costs paid by the Company.

## **Employment and Severance Agreements**

In August 2006, we entered into a three-year employment agreement with Christopher J. Schaber, PhD. Pursuant to this employment agreement we agreed to pay Dr. Schaber a base salary of \$300,000 per year and a minimum annual bonus of \$100,000. Dr. Schaber's employment agreement was renewed in December 27, 2007 for an additional term of three years. We agreed to issue him options to purchase 125,000 shares of our common stock, with one third immediately vesting and the remainder vesting over three years. Upon termination without "Just Cause" as defined by this agreement, we would pay Dr. Schaber nine months of severance, as well as any accrued bonuses, accrued vacation, and we would provide health insurance and life insurance benefits for Dr. Schaber and his dependents. No unvested options shall vest beyond the termination date. Dr. Schaber's monetary compensation (base salary of \$300,000 and bonus of \$100,000) remained unchanged from 2006 with the 2007 renewal. Upon a change in control of the Company due to merger or acquisition, all of Dr. Schaber's options shall become fully vested, and be exercisable for a period of five years after such change in control (unless they would have expired sooner pursuant to their terms). In the event of his death during the term of the agreement, all of his unvested options shall immediately vest and remain exercisable for the remainder of their term and become the property of Dr. Schaber's immediate family. Dr. Schaber's employment agreement automatically renewed in December 2013 for an additional term of three years.

On June 22, 2011, the Compensation Committee eliminated his fixed minimum annual bonus payable and revised it to an annual targeted bonus of 40% of his annual base salary. On December 4, 2013, the Compensation Committee approved an increase in salary for Dr. Schaber to \$412,000. On December 4, 2014, the Compensation Committee approved an increase in salary for Dr. Schaber to \$424,360. On December 10, 2015, the Compensation Committee approved an increase in salary for Dr. Schaber to \$434,969.

In May 2011, we entered into a one-year employment agreement with Mr. Joseph M. Warusz, our Acting Chief Financial Officer, Vice President Finance and Chief Accounting Officer. Pursuant to the agreement, we have agreed to pay Mr. Warusz \$175,000 per year and a targeted annual bonus of 30% of base salary. We also agreed to issue him options to purchase 40,000 shares of our common stock with one-third immediately vesting and the remainder vesting over three years. Upon termination without "Just Cause", as defined in Mr. Warusz's employment agreement, we would pay Mr. Warusz three months of severance, accrued bonuses and vacation, and health insurance benefits. No unvested options vest beyond the termination date. On December 6, 2012, the Compensation Committee approved an increase in the targeted annual bonus to 35%. On December 4, 2013, the Compensation Committee approved an increase in salary for Mr. Warusz to \$191,000. On December 4, 2014, the Compensation Committee approved an increase in salary for Mr. Warusz to \$196,730. On December 10, 2015, the Compensation Committee approved an increase in salary for Mr. Warusz to \$201,648.

In December 2014, we entered into a one-year employment agreement with Richard C. Straube, MD, our Chief Medical Officer and Senior Vice President. Pursuant to the agreement, we have agreed to pay Dr. Straube \$300,000 per year and a targeted annual bonus of 30% of base salary. We also agreed to issue him options to purchase 100,000 shares of our common stock with one-third immediately vesting and the remainder vesting over three years. Upon termination without "Just Cause", as defined in Dr. Straube's employment agreement, we would pay Dr. Straube three months of severance, accrued bonuses and vacation, and health insurance benefits. No unvested options vest beyond the termination date. On December 4, 2014, the Compensation Committee approved an increase in salary for Dr. Straube to \$309,000. On December 10, 2015, the Compensation Committee approved an increase in salary for Dr. Straube to \$316,725.

In February 2007, our Board of Directors authorized the issuance of 50,000 shares to Dr. Schaber immediately prior to the completion of a transaction, or series or a combination of related transactions negotiated by our Board of Directors whereby, directly or indirectly, a majority of our capital stock or a majority of our assets are transferred from the Company and/or our stockholders to a third party. The amended agreement with Dr. Schaber includes our obligation to issue such shares to him if such event occurs.

### Outstanding Equity Awards at Fiscal Year-End

The following table contains information concerning unexercised options, stock that has not vested, and equity incentive plan awards for the Named Executive Officers outstanding at December 31, 2015. We have never issued Stock Appreciation Rights.

Name	Number of Securities Underlying Unexercised Options (#)		Equity Incentive Plan Awards: Number of Securities Underlying Unexercised	Option Exercise Price (\$)	Option Expiration Date
	Exercisable	Unexercisable	Options (#)		
Christopher J. Schaber	125,000	-	-	\$ 5.40	8/28/2016
	45,000	-	-	\$ 9.40	8/9/2017
	140,000	-	-	\$ 1.20	12/17/2018
	110,000	-	-	\$ 4.64	6/30/2020
	112,185	-	-	\$ 0.64	11/30/2021
	130,000	-	-	\$ 0.68	12/04/2022
	75,000	25,000	25,000	\$ 2.01	12/04/2023
	50,000	50,000	50,000	\$ 1.50	12/04/2024
	35,000	105,000	105,000	\$ 1.13	12/30/2025
Richard C. Straube	68,750	31,250	31,250	\$ 2.01	1/06/2024
	25,000	25,000	25,000	\$ 1.50	12/04/2024
	17,500	52,500	52,500	\$ 1.13	12/30/2025
Joseph M. Warusz	40,000	-	-	\$ 4.10	5/30/2021
	25,310	-	-	\$ 0.64	11/30/2021
	55,000	-	-	\$ 0.68	12/04/2022
	33,754	11,246	11,246	\$ 2.01	12/04/2023
	22,502	22,498	22,498	\$ 1.50	12/04/2024
	13,750	41,250	41,250	\$ 1.13	12/30/2025

### Compensation of Directors

The following table contains information concerning the compensation of the non-employee directors during the fiscal year ended December 31, 2014.

Name	Fees Earned Paid in Cash <sup>1</sup>	Option Awards <sup>2</sup>	Total
Keith Brownlie	\$ 55,500	\$ 30,000	\$ 85,000
Marco Brughera	\$ 40,000	\$ 30,000	\$ 70,000
Gregg A. Lapointe	\$ 47,500	\$ 30,000	\$ 77,500
Robert J. Rubin	\$ 52,500	\$ 30,000	\$ 82,500
Jerome B. Zeldis	\$ 50,000	\$ 30,000	\$ 80,000

<sup>1</sup> Directors who are compensated as full-time employees receive no additional compensation for service on our Board of Directors. Each independent director who is not a full-time employee is paid \$35,000 annually, on a prorated basis, for their service on our Board of Directors, the chairman of our Audit Committee is paid \$15,000 annually, on a prorated basis, and the chairmen of our Compensation and Nominating Committees will be paid \$10,000 annually, on a prorated basis. Additionally, Audit Committee members are paid \$7,500 annually and Compensation and Nominating Committee members are paid \$5,000 annually. This compensation is paid quarterly.

<sup>2</sup> We maintain a stock option grant program pursuant to the nonqualified stock option plan, whereby members of our Board of Directors or its committees who are not full-time employees receive an initial grant of fully vested options to purchase 15,000 shares of common stock. Upon re-election to the Board, each Board member will receive stock options with a value of \$30,000, calculated using the closing price of the common stock on the trading day prior to the date of the annual meeting of the Company's stockholders, which vest at the rate of 25% per quarter, commencing with the first quarter after each annual meeting of stockholders.



## Stock Ownership Policy

In April 2012, our Board of Directors adopted a stock ownership policy applicable to our non-employee directors to strengthen the link between director and stockholder interests. Pursuant to the stock ownership policy, each non-employee director is required to hold a minimum ownership position in the common stock equal to the annual cash compensation paid for service on the Board of Directors, exclusive of cash compensation paid for service as a chair or member of any committees of the Board of Directors.

Stock counted toward the ownership requirement includes common stock held by the director, unvested and vested restricted stock, and all shares of common stock beneficially owned by the director held in a trust and by a spouse and/or minor children of the director. The policy provides that the ownership requirement must be attained within three years after the later of June 21, 2012 and the date a director is first elected or appointed to the Board of Directors. To monitor progress toward meeting the requirement, the Nominating Committee will review director ownership levels at the end of March of each year. Non-employee directors are prohibited from selling any shares of common stock unless such director is in compliance with the stock ownership policy. A copy of our director compensation and stock ownership policy is publicly available on our website at [www.soligenix.com](http://www.soligenix.com) under the “Investors” section.

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

The table below provides information regarding the beneficial ownership of the common stock as of March 18, 2016, of (1) each person or entity who owns beneficially 5% or more of the shares of our outstanding common stock, (2) each of our directors, (3) each of the Named Executive Officers, and (4) our directors and officers as a group. Except as otherwise indicated, and subject to applicable community property laws, we believe the persons named in the table have sole voting and investment power with respect to all shares of common stock held by them.

### Beneficial Ownership

Name of Beneficial Owner	Shares of Common Stock Beneficially Owned	Percent of Class
Randall J. Kirk (1)	6,867,816	20.34%
NRM VII Holdings I, LLC (1)	5,833,333	17.27%
Paolo Cavazza (2)	3,379,950	10.66%
Sigma-Tau Pharmaceuticals, Inc (2)	3,068,461	9.70%
Intrexon Corporation (1)	1,034,483	3.31%
Christopher J. Schaber (3)	941,298	2.93%
Keith Brownlie (4)	115,208	*
Marco Brughera (5)	43,600	*
Gregg A. Lapointe (6)	151,493	*
Robert J. Rubin (7)	111,158	*
Jerry Zeldis (8)	126,041	*
Joseph Warusz (9)	217,294	*
Richard Straube (10)	131,250	*
Oreola Donini (11)	140,000	*
All directors and executive officers as a group (9 persons)	1,977,342	6.00%

(1) On June 26, 2013, Randal J. Kirk, on his own behalf and on behalf of Third Security, LLC, NYM VII Holdings I, LLC and Intrexon Corporation, filed Amendment No. 1 to Schedule 13D with the Securities and Exchange Commission (the “SEC”), which amends the Schedule 13D filed May 9, 2013 with the SEC (as amended, “Schedule 13D”). The Schedule 13D states that Mr. Kirk is Senior Managing Director of, and controls, Third Security, LLC, which is the Manager of an affiliate that manages NRM VII Holdings I, LLC, and that Mr. Kirk serves as the Chairman and Chief Executive Officer of Intrexon Corporation. The Schedule 13D indicates that (a) Mr. Kirk, Third Security, LLC and NRM VII Holdings I, LLC have sole voting and dispositive power with respect to 3,333,333 shares of Common Stock and warrants to purchase 2,500,000 shares of Common Stock exercisable within 60 days of March 18, 2016 held by NRM VII Holdings I, LLC, and (b) Mr. Kirk and Intrexon Corporation have shared voting and dispositive power with respect to 1,034,483 shares of Common Stock held by Intrexon Corporation. The address of the principal business office of Mr. Kirk is 2875 South Ocean Boulevard, Suite 214, Palm Beach, Florida 33480. The address of the principal business office of NRM VII Holdings I, LLC is c/o Third Security, LLC, 1881 Grove Avenue, Redford, Virginia 24141. The address of the principal business office of Intrexon Corporation is 20358 Seneca Meadows Parkway, Germantown, Maryland 20876.

- (2) On May 16, 2013, Paolo Cavazza, on his own behalf and on behalf of Sigma Tau Finanziaria S.p.A., Sigma-Tau International S.A., Sigma-Tau America S.A. and Sigma-Tau Pharmaceuticals, Inc., filed Amendment No. 4 to Schedule 13D with the SEC, which amends the Schedule 13D filed with the SEC on February 20, 2009 as amended by Amendment No. 1 filed with the SEC on October 2, 2009, Amendment No. 2 filed with the SEC on June 28, 2010 and Amendment No. 3 filed with the SEC on January 2, 2013 (the "Schedule 13D"). The Schedule 13D indicates that (a) Mr. Cavazza has sole voting and dispositive power with respect to (i) 59,539 shares held by Mr. Paolo Cavazza and (ii) 164,146 shares of common stock and warrants to purchase 87,804 shares held by SINAF SA, and (b) Mr. Cavazza, Sigma-Tau Finanziaria S.p.A., Sigma-Tau International S.A., Sigma-Tau America S.A. and Sigma-Tau Pharmaceuticals, Inc. have shared voting and dispositive power with respect to 2,711,392 shares of common stock and warrants to purchase 357,069 shares of common stock exercisable within 60 days of the date of March 18, 2016 held by Sigma-Tau Pharmaceuticals, Inc. Sigma-Tau Pharmaceuticals, Inc. is a direct wholly-owned subsidiary of Sigma-Tau Finanziaria S.p.A. Mr. Paolo Cavazza directly and indirectly owns 37.2% of Sigma-Tau Finanziaria S.p.A. SINAF SA is a wholly owned subsidiary of Aptafin S.p.A., which is owned by Mr. Paolo Cavazza and members of his family. Mr. Paolo Cavazza's address is Via Tesserte, 10, Lugano, Switzerland. The business address of Sigma-Tau Finanziaria S.p.A. is Via Sudafrica, 20, Rome, Italy 00144. The business address of Sigma-Tau Pharmaceuticals, Inc. is 9841 Washingtonian Boulevard, Suite 500, Gaithersburg, Maryland 20878.
- (3) Includes 92,904 shares of common stock owned by Dr. Schaber, options to purchase 843,435 shares of common stock exercisable within 60 days of March 18, 2016, and warrants to purchase 4,959 shares of common stock exercisable within 60 days of March 18, 2015. The address of Dr. Schaber is c/o Soligenix, 29 Emmons Drive, Suite C-10, Princeton, New Jersey 08540.
- (4) Includes 50,000 shares of common stock and options to purchase 65,208 shares of common stock exercisable within 60 days of the March 18, 2016. The address of Mr. Brownlie is c/o Soligenix, 29 Emmons Drive, Suite C-10, Princeton, New Jersey 08540.
- (5) Includes 7,500 shares of common stock and options to purchase 36,100 shares of common stock owned by Dr. Brughera exercisable within 60 days of March 18, 2016. The address of Dr. Brughera is c/o Soligenix, 29 Emmons Drive, Suite C-10, Princeton, New Jersey 08540.
- (6) Includes 73,781 shares of common stock and options to purchase 77,712 shares of common stock exercisable within 60 days of March 18, 2016. The address of Mr. Lapointe is c/o Soligenix, 29 Emmons Drive, Suite C-10, Princeton, New Jersey 08540.
- (7) Includes 12,195 shares of common stock and options to purchase 98,962 shares of common stock exercisable within 60 days of March 18, 2016. The address of Dr. Rubin is c/o Soligenix, 29 Emmons Drive, Suite C-10, Princeton, New Jersey 08540.
- (8) Includes 69,166 shares of common stock and options to purchase 56,875 shares of common stock exercisable within 60 days of March 18, 2016. The address of Dr. Zeldis is c/o Soligenix, 29 Emmons Drive, Suite C-10, Princeton, New Jersey 08540.
- (9) Includes 12,955 shares of common stock, options to purchase 199,380 shares of common stock owned by Mr. Warusz exercisable within 60 days of March 18, 2016 and warrants to purchase 4,959 shares of Common Stock exercisable within 60 days of March 18, 2016. The address of Mr. Warusz is c/o Soligenix, 29 Emmons Drive, Suite C-10, Princeton, New Jersey 08540.
- (10) Includes options to purchase 131,250 shares of common stock exercisable within 60 days of March 18, 2016. The address of Dr. Straube is c/o Soligenix, 29 Emmons Drive, Suite C-10, Princeton, New Jersey 08540.
- (11) Includes options to purchase 90,000 shares of common stock owned by Dr. Donini exercisable within 60 days of March 18, 2016 and warrants to purchase 50,000 shares of common stock exercisable within 60 days of March 18, 2016. The address of Dr. Donini is c/o Soligenix, 29 Emmons Drive, Suite C-10, Princeton, New Jersey 08540.

\* Indicates less than 1%.

\*\* Beneficial ownership is determined in accordance with the rules of the SEC. Shares of common stock subject to options or warrants currently exercisable or exercisable within 60 days of March 18, 2016 are deemed outstanding for computing the percentage ownership of the stockholder holding the options or warrants, but are not deemed outstanding for computing the percentage ownership of any other stockholder. Percentage of ownership is based on 31,269,522 shares of common stock outstanding as of March 18, 2016.

## Equity Compensation Plan Information

In December 2005, our Board of Directors approved the 2005 Equity Incentive Plan, which was approved by stockholders on December 29, 2005. In September 2013, our stockholders approved an amendment to the 2005 Equity Incentive Plan to increase the maximum number of shares of our common stock available for issuance under the plan by 1,250,000 shares, bringing the total shares reserved for issuance under the plan to 3,000,000 shares. In April 2015, our Board of Directors approved the 2015 Equity Incentive Plan, which was approved by stockholders on June 18, 2015. A maximum of 3,000,000 shares of our common stock are available for issuance under the 2015 Equity Incentive Plan. The following table provides information, as of December 31, 2015 with respect to options outstanding under our 2005 Equity Incentive Plan and our 2015 Equity Incentive Plan.

<b>Plan Category</b>	<b>Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights</b>	<b>Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights</b>	<b>Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (excluding securities reflected in the first column)</b>
Equity compensation plans approved by security holders <sup>1</sup>	2,768,612	\$ 2.13	2,523,000
Equity compensation plans not approved by security holders	-	-	-
<b>Total</b>	<b>2,768,612</b>	<b>\$ 2.13</b>	<b>2,523,000</b>

<sup>1</sup> Includes our 2005 Equity Incentive Plan and our 2015 Equity Incentive Plan. Our 2005 Plan expired in 2015 and thus no securities remain available for future issuance under that plan.

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

### Related Party Transactions

Other than the employment agreements and compensation paid to our directors, we did not engage in any transactions with related parties since January 1, 2015. For a discussion of our employment agreements and compensation paid to our directors, see “Item 11. Executive Compensation.”

### Director Independence

The Board of Directors has determined that Keith Brownlie, Gregg Lapointe, Dr. Robert Rubin and Dr. Jerome Zeldis are “independent” as such term is defined by the applicable listing standards of Nasdaq. Our Board of Directors based this determination primarily on a review of the responses of the Directors to questionnaires regarding their employment, affiliations and family and other relationships.

## Item 14. Principal Accountant Fees and Services

The following table highlights the aggregate fees billed during each of the two years ended December 31, 2015 by EisnerAmper LLP.

	<b>2015</b>	<b>2014</b>
Audit fees	\$ 167,365	\$ 173,503
Tax fees	10,000	10,536
Other fees	27,500	11,993
<b>Total</b>	<b>\$ 204,865</b>	<b>\$ 196,032</b>

### **Other Fees**

Our principal accountants did not bill us for any services or products other than as reported above in this Item 14 during each of the two years. Other services include billing for an IT security assessment project that commenced during the year ended December 31, 2014.

### **Pre-Approval Policies and Procedures**

The audit committee has adopted a policy that requires advance approval of all audit services and permitted non-audit services to be provided by the independent auditor as required by the Exchange Act. The audit committee must approve the permitted service before the independent auditor is engaged to perform it. The audit committee approved all of the services described above in accordance with its pre-approval policies and procedures.

## Part IV

### Item 15. Exhibits and Financial Statements Schedules

#### a. (1) Consolidated Financial Statements:

The financial statements required to be filed by Item 8 of this Annual Report on Form 10-K and filed in this Item 15, are as follows:

Consolidated Balance Sheets as of December 31, 2015 and 2014	F-2
Consolidated Statements of Operations for the Years Ended December 31, 2015 and 2014	F-3
Consolidated Statements of Shareholders' Deficiency for the Years Ended December 31, 2015 and 2014	F-4
Consolidated Statements of Cash Flows for the Years Ended December 31, 2015 and 2014	F-5
Notes to Consolidated Financial Statements	F-6
Report of Independent Registered Public Accounting Firm	F-22

#### (2) Financial Statement Schedules

Schedules are omitted because they are not applicable, or are not required, or because the information is included in the consolidated financial statements and notes thereto.

#### (3) Exhibits:

2.1	Agreement and Plan of Merger, dated May 10, 2006 by and among the Company, Corporate Technology Development, Inc., Enteron Pharmaceuticals, Inc. and CTD Acquisition, Inc. (incorporated by reference to Exhibit 2.1 included in our Registration Statement on Form SB-2 (File No. 333-133975) filed on May 10, 2006).
3.1	Second Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 included in our current report on Form 8-K filed on June 22, 2012).
3.2	By-laws (incorporated by reference to Exhibit 3.1 included in our Quarterly Report on Form 10-QSB, as amended, for the fiscal quarter ended June 30, 2003).
4.1	Rights Agreement dated June 22, 2007, between the Company and American Stock Transfer & Trust Company, as Rights Agent (incorporated by reference to Exhibit 4.1 included in our current report on Form 8-K filed on June 22, 2007).
4.2	Form of Right Certificate (incorporated by reference to Exhibit 4.2 included in our current report on Form 8-K filed on June 22, 2007).
4.3	Form of Warrant issued to each investor in the January 2009 private placement (incorporated by reference to Exhibit 4.18 included in our Registration Statement on Form S-1 (File No. 333-149239) filed on February 14, 2008).
4.4	Form of Warrant issued to each investor in the September 2009 private placement (incorporated by reference to Exhibit 10.2 included in our current report on Form 8-K filed on September 29, 2009).
4.5	Warrant dated April 19, 2010, issued to Fusion Capital Fund II, LLC (incorporated by reference to Exhibit 4.10 included in our Post-Effective Amendment to Registration Statement on Form S-1 filed on April 20, 2010).
4.6	Form of Common Stock Purchase Warrant issued to each investor in the June 2010 private placement (incorporated by reference to Exhibit 10.2 included in our current report on Form 8-K filed on June 18, 2010).
4.7	Warrant dated December 20, 2012 and issued to Sigma-Tau to purchase 357,069 shares of the Company's common stock (incorporated by reference to Exhibit 10.2 of our current report on Form 8-K filed on December 27, 2012).
4.8	Warrant dated December 20, 2012 and issued to SINAF S.A. to purchase 87,804 shares of the Company's common stock (incorporated by reference to Exhibit 10.3 of our current report on Form 8-K filed on December 27, 2012).
4.9	Warrant dated December 20, 2012 and issued to McDonald to purchase 280,000 shares of the Company's common stock (incorporated by reference to Exhibit 10.6 of our current report on Form 8-K filed on December 27, 2012).

4.10	Form of Common Stock Purchase Warrant issued to each investor in the June 2013 registered public offering (incorporated by reference to Exhibit 10.3 included in our current report on Form 8-K filed on June 24, 2013).
4.11	Form of Warrant issued to Maxim Group LLC (incorporated by reference to Exhibit 10.4 included in our current report on Form 8-K filed on June 24, 2013).
4.12	Form of Warrant to Purchase Common Stock issued to each investor in the December 2014 registered public offering (incorporated by reference to Exhibit 4.12 included in our Registration Statement on Form S-1 (File No. 333-199761) filed on December 17, 2014).
4.13	Form of Warrant to Purchase Common Stock issued to Roth Capital Partners, LLC (incorporated by reference to Exhibit 4.13 included in our Registration Statement on Form S-1 (File No. 333-199761) filed on December 17, 2014).
10.1	License Agreement between the Company and the University of Texas Southwestern Medical Center (incorporated by reference to Exhibit 10.9 included in our Annual Report on Form 10-KSB filed March 30, 2004, as amended, for the fiscal year ended December 31, 2004).
10.2	License Agreement between the Company and Thomas Jefferson University (incorporated by reference to Exhibit 10.9 included in our Annual Report on Form 10-KSB, as amended, for the fiscal year ended December 31, 2004).
10.3	License Agreement between the Company and the University of Texas Medical Branch (incorporated by reference to Exhibit 10.10 included in our Annual Report on Form 10-KSB, as amended, for the fiscal year ended December 31, 2004).
10.4	Consulting Agreement between the Company and Lance Simpson of Thomas Jefferson University. (incorporated by reference to Exhibit 10.43 included in our Annual Report on Form 10-KSB as amended for the fiscal year ended December 31, 2002).
10.5	2005 Equity Incentive Plan, as amended on September 25, 2013 (incorporated by reference to Exhibit 10.1 included in our current report on Form 8-K filed on September 30, 2013). **
10.6	Form S-8 Registration of Stock Options Plan dated December 30, 2005 (incorporated by reference to our registration statement on Form S-8 filed on December 30, 2005).
10.7	Letter of Intent dated January 3, 2007 by and between the Company and Sigma-Tau Pharmaceuticals, Inc. (incorporated by reference to Exhibit 10.1 included in our current report on Form 8-K filed on January 4, 2007).
10.8	Employment Agreement dated December 27, 2007, between Christopher J. Schaber, PhD and the Company (incorporated by reference to Exhibit 10.30 included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2008). **
10.9	Exclusive License Agreement dated November 24, 1998, between Enteron Pharmaceuticals, Inc. and George B. McDonald, MD and amendments (incorporated by reference to Exhibit 10.42 included in our Registration Statement on Form S-1 (File No. 333-157322) filed on February 13, 2009).
10.10	Collaboration and Supply Agreement dated February 11, 2009, between the Company and Sigma-Tau Pharmaceuticals, Inc. (incorporated by reference to Exhibit 10.43 included in our Registration Statement on Form S-1 (File No. 333-157322) filed on February 13, 2009). †
10.11	Employment Agreement dated as of May 31, 2011, between Joseph M. Warusz and the Company (incorporated by reference to Exhibit 10.1 of our current report on Form 8-K filed on May 31, 2011).**
10.12	First Amendment to Employment Agreement dated as of July 12, 2011, between the Company and Christopher J. Schaber, PhD (incorporated by reference to Exhibit 10.1 of our current report on Form 8-K filed on July 14, 2011).**
10.13	Amendment to the Collaboration and Supply Agreement dated July 26, 2011, between Sigma-Tau Pharmaceuticals, Inc. and the Company (incorporated by reference to Exhibit 10.1 of our current report on Form 8-K filed on July 28, 2011).
10.14	Amendment to the Exclusive License Agreement dated as of July 26, 2011, between George McDonald, MD and the Company (incorporated by reference to Exhibit 10.2 of our current report on Form 8-K filed on July 28, 2011).
10.15	Amendment No. 2 to the Collaboration and Supply Agreement between the Company, Enteron and Sigma-Tau dated as of December 20, 2012 (incorporated by reference to Exhibit 10.1 of our current report on Form 8-K filed on December 27, 2012). †

10.16	Amendment to Exclusive License Agreement dated as of December 20, 2012 between Enteron and McDonald (incorporated by reference to Exhibit 10.4 of our current report on Form 8-K filed on December 27, 2012).
10.17	Amendment to Consulting Agreement dated as of December 20, 2012 between Enteron and McDonald (incorporated by reference to Exhibit 10.5 of our current report on Form 8-K filed on December 27, 2012).
10.18	Contract HHSO100201300023C dated September 18, 2013 between the Company and the U.S. Department of Health and Human Services Biomedical Advanced Research and Development Authority (incorporated by reference to Exhibit 10.1 of our current report on Form 8-K filed on September 24, 2013). †
10.19	Contract HHSN272201300030C dated September 24, 2013 by and between the Company and the National Institutes of Health (incorporated by reference to Exhibit 10.1 of our current report on Form 8-K filed on September 30, 2013). †
10.20	Purchase Agreement dated as of November 18, 2013 between the Company and Lincoln Park Capital Fund, LLC (incorporated by reference to Exhibit 10.1 of our current report on Form 8-K filed on November 21, 2013).
10.21	Registration Rights Agreement dated as of November 18, 2013 between the Company and Lincoln Park Capital Fund, LLC (incorporated by reference to Exhibit 10.2 of our current report on Form 8-K filed on November 21, 2013)
10.22	Employment Agreement dated as of January 6, 2014 between the Company and Richard Straube, M.D. (incorporated by reference to Exhibit 10.1 of our current report on Form 8-K filed on January 8, 2014). **
10.23	Asset Purchase Agreement dated September 3, 2014 between the Company and Hy Biopharma, Inc. (incorporated by reference to Exhibit 10.1 of our current report on Form 8-K filed on September 5, 2014). †
10.24	Registration Rights Agreement dated September 3, 2014 between the Company and Hy Biopharma, Inc. (incorporated by reference to Exhibit 10.2 of our current report on Form 8-K filed on September 5, 2014).
10.25	Contract HHSN272201400039C dated September 17, 2014 by and between the Company and the National Institutes of Health (incorporated by reference to Exhibit 10.1 of our current report on Form 8-K filed on September 23, 2014). †
10.26	Lease Agreement dated November 21, 2014, between the Company and CPP II, LLC. (incorporated by reference to Exhibit 10.42 of our annual report on Form 10-K for the year ended December 31, 2014).
10.27	2015 Equity Incentive Plan, as amended on June 9, 2015 (incorporated by reference to Exhibit 10.1 of our current report on Form 8-K filed on June 19, 2015).
10.28	Form of Equity Purchase Agreement dated as of July 29, 2015 between the Company and Kodiak Capital Group, LLC, Kingsbrook Opportunities Master Fund LP and River North Equity, LLC (incorporated by reference to Exhibit 10.1 of our current report on Form 8-K filed on July 31, 2015).
10.29	Form of Registration Rights Agreement dated as of July 29, 2015 between the Company and Kodiak Capital Group, LLC, Kingsbrook Opportunities Master Fund LP and River North Equity, LLC (incorporated by reference to Exhibit 10.2 of our current report on Form 8-K filed on July 31, 2015).
10.30	Form of Promissory Note dated as of July 29, 2015 made by the Company in favor of Kodiak Capital Group, LLC, Kingsbrook Opportunities Master Fund LP and River North Equity, LLC (incorporated by reference to Exhibit 10.3 of our current report on Form 8-K filed on July 31, 2015).
10.31	Purchase Agreement dated as of March 22, 2016 between the Company and Lincoln Park Capital Fund, LLC. *
10.32	Registration Rights Agreement dated as of March 22, 2016 between the Company and Lincoln Park Capital Fund, LLC. *

21.1	Subsidiaries of the Company. *
23.1	Consent of EisnerAmper LLP. *
31.1	Certification of the Chief Executive Officer pursuant to Exchange Act rule 13(a)-14(a) (under Section 302 of the Sarbanes-Oxley Act of 2002). *
31.2	Certification of the Chief Financial Officer pursuant to Exchange Act rule 13(a)-14(a) (under Section 302 of the Sarbanes-Oxley Act of 2002). *
32.1	Certification of the Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. *
32.2	Certification of the Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. *

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\* Filed herewith.

\*\* Indicates management contract or compensatory plan.

† Portions of this exhibit have been omitted pursuant to a request for confidential treatment.

## SIGNATURES

In accordance with Section 13 or 15(d) of the Exchange Act, the registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

SOLIGENIX, INC.

By: /s/ Christopher J. Schaber  
Christopher J. Schaber, PhD  
Chief Executive Officer and President

Date: March 24, 2016

In accordance with the Exchange Act, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated and on the dates indicated.

<u>Name</u>	<u>Capacity</u>	<u>Date</u>
<u>/s/ Christopher J. Schaber</u> Christopher J. Schaber, PhD	Chairman of the Board, Chief Executive Officer and President (principal executive officer)	March 24, 2016
<u>/s/ Keith L. Brownlie</u> Keith L. Brownlie, CPA	Director	March 24, 2016
<u>/s/ Marco Brughera</u> Marco Brughera, DVM	Director	March 24, 2016
<u>/s/ Gregg A. Lapointe</u> Gregg A. Lapointe, CPA	Director	March 24, 2016
<u>/s/ Robert J. Rubin</u> Robert J. Rubin, MD	Director	March 24, 2016
<u>/s/ Jerome B. Zeldis</u> Jerome Zeldis, MD, PhD	Director	March 24, 2016
<u>/s/ Joseph M. Warusz</u> Joseph M. Warusz, CPA	Vice President of Finance, Acting Chief Financial Officer and Corporate Secretary (principal accounting officer)	March 24, 2016



**SOLIGENIX, INC. AND SUBSIDIARIES  
CONSOLIDATED FINANCIAL STATEMENTS**

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**Soligenix, Inc. and Subsidiaries**  
**Consolidated Balance Sheets**  
**As of December 31,**

	<u>2015</u>	<u>2014</u>
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 4,921,545	\$ 5,525,094
Contracts and grants receivable	1,985,212	794,767
Prepaid expenses	244,267	172,928
Total current assets	<u>7,151,024</u>	<u>6,492,789</u>
Office furniture and equipment, net	47,366	51,510
Intangible assets, net	188,732	409,949
Total assets	<u>\$ 7,387,122</u>	<u>\$ 6,954,248</u>
<b>Liabilities and shareholders' deficiency</b>		
Current liabilities:		
Accounts payable	\$ 4,379,936	\$ 3,003,545
Notes payable	292,719	-
Warrant liability	2,434,101	3,789,562
Accrued compensation	298,675	315,030
Total current liabilities	<u>7,405,431</u>	<u>7,108,137</u>
Commitments and contingencies		
Shareholders' deficiency:		
Preferred stock, 350,000 shares authorized; none issued or outstanding	-	-
Common stock, \$.001 par value; 50,000,000 shares authorized; 31,269,522 and 23,936,568 shares issued and outstanding in 2015 and 2014, respectively	31,270	23,937
Additional paid-in capital	146,828,000	138,868,523
Accumulated deficit	(146,877,579)	(139,046,349)
Total shareholders' deficiency	<u>(18,309)</u>	<u>(153,889)</u>
Total liabilities and shareholders' deficiency	<u>\$ 7,387,122</u>	<u>\$ 6,954,248</u>

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

**Soligenix, Inc. and Subsidiaries**  
**Consolidated Statements of Operations**  
**For the Years Ended December 31,**

	<u>2015</u>	<u>2014</u>
Revenues:		
Grant revenue	\$ 127,042	\$ 1,497,548
Contract revenue	8,641,348	5,545,468
Total revenues	<u>8,768,390</u>	<u>7,043,016</u>
Cost of revenues	<u>(6,882,204)</u>	<u>(5,313,855)</u>
Gross profit	<u>1,886,186</u>	<u>1,729,161</u>
Operating expenses:		
Research and development	5,399,839	5,086,535
Acquired in-process research and development	-	4,000,000
General and administrative	3,596,623	3,403,975
Total operating expenses	<u>8,996,462</u>	<u>12,490,510</u>
Loss from operations	<u>(7,110,276)</u>	<u>(10,761,349)</u>
Other income (expense):		
Change in fair value of warrant liability	(1,201,870)	3,436,195
Interest income (expense), net	(8,017)	1,310
Total other income (expense)	<u>(1,209,887)</u>	<u>3,437,505</u>
Net loss before income taxes	<u>(8,320,163)</u>	<u>(7,323,844)</u>
Income tax benefit	488,933	616,872
Net loss	<u>\$ (7,831,230)</u>	<u>\$ (6,706,972)</u>
Basic net loss per share	<u>\$ (0.30)</u>	<u>\$ (0.32)</u>
Diluted net loss per share	<u>\$ (0.30)</u>	<u>\$ (0.43)</u>
Basic weighted average common shares outstanding	<u>26,065,765</u>	<u>20,638,421</u>
Diluted weighted average common shares outstanding	<u>26,065,765</u>	<u>23,584,944</u>

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

**Soligenix, Inc. and Subsidiaries**  
**Consolidated Statements of Changes in Shareholders' Deficiency**  
**For the Years Ended December 31, 2015 and 2014**

	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Total
	Shares	Par Value			
<b>Balance, December 31, 2013</b>	<b>19,626,439</b>	<b>\$ 19,626</b>	<b>\$ 130,549,930</b>	<b>\$ (132,339,377)</b>	<b>\$ (1,769,821)</b>
Issuance of common stock pursuant to Lincoln Park Equity line	230,743	231	470,244	-	470,475
Issuance of common stock to vendors	121,000	121	255,919	-	256,040
Issuance of shares from exercise of stock options	36,672	37	28,041	-	28,078
Reclassification of warrant liability upon partial exercise of warrants issued in unit offering	-	-	1,055,490	-	1,055,490
Fair value of common stock warrants issued to vendors	-	-	4,775	-	4,775
Issuance of common stock to collaboration partner	43,067	43	99,959	-	100,002
Shares issued in connection with acquisition of in-process research and development	1,849,113	1,849	3,748,151	-	3,750,000
Issuance of common stock from cashless exercise of warrants	143,004	143	(143)	-	-
Share-based compensation expense	-	-	720,150	-	720,150
Common stock issued in unit offering, net of offering costs of \$344,808	1,886,530	1,887	1,936,007	-	1,937,894
Net loss	-	-	-	(6,706,972)	(6,706,972)
<b>Balance, December 31, 2014</b>	<b>23,936,568</b>	<b>\$ 23,937</b>	<b>\$ 138,868,523</b>	<b>\$ (139,046,349)</b>	<b>\$ (153,889)</b>
Issuance of common stock pursuant to Lincoln Park Equity line	841,348	842	1,338,335	-	1,339,177
Issuance of common stock pursuant to Equity Line Purchase Agreement	4,545,770	4,546	2,495,454	-	2,500,000
Stock issuance cost associated with Equity Line Purchase Agreement	-	-	(453,162)	-	(453,162)
Issuance of common stock to vendors	166,282	166	232,046	-	232,212
Issuance of shares from exercise of stock options	33,125	33	19,217	-	19,250
Issuance of shares for exercise of warrants	1,746,429	1,746	1,115,775	-	1,117,521
Reclassification of warrant liability upon partial exercise of warrants issued in unit offering	-	-	2,557,331	-	2,557,331
Share-based compensation expense	-	-	654,481	-	654,481
Net loss	-	-	-	(7,831,230)	(7,831,230)
<b>Balance, December 31, 2015</b>	<b>31,269,522</b>	<b>\$ 31,270</b>	<b>\$ 146,828,000</b>	<b>\$ (146,877,579)</b>	<b>\$ (18,309)</b>

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

**Soligenix, Inc. and Subsidiaries**  
**Consolidated Statements of Cash Flows**  
**For the Years Ended December 31,**

	<b>2015</b>	<b>2014</b>
<b>Operating activities:</b>		
Net loss	\$ (7,831,230)	\$ (6,706,972)
Adjustments to reconcile net loss to net cash used in operating activities:		
Amortization and depreciation	247,458	245,787
Charge for common stock issued for collaboration agreement	-	100,002
Common stock issued in exchange for services	232,212	256,040
Issuance of common stock for acquisition of in-process research and development	-	4,000,000
Warrants issued to vendor	-	4,775
Amortization of discount on debt	10,648	-
Share-based compensation	654,481	720,150
Change in fair value of warrant liability	1,201,870	(3,436,195)
Change in operating assets and liabilities:		
Contracts and grants receivable	(1,190,445)	72,319
Taxes receivable	-	750,356
Prepaid expenses	(71,339)	(37,537)
Accounts payable	1,376,391	1,483,255
Accrued compensation	(16,354)	81,291
Total adjustments and change in operating assets and liabilities	2,444,922	4,240,243
Net cash used in operating activities	(5,386,308)	(2,466,729)
<b>Investing activities:</b>		
Payments for acquisition of in-process research and development	-	(250,000)
Purchases of furniture and office equipment	(22,098)	(50,866)
Net cash used in investing activities	(22,098)	(300,866)
<b>Financing activities:</b>		
Net proceeds from sale of units containing common stock and warrants	-	1,937,894
Net proceeds from issuance of common stock pursuant to the equity lines	3,839,177	470,475
Stock issuance cost associated with equity line purchase agreement	(171,091)	-
Proceeds from exercise of options and warrants	1,136,771	28,078
Net cash provided by financing activities	4,804,857	2,436,447
Net decrease in cash and cash equivalents	(603,549)	(331,148)
Cash and cash equivalents at beginning of period	5,525,094	5,856,242
Cash and cash equivalents at end of period	\$ 4,921,545	\$ 5,525,094
<b>Supplemental disclosure of non cash investing and financing activities:</b>		
Notes payable issued in connection with Equity Purchase Agreement	\$ 282,071	\$ -
Reclassification of warrant liability to additional paid-in capital upon partial exercise of warrants issued in unit offering	\$ 2,557,331	\$ 1,055,490
<b>Supplemental information:</b>		
Cash paid for state income taxes	\$ 7,542	\$ 6,994

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

**Soligenix, Inc. and Subsidiaries**  
**Notes to Consolidated Financial Statements**

**Note 1. Nature of Business**

Basis of Presentation

Soligenix, Inc. (the “Company”) is a late-stage biopharmaceutical company focused on developing and commercializing products to treat rare diseases where there is an unmet medical need. The Company maintains two active business segments: BioTherapeutics and Vaccines/BioDefense.

The Company’s BioTherapeutics business segment is developing a first-in-class photodynamic therapy (SGX301) utilizing safe visible light for the treatment of cutaneous T-cell lymphoma (“CTCL”), proprietary formulations of oral beclomethasone 17,21-dipropionate (“BDP”) for the prevention/treatment of gastrointestinal (“GI”) disorders characterized by severe inflammation, including pediatric Crohn’s disease (SGX203) and acute radiation enteritis (SGX201), and its novel innate defense regulator (“IDR”) technology (SGX942) for the treatment of oral mucositis in head and neck cancer.

The Company’s Vaccines/BioDefense business segment includes active development programs for RiVax™, its ricin toxin vaccine candidate, VeloThrax™, an anthrax vaccine candidate, OrbeShield™, a GI acute radiation syndrome (“GI ARS”) therapeutic candidate and SGX943, a melioidosis therapeutic candidate. The development of the vaccine programs currently supported by the heat stabilization technology, known as ThermoVax™, under existing and on-going government contract funding. With the government contract from the National Institute of Allergy and Infectious Diseases (“NIAID”), the Company will attempt to advance the development of RiVax™ to protect against exposure to ricin toxin. The Company plans to use the funds received under the government contracts with the Biomedical Advanced Research and Development Authority (“BARDA”) and NIAID to advance the development of OrbeShield™ for the treatment of GI ARS.

The Company generates revenues under government grants primarily from the National Institutes of Health (the “NIH”) and government contracts from BARDA and NIAID.

The Company is subject to risks common to companies in the biotechnology industry including, but not limited to, development of new technological innovations, dependence on key personnel, protections of proprietary technology, compliance with the United States Food and Drug Administration (the U.S. “FDA”) regulations, litigation, and product liability.

Liquidity

As of December 31, 2015, the Company had cash and cash equivalents of \$4,921,545 as compared to \$5,525,094 as of December 31, 2014, representing a decrease of \$603,549 or 11%. The decrease in cash was primarily due to net cash used in operations of \$5,386,308 partially offset by cash provided by financing activities of \$4,804,857. As of December 31, 2015, the Company had working capital of \$2,179,694, which excludes a non-cash warrant liability of \$2,434,101, as compared to working capital of \$3,174,214 as of December 31, 2014, representing a decrease of \$994,520 or 31%. The decrease in working capital was primarily the result of expenditures to support the completion of the Phase 2 clinical trial of SGX942 and the initiation of the pivotal Phase 3 clinical trial of SGX301 for the treatment of CTCL offset by the \$4,804,857 in various financing activities.

Based on the Company’s current rate of cash outflows, cash on hand, proceeds from its government contract and grant programs, availability of funds from equity lines and proceeds from the state of New Jersey Technology Business Tax Certificate Transfer Program, management believes that its current cash will be sufficient to meet the anticipated cash needs for working capital and capital expenditures for at least the next twelve months.

Management's business plan can be outlined as follows:

- Complete enrollment and report preliminary results in the pivotal Phase 3 clinical trial of SGX301 for the treatment of CTCL;
- Initiate a Phase 3 clinical trial of oral BDP, known as SGX203, for the treatment of pediatric Crohn's disease;
- Continue to collect the long-term follow-up safety data from the SGX942 Phase 2 proof-of-concept study in the treatment of oral mucositis in head and neck cancer patients and publish the findings from this study;
- Obtain FDA agreement on a pivotal Phase 2b/3 protocol of SGX942 in the treatment of oral mucositis in head and neck cancer patients;
- Continue development of RiVax™ in combination with ThermoVax® technology to develop new heat stable vaccines in biodefense and infectious diseases with the potential to collaborate and/or partner with other companies in these areas;
- Advance the preclinical and manufacturing development of OrbeShield™ as a biodefense medical countermeasure for the treatment of GI ARS;
- Continue to apply for and secure additional government funding for each of our BioTherapeutics and Vaccines/BioDefense programs through grants, contracts and/or procurements;
- Acquire or in-license new clinical-stage compounds for development; and
- Explore other business development and merger/acquisition strategies.

The Company's plans with respect to its liquidity management include, but are not limited to the following:

- The Company has up to \$43.0 million in active government contract funding still available to support its associated research programs through 2016 and beyond. The Company plans to submit additional contract and grant applications for further support of its programs with various funding agencies;
- The Company has continued to use equity instruments to provide a portion of the compensation due to vendors and collaboration partners and expects to continue to do so for the foreseeable future;
- The Company will pursue Net Operating Loss ("NOL") sales in the state of New Jersey pursuant to its Technology Business Tax Certificate Transfer Program. Based on the receipt of \$488,933 in proceeds of the sale of NJ NOL in 2015, the Company expects to participate in the program during 2016 and beyond;
- The Company has an aggregate of \$20.2 million available from equity facilities through 2019; and
- The Company may seek additional capital in the private and/or public equity markets, pursue government contracts and grants as well as business development activities to continue its operations, respond to competitive pressures, develop new products and services, and to support new strategic partnerships. The Company is currently evaluating additional equity financing opportunities on an ongoing basis and may execute them when appropriate. However, there can be no assurances that the Company can consummate such a transaction, or consummate a transaction at favorable pricing.

## **Note 2. Summary of Significant Accounting Policies**

### Principles of Consolidation

The consolidated financial statements include Soligenix, Inc., and its wholly and majority owned subsidiaries. All significant intercompany accounts and transactions have been eliminated as a result of consolidation.

### Operating Segments

Operating segments are defined as components of an enterprise about which separate financial information is available that is evaluated on a regular basis by the chief operating decision maker, or decision making group, in deciding how to allocate resources to an individual segment and in assessing the performance of the segment. The Company divides its operations into two operating segments: BioTherapeutics and Vaccines/BioDefense.

### Cash and Cash Equivalents

The Company considers all highly liquid investments with maturities of three months or less when purchased to be cash equivalents.

### Contracts and Grants Receivable

Contracts and grants receivable consist of unbilled amounts due from various grants from the NIH and contracts from BARDA and NIAID, an institute of NIH, for costs incurred prior to the period end under reimbursement contracts. The amounts were billed to the respective governmental agencies in the month subsequent to period end and collected shortly thereafter. Accordingly, no allowance for doubtful amounts has been established. If amounts become uncollectible, they are charged to operations.

### Intangible Assets

One of the most significant estimates or judgments that the Company makes is whether to capitalize or expense patent and license costs. The Company makes this judgment based on whether the technology has alternative future uses, as defined in Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) 730, *Research and Development*. Based on this consideration, the Company capitalizes payments made to legal firms that are engaged in filing and protecting rights to intellectual property and rights for its current products in both the domestic and international markets. The Company believes that patent rights are one of its most valuable assets. Patents and patent applications are a key component of intellectual property, especially in the early stage of product development, as their purchase and maintenance gives the Company access to key product development rights from Soligenix’s academic and industry partners. These rights can also be sold or sub-licensed as part of its strategy to partner its products at each stage of development as the intangible assets have alternative future use. The legal costs incurred for these patents consist of work associated with filing new patents designed to protect, preserve and maintain the Company’s rights, and perhaps extend the lives of the patents. The Company capitalizes such costs and amortizes intangibles on a straight-line basis over their expected useful life – generally a period of 11 to 16 years.

These intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable or if the underlying program is no longer being pursued. If the sum of the expected undiscounted cash flows is less than the carrying value of the related asset or group of assets, a loss is recognized for the difference between the fair value and carrying value of the related asset or group of assets. No such write downs have occurred during the years ended December 31, 2015 and 2014.

The Company did not capitalize any patent related costs during the years ended December 31, 2015 or 2014.

### Impairment of Long-Lived Assets

Office furniture and equipment and intangible assets are evaluated and reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. The Company recognizes impairment of long-lived assets in the event the net book value of such assets exceeds the estimated future undiscounted cash flows attributable to such assets. If the sum of the expected undiscounted cash flows is less than the carrying value of the related asset or group of assets, a loss is recognized for the difference between the fair value and the carrying value of the related asset or group of assets. Such analyses necessarily involve significant judgment.

The Company did not record any impairment of long-lived assets for the years ended December 31, 2015 or 2014.

### Fair Value of Financial Instruments

FASB ASC 820 — *Fair Value Measurements and Disclosures*, defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. FASB ASC 820 requires disclosures about the fair value of all financial instruments, whether or not recognized, for financial statement purposes. Disclosures about the fair value of financial instruments are based on pertinent information available to the Company on December 31, 2015. Accordingly, the estimates presented in these financial statements are not necessarily indicative of the amounts that could be realized on disposition of the financial instruments.



FASB ASC 820 specifies a hierarchy of valuation techniques based on whether the inputs to those valuation techniques are observable or unobservable. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect market assumptions. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurement) and the lowest priority to unobservable inputs (Level 3 measurement).

The three levels of the fair value hierarchy are as follows:

- Level 1 — Quoted prices in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date. Level 1 primarily consists of financial instruments whose value is based on quoted market prices such as exchange-traded instruments and listed equities.
- Level 2 — Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. Level 2 includes financial instruments that are valued using models or other valuation methodologies. These models consider various assumptions, including volatility factors, current market prices and contractual prices for the underlying financial instruments. Substantially all of these assumptions are observable in the marketplace, can be derived from observable data or are supported by observable levels at which transactions are executed in the marketplace.
- Level 3 — Unobservable inputs for the asset or liability. Financial instruments are considered Level 3 when their fair values are determined using pricing models, discounted cash flows or similar techniques and at least one significant model assumption or input is unobservable.

The carrying amounts reported in the consolidated balance sheet for cash and cash equivalents, contracts and grants receivable, accounts payable, notes payable and accrued compensation approximate their fair value based on the short-term maturity of these instruments. The Company recognizes all derivative financial instruments as assets or liabilities in the financial statements and measures them at fair value with changes in fair value reflected as current period income or loss unless the derivatives qualify as hedges. As a result, certain warrants issued in connection with the Company's June 2013 registered public offering were accounted for as derivatives. See Note 5, *Warrant Liability*.

#### Revenue Recognition

The Company's revenues are primarily generated from government contracts and grants. The revenue from government contracts and grants is based upon subcontractor costs and internal costs incurred that are specifically covered by the contracts and grants, plus a facilities and administrative rate that provides funding for overhead expenses and management fees. These revenues are recognized when expenses have been incurred by subcontractors or when the Company incurs reimbursable internal expenses that are related to the government contracts and grants.

#### Research and Development Costs

Research and development costs are charged to expense when incurred in accordance with FASB ASC 730, *Research and Development*. Research and development includes costs such as clinical trial expenses, contracted research and license agreement fees with no alternative future use, supplies and materials, salaries, share-based compensation, employee benefits, equipment depreciation and allocation of various corporate costs. Purchased in-process research and development expense represents the value assigned or paid for acquired research and development for which there is no alternative future use as of the date of acquisition.

## Accounting for Warrants

The Company considered FASB ASC 815, *Evaluating Whether an Instrument is Considered Indexed to an Entity's Own Stock*, which provides guidance for determining whether an equity-linked financial instrument (or embedded feature) issued by an entity is indexed to the entity's stock, and, therefore, qualifying for the first part of the scope exception in paragraph 815-10-15. The Company evaluated the provisions in its outstanding warrants and determined that warrants issued in connection with the Company's June 2013 registered public offering contains provisions that protect holders from a decline in the issue price of the Company's common stock (or "down-round" provisions) and contain net settlement provisions. Consequently, these warrants are recognized as liabilities at their fair value on the date of grant and remeasured at fair value on each reporting date. All other warrants issued were indexed to the Company's stock and therefore are accounted for as equity instruments for 2015 and 2014.

## Share-Based Compensation

Stock options are issued with an exercise price equal to the market price on the date of grant. Stock options issued to directors upon re-election vest quarterly for a period of one year (new director issuances are fully vested upon issuance). Stock options issued to employees vest 25% on the grant date, then 25% each subsequent year for a period of three years. Stock options vest over each three-month period from the date of issuance to the end of the three year period. These options have a ten year life for as long as the individuals remain employees or directors. In general, when an employee or director terminates their position, the options will expire within three months, unless otherwise extended by the Board.

From time to time, the Company issues restricted shares of common stock to vendors and consultants as compensation for services performed. Typically these instruments vest upon issuance and therefore the entire share-based compensation expense is recognized upon issuance to the vendors and/or consultants.

Share-based compensation expense for options, warrants and shares of common stock granted to non-employees has been determined in accordance with and FASB ASC 505-50, *Equity-Based Payments to Non-Employees*, and represents the fair value of the consideration received, or the fair value of the equity instruments issued, whichever may be more reliably measured. For options that vest over future periods, the fair value of options granted to non-employees is amortized as the options vest. The fair value is remeasured each reporting period until performance is complete.

For the year ended December 31, 2015 the Company issued 605,340 stock options at a weighted average exercise price of \$1.19 per share. The fair value of options issued during the years ended December 31, 2015 and 2014 was estimated to be \$1.22 and \$1.48 per share, respectively, using the Black-Scholes option-pricing model and the following assumptions:

- a dividend yield of 0%;
- an expected life of 4 years;
- volatilities ranging from 121% - 141% and 128% - 165% for 2015 and 2014, respectively;
- forfeitures at a rate of 12%; and
- risk-free interest rates ranging from .98% to 1.53% and 1.05% to 1.43% for 2015 and 2014, respectively.

The weighted average fair value of each option grant made during 2015 and 2014 was estimated on the date of each grant using the Black-Scholes option pricing model and amortized ratably over the option vesting periods, which approximates the service period.

## Income Taxes

Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. A valuation allowance is established when it is more likely than not that all or a portion of a deferred tax asset will not be realized. A review of all available positive and negative evidence is considered, including the Company's current and past performance, the market environment in which the Company operates, the utilization of past tax credits, and the length of carryback and carryforward periods. Deferred tax assets and liabilities are measured utilizing tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The Company recognizes accrued interest and penalties associated with uncertain tax positions, if any, as part of income tax expense. There were no tax related interest and penalties recorded for 2015 and 2014. Additionally, the Company has not recorded an asset for unrecognized tax benefits or a liability for uncertain tax positions at December 31, 2015 and 2014.

## Earnings Per Share

Basic earnings per share ("EPS") excludes dilution and is computed by dividing income (loss) available to common stockholders by the weighted-average number of common shares outstanding for the period. Diluted EPS reflects the potential dilution that could occur if securities or other contracts to issue common stock were exercised or converted into common stock or resulted in the issuance of common stock that shared in the earnings of the entity. Since there is a significant number of options and warrants outstanding, fluctuations in the actual market price can have a variety of results for each period presented.

	<b>For the Year Ended December 31, 2015</b>	<b>For the Year Ended December 31, 2014</b>
Numerator:		
Net loss for basic earnings per share	\$ (7,831,230)	\$ (6,706,972)
Less change in fair value of warrant liability	-	3,436,195
Net loss for diluted earnings per share	<u>\$ (7,831,230)</u>	<u>\$ (10,143,167)</u>
Denominator:		
Weighted-average basic common shares outstanding	26,065,765	20,638,421
Assumed conversion of dilutive securities:		
Common stock purchase warrants	-	2,946,523
Denominator for diluted earnings per share – adjusted weighted-average shares	<u>26,065,765</u>	<u>23,584,944</u>
Basic net loss per share	<u>(\$ 0.30)</u>	<u>(\$ 0.32)</u>
Diluted net loss per share	<u>(\$ 0.30)</u>	<u>(\$ 0.43)</u>

The following table summarizes potentially dilutive adjustments to the weighted average number of common shares which were excluded from the calculation because their effect would be anti-dilutive.

	<b>For the Year Ended December 31, 2015</b>	<b>For the Year Ended December 31, 2014</b>
Common stock purchase warrants	4,926,119	2,546,143
Stock options	2,768,612	2,488,279
Total	<u>7,694,731</u>	<u>5,034,422</u>

Shares issuable upon the exercise of options and warrants outstanding at December 31, 2015 and 2014 were 2,768,612 and 2,488,279 shares issuable upon the exercise of options, and 4,926,119 and 7,269,500 shares issuable upon the exercise of warrants, respectively. The weighted average exercise price of the Company's stock options and warrants outstanding at December 31, 2015 were \$2.13 and \$0.74 per share, respectively.

## Use of Estimates and Assumptions

The preparation of financial statements in conformity with accounting principles generally accepted in the U.S. requires management to make estimates and assumptions such as the fair value of warrants and stock options and the useful life of intangibles that affect the reported amounts in the financial statements and accompanying notes. Actual results could differ from those estimates.

## Recently Issued Accounting Pronouncements

In August 2014, FASB issued Accounting Standards Update (“ASU”) No. 2014-15, “*Presentation of Financial Statements - Going Concern (Subtopic 205-40): Disclosure of Uncertainties about an Entity’s Ability to Continue as a Going Concern.*” The amendments in this ASU are intended to define management’s responsibility to evaluate whether there is substantial doubt about an entity’s ability to continue as a going concern and to provide related footnote disclosures. Specifically, this ASU provides a definition of the term substantial doubt and requires an assessment for a period of one year after the date that the financial statements are issued (or available to be issued). It also requires certain disclosures when substantial doubt is alleviated as a result of consideration of management’s plans and requires an express statement and other disclosures when substantial doubt is not alleviated. The new standard will be effective for annual periods ending after December 15, 2016, and interim periods thereafter, with early adoption permitted. The Company is currently evaluating the impact the adoption of this standard will have on the Company’s consolidated financial statements and disclosures.

In February 2016, the FASB issued ASU No. 2016-02, “*Leases*” (topic 842). The FASB issued this update to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. The updated guidance is effective for annual periods beginning after December 15, 2018, including interim periods within those fiscal years. Early adoption of the update is permitted. The Company is evaluating the impact of the adoption of this update on our consolidated financial statements and related disclosures.

### Note 3. Intangible Assets

The following is a summary of intangible assets which consists of licenses and patents:

	<b>Weighted Average Remaining Amortization Period (Years)</b>	<b>Cost</b>	<b>Accumulated Amortization</b>	<b>Net Book Value</b>
<b>December 31, 2015</b>				
Licenses	3.8	\$ 462,234	\$ 333,732	\$ 128,502
Patents	1.1	1,893,185	1,832,955	60,230
Total	1.9	<u>\$ 2,355,419</u>	<u>\$ 2,166,687</u>	<u>\$ 188,732</u>
<b>December 31, 2014</b>				
Licenses	4.7	\$ 462,234	\$ 306,495	\$ 155,739
Patents	1.9	1,893,185	1,638,975	254,210
Total	2.6	<u>\$ 2,355,419</u>	<u>\$ 1,945,470</u>	<u>\$ 409,949</u>

Amortization expense was \$221,217 and \$222,563 in 2015 and 2014, respectively.

Based on the balance of licenses and patents at December 31, 2015, the annual amortization expense for each of the succeeding four years is expected to approximate as follows:

<b>Year</b>	<b>Amortization Expense</b>
2016	\$ 61,800
2017	\$ 61,800
2018	\$ 37,300
2019	\$ 27,832

Licence fees and royalty payments are expensed annually as incurred, as the Company does not attribute any future benefits of such payments.

#### **Note 4. Notes Payable**

On July 29, 2015, the Company entered into equity purchase agreements (the “Equity Line Purchase Agreements”) and registration rights agreements with certain accredited institutional investors. Under the Equity Line Purchase Agreements, the investors have agreed to purchase from the Company up to an aggregate of \$10 million worth of shares of common stock, from time to time.

In consideration for entering into the Equity Line Purchase Agreements, the Company issued to the investors promissory notes having an aggregate principal amount of \$300,000, which were recorded as stock issuance costs. The promissory notes are payable by April 15, 2016, with an issuance date present value of \$282,071. The promissory notes did not include terms for interest, therefore the interest was imputed at 9%. Total discount amortization of \$10,648 was recorded as interest expense for the year ended December 31, 2015. The discount is being accreted over the term of the promissory notes using the effective interest rate method.

#### **Note 5. Warrant Liability**

Warrants issued in connection with the Company’s June 2013 registered public offering contain provisions that protect holders from a decline in the issue price of its common stock (or “down-round” provision) and contain net settlement provisions. As a result, the Company accounts for these warrants as liabilities instead of equity instruments. Down-round provisions reduce the exercise or conversion price of a warrant if the Company issues equity shares for a price that is lower than the exercise or conversion price of the warrants. Net settlement provisions allow the holder of the warrant to surrender shares underlying the warrant equal to the exercise price as payment of its exercise price, instead of exercising the warrant by paying cash. The Company evaluates whether warrants to acquire its common stock contain provisions that protect holders from declines in the stock price or otherwise could result in modification of the exercise price and/or shares to be issued under the respective warrant agreements based on a variable that is not an input to the fair value of a “fixed for fixed” option. As a result of the Company’s December 2014 registered public unit offering, the exercise price of warrants outstanding in connection with the public offering completed in June 2013 was adjusted to \$0.61 per share. As a result of the Company’s December 2015 drawdown on the Equity Line Purchase Agreement, the exercise price of warrants outstanding in connection with the public offering completed in June 2013 was adjusted to \$0.51 per share.

The Company recognized these warrants as liabilities at their fair value on the date of grant and remeasures them to fair value on each reporting date.

The Company recognized an initial warrant liability for the warrants issued in connection with the registered public offering completed in June 2013 totaling \$4,827,788, which was based on the June 25, 2013 closing price of a share of the Company’s common stock as reported on OTC Markets of \$0.96. During the year ended December 31, 2014, 143,004 shares of common were issued upon 586,081 warrants exercised on a cashless basis. On January 22, 2014, 250,000 warrants were exercised and on August 19, 2014, 336,081 warrants were exercised. The fair value of the warrants exercised in 2014, or \$1,055,490 was reclassified from warrant liability to additional paid-in capital on the respective exercise dates. During the year ended December 31, 2015, 1,686,429 warrants were exercised. The fair value of the warrants exercised in 2015, or \$2,557,331 was reclassified from warrant liability to additional paid-in capital on the respective exercise dates. On December 31, 2015, the closing price of the Company’s common stock as reported on OTC Markets was \$1.13. Due to the fluctuations in the market value of the Company’s common stock from December 31, 2014 through December 31, 2015, the Company recognized a non-cash expense of \$1,201,870 for the change in the fair value of the warrant liability for 2015.

The assumptions used in connection with the valuation of warrants issued, using the binomial method, were as follows:

	<b>Initial Measurement June 25, 2013</b>	<b>December 31, 2013</b>	<b>December 31, 2014</b>	<b>Exercised During 2015</b>	<b>December 31, 2015</b>
Number of shares underlying the warrants	5,416,851	5,309,438	4,723,357	1,686,429	3,036,925
Exercise price	\$ 1.65	\$ 1.65	\$ 0.61	\$ 0.61	\$ 0.51
Volatility	140%	135%	128%	117-119%	98%
Risk-free interest rate	1.49%	1.75%	1.38%	.81-1.06%	1.19%
Expected dividend yield	0	0	0	0	0
Expected warrant life (years)	5.0	4.5	3.5	3.01-3.33	2.48
Stock price	\$ 0.96	\$ 1.80	\$ 0.98	\$ 1.69-\$2.22	\$ 1.13

*Recurring Level 3 Activity and Reconciliation*

The table below provides a reconciliation of the beginning and ending balances for the liability measured at fair value using significant unobservable inputs (Level 3). The table reflects losses for the year ended December 31, 2015 for the financial liability categorized as Level 3 as of December 31, 2015.

Fair Value Measurements Using Significant Unobservable Inputs (Level 3):

	<b>December 31, 2014</b>	<b>Decrease from Warrants Exercised in 2015</b>	<b>Increase in Fair Value</b>	<b>December 31, 2015</b>
Warrant liability	\$ 3,789,562	\$ (2,557,331)	\$ 1,201,870	\$ 2,434,101

**Note 6. Income Taxes**

The income tax benefit consisted of the following for the years ended December 31, 2015 and December 31, 2014:

	<b>2015</b>	<b>2014</b>
Federal	\$ -	\$ -
State	(488,933)	(616,872)
Income tax benefit	\$ (488,933)	\$ (616,872)

The significant components of the Company's deferred tax assets and liabilities at December 31, 2015 and 2014 are as follows:

	<b>2015</b>	<b>2014</b>
Net operating loss carry forwards	\$ 31,216,000	\$ 29,594,000
Orphan drug and research and development credit carry forwards	4,909,000	3,556,000
Equity based compensation	1,923,000	2,049,000
Intangibles	2,090,000	2,140,000
<b>Total</b>	40,138,000	37,339,000
Valuation allowance	(40,138,000)	(37,339,000)
Net deferred tax assets	\$ -	\$ -

The Company has gross NOLs at December 31, 2015 of approximately \$90,891,000 for federal tax purposes and approximately \$5,273,000 of New Jersey NOL carry forwards remaining after the sale of unused net operating loss carry forwards, portions of which will begin to expire in 2018. In addition, the Company has \$4,909,000 of various tax credits which expire from 2018 to 2034. The Company may be able to utilize its NOLs to reduce future federal and state income tax liabilities. However, these NOLs are subject to various limitations under Internal Revenue Code (“IRC”) Section 382. IRC Section 382 limits the use of NOLs to the extent there has been an ownership change of more than 50 percentage points. In addition, the NOL carry forwards are subject to examination by the taxing authority and could be adjusted or disallowed due to such exams. Although the Company has not undergone an IRC Section 382 analysis, it is likely that the utilization of the NOLs may be substantially limited.

The Company and one or more of its subsidiaries files income tax returns in the U.S. Federal jurisdiction, and various state and local jurisdictions. During the years ended December 31, 2015 and 2014, in accordance with the State of New Jersey’s Technology Business Tax Certificate Program, which allowed certain high technology and biotechnology companies to sell unused net operating loss carryforwards to other New Jersey-based corporate taxpayers, the Company sold New Jersey net operating loss carryforwards, resulting in the recognition of \$488,933 and \$616,872 of income tax benefit, net of transaction costs, respectively. There can be no assurance as to the continuation or magnitude of this program in the future.

Reconciliations of the difference between income tax benefit computed at the federal and state statutory tax rates and the provision for income tax benefit for the years ended December 31, 2015 and 2014 were as follows:

	<u>2015</u>	<u>2014</u>
Income tax loss at federal statutory rate	(34.00)%	(34.00)%
State tax benefits, plus sale of NJ NOLs, net of federal benefit	(6.00)	(6.00)
Subtotal	(40.00)	(40.00)
Valuation allowance	34.12	31.58
Income tax benefit	<u>(5.88)%</u>	<u>(8.42)%</u>

## **Note 7. Shareholders’ Deficiency**

### Preferred Stock

The Company has 350,000 shares of preferred stock authorized, none of which are issued or outstanding.

### Common Stock

The following items represent transactions in the Company’s common stock for the year ended December 31, 2015:

- In February 2015, the Company issued 701,786 shares of common stock in connection with the exercise of stock warrants;
- In March 2015, the Company issued 482,000 shares of common stock in connection with the exercise of stock warrants;
- In March 2015, the Company issued 153,010 shares of common stock pursuant to the Lincoln Park facility;
- In April 2015, the Company issued 356,786 shares of common stock in connection with the exercise of stock warrants;
- In April 2015, the Company issued 8,125 shares of common stock in connection with the exercise of stock options;
- In May 2015, the Company issued 76,364 shares of common stock pursuant to the Lincoln Park facility;
- In June 2015, the Company issued 384,237 shares of common stock pursuant to the Lincoln Park facility;
- In June 2015, the Company issued 198,714 shares of common stock in connection with the exercise of stock warrants;
- In July 2015, the Company issued 7,143 shares of common stock in connection with the exercise of stock warrants;

- In September 2015, the Company issued 609,535 shares of common stock pursuant to an Equity Line Purchase Agreement;
- In September 2015, the Company issued 25,000 shares of common stock in connection with the exercise of stock options;
- In October 2015, the Company issued 151,843 shares of common stock pursuant to the Lincoln Park facility;
- In November 2015, the Company issued 75,894 shares of common stock pursuant to the Lincoln Park facility;
- In December 2015, the Company issued 3,936,235 shares of common stock pursuant to an Equity Line Purchase Agreement;
- In nine separate transactions, the Company issued 166,282 fully vested shares of common stock as partial consideration for services performed.

The following items represent transactions in the Company's common stock for the year ended December 31, 2014:

- In January 2014, the Company issued 77,889 shares of common stock in connection with the cashless exercise of 250,000 stock warrants;
- In March 2014, the Company issued 76,932 shares of common stock pursuant to the Lincoln Park facility;
- In April 2014, the Company issued 76,907 shares of common stock pursuant to the Lincoln Park facility;
- In May 2014, the Company issued 43,067 shares of common stock upon the execution of an agreement to evaluate specific oncology technology;
- In May 2014, the Company issued 29,172 shares of common stock upon the exercise of vested stock options;
- In July 2014, the Company issued 76,904 shares of common stock pursuant to the Lincoln Park facility;
- In July 2014, the Company issued 7,500 shares of common stock upon the exercise of vested stock options;
- In August 2014, the Company issued 65,115 shares of common stock with the cashless exercise of 336,081 stock warrants;
- In September 2014, the Company issued 1,849,113 shares of common stock in connection with the Hy BioPharma Acquisition of in process research and development.
- In December 2014, the Company issued 1,886,530 shares of common stock and 1,169,318 warrants pursuant to a registered direct unit offering of common stock and warrants. The Company received net proceeds of \$1,937,894 from this offering.
- In four separate transactions, the Company issued 121,000 shares of common stock as partial consideration for services performed.

#### Equity Line Purchase Agreement

On July 29, 2015, the Company entered into the Equity Line Purchase Agreements and a registration rights agreements with accredited institutional investors, Kodiak Capital Group, LLC ("Kodiak Capital"), Kingsbrook Opportunities Master Fund LP ("Kingsbrook") and River North Equity, LLC ("River North" and, together with Kodiak Capital and Kingsbrook, the "Investors"). Under the Equity Line Purchase Agreements, the Investors agreed to purchase from the Company up to an aggregate of \$10 million worth of shares of common stock, from time to time. In accordance with the registration rights agreements, the Company has filed with the U.S. Securities and Exchange Commission (the "SEC") a registration statement to register for resale under the Securities Act of 1933, as amended, the shares of common stock that may be issued to the Investors under the Equity Line Purchase Agreements.

From the date that the SEC declared the registration statement effective, in August 2015, until December 31, 2016, the Company has the right to sell up to \$5 million, \$4 million and \$1 million worth of shares of common stock to Kodiak Capital, Kingsbrook and River North, respectively. The Company will control the timing and amount of future sales, if any, of common stock to the Investors under the Equity Line Purchase Agreements. The purchase price of the shares will be equal to eighty percent (80%) of the lowest daily volume weighted average price of the common stock for any trading day during the five consecutive trading days immediately following the date of the Company's notice to the Investors requesting the purchase. There is no minimum amount that the Company may require the Investors to purchase at any one time. The Company may not require the Investors to purchase more than \$3 million worth of shares of common stock during any seven day period and may not require any of the Investors to purchase shares of common stock if such purchase would result in such Investor's beneficial ownership exceeding 9.99% of the outstanding common stock.



The Equity Line Purchase Agreements contain customary representations, warranties, covenants, closing conditions, and indemnification and termination provisions. Each of the Investors has covenanted not to cause or engage in any manner whatsoever any direct or indirect short selling of the common stock.

In consideration for entering into the Equity Line Purchase Agreements, the Company issued to each of the Investors a promissory note having a principal amount equal to 3% of the total amount committed by such Investor. The principal amount due under the promissory notes does not accrue interest and is payable by April 15, 2016 (see Note 4).

The Equity Line Purchase Agreements may be terminated by the Company at any time at its discretion without any cost to the Company.

The initial drawdown under the Equity Line Purchase Agreements was \$500,000 offset by issuance cost of \$453,162, which is included in the Consolidated Statements of Changes in Shareholders' Deficiency. Issuance costs include professional fees, 3% commitment fee (promissory notes payable by April 15, 2016) and SEC filing fees.

In December 2015, a second drawdown was made, whereby under the Equity Line Purchase Agreements, the Company issued 3,936,235 shares of common stock receiving proceeds of \$2,000,000.

On March 7, 2016, in accordance with the terms of the Equity Line Purchase Agreements, the Company exercised its right to terminate the Purchase Agreements upon written notice to the Investors. The Company did not incur any penalties as a result of this termination.

#### Equity Line

In November 2013, the Company entered into a common stock purchase agreement with Lincoln Park Capital Fund, LLC ("Lincoln Park"). The Lincoln Park equity facility allows the Company to require Lincoln Park to purchase up to 75,000 shares ("Regular Purchase") of the Company's common stock every two business days, up to an aggregate of \$10.6 million over approximately a 36-month period depending on certain conditions, including the quoted market price of the Company's common stock on such date. The purchase price for the Regular Purchase shall be equal to the lesser of (i) the lowest sale price of the common shares during the purchase date, or (ii) the average of the three lowest closing sale prices of common shares during the twelve business days prior to the purchase date. Each Regular Purchase shall not exceed \$750,000. Furthermore, for each additional purchase by Lincoln Park, additional commitment shares in commensurate amounts up to a total of 122,070 shares will be issued based upon the relative proportion of the aggregate amount of \$10.0 million. The Regular Purchase amount may be increased up to 100,000 shares of common stock if the closing price of the common shares is not below \$2.50. In addition to the Regular Purchase and provided that the closing price of the common shares is not below \$1.50 on the purchase date, the Company in its sole discretion may direct Lincoln Park on each purchase date to purchase on the next stock trading day ("Accelerate Purchase Date") additional shares of Company stock up to the lesser of (i) two times the number of shares purchased following a Regular Purchase or (ii) 30% of the trading volume of shares traded on the Accelerated Purchase Date as a price equal to the lesser of the closing sale price on the Accelerated Purchase Date or 95% of the Accelerated Purchase Date's volume weighted average price.

During the year ended December 31, 2014, in three separate transactions, the Company sold 225,000 shares of common stock and issued 5,743 commitment shares receiving net proceeds of \$470,475. During the year ended December 31, 2015, in nine separate transactions, the Company sold 825,000 shares of common stock and issued 16,348 commitment shares receiving net proceeds of \$1,339,177.

## Note 8. Stock Option Plans and Warrants to Purchase Common Stock

### Stock Option Plans

The Amended and Restated 2005 Equity Incentive Plan was replaced by the 2015 Equity Incentive Plan (“2015 Plan”), approved in June 2015, and is divided into four separate equity programs:

- 1) the Discretionary Option Grant Program, under which eligible persons may, at the discretion of the Plan Administrator, be granted options to purchase shares of common stock,
- 2) the Salary Investment Option Grant Program, under which eligible employees may elect to have a portion of their base salary invested each year in options to purchase shares of common stock,
- 3) the Automatic Option Grant Program, under which eligible nonemployee Board members will automatically receive options at periodic intervals to purchase shares of common stock, and
- 4) the Director Fee Option Grant Program, under which non-employee Board members may elect to have all, or any portion, of their annual retainer fee otherwise payable in cash applied to a special option grant.

The 2005 Equity Incentive Plan (“2005 Plan”) also was divided into four separate equity programs:

- 1) the Discretionary Option Grant Program, under which eligible persons may, at the discretion of the Plan Administrator, be issued common stock or granted options to purchase shares of common stock,
- 2) the Salary Investment Option Grant Program, under which eligible employees may elect to have a portion of their base salary invested each year in options to purchase shares of common stock,
- 3) the Automatic Option Grant Program, under which eligible nonemployee Board members will automatically receive options at periodic intervals to purchase shares of common stock, and
- 4) the Director Fee Option Grant Program, under which non-employee Board members may elect to have all, or any portion, of their annual retainer fee otherwise payable in cash applied to a special option grant.

In addition, under the 2005 Plan, the Board may elect to pay certain consultants, directors, and employees in common stock. The 2005 Plan was amended in September 2007 to increase the number of options available under the plan to 1,000,000, in 2010 to increase the number of shares under the plan to 1,750,000 and again in 2013 to increase the number shares available under the plan to 3,000,000. The 2015 Plan was approved in June 2015 with 3,000,000 shares available under the plan.

The table below accounts only for transactions occurring as part of the 2015 Plan.

	<b>December 31,</b>	
	<b>2015</b>	<b>2014</b>
<b>Shares available for grant at plan approval</b>	3,000,000	-
Options granted	(477,000)	-
<b>Shares available for grant at end of year</b>	<b>2,523,000</b>	<b>-</b>

The total option activity for the amended 2005 Plan and the 2015 Plan for the years ended December 31, 2015 and 2014 was as follows:

	<b>Options</b>	<b>Weighted Average Options Exercise Price</b>
		<b>Exercise Price</b>
<b>Balance at December 31, 2013</b>	<b>2,051,511</b>	<b>\$ 2.63</b>
Granted	637,495	1.79
Exercised	(36,672)	0.77
Forfeited	(164,055)	3.13
<b>Balance at December 31, 2014</b>	<b>2,488,279</b>	<b>\$ 2.40</b>
Granted	605,340	1.19
Exercised	(33,125)	0.58
Forfeited	(291,882)	3.13
<b>Balance at December 31, 2015</b>	<b>2,768,612</b>	<b>\$ 2.13</b>

As of December 31, 2015, there were 2,082,199 options exercisable with a weighted average exercise price of \$2.33, a weighted average remaining contractual term of 7.28 years and an intrinsic value of \$256,347. The intrinsic value of options exercised during the years ended December 31, 2015 and 2014 was \$18,181 and \$47,241, respectively. As of December 31, 2015, there were 2,768,612 options outstanding and expected to vest with a weighted average exercise price of \$2.13, weighted average remaining term of 7.28 years and an intrinsic value of \$257,369. The aggregate intrinsic value represents the total pre-tax intrinsic value (the difference between the closing price of our common stock on the last trading day on December 31, 2015 and the exercise price, multiplied by the number of in-the-money options) what would have been received by the option holders had all option holders exercised their options on December 31, 2015. This amount changes based on the fair market value of our common stock.

The Company awarded 605,340 and 637,495 stock options to new employees and existing Board members during the years ended 2015 and 2014, respectively. During the year ended 2015, under the 2005 Equity Incentive Plan, 29,000 option grants were issued to employees and 99,340 option grants were issued to Board members, and under the 2015 Equity Incentive Plan 477,000 option grants were issued to employees.

The weighted-average exercise price, by price range, for outstanding options to purchase common stock at December 31, 2015 was:

Price Range	Weighted Average Remaining Contractual Life in Years	Outstanding Options	Exercisable Options
\$0.30-\$2.20	8.03	2,170,838	1,484,425
\$2.26-\$4.10	5.36	174,774	174,774
\$4.64-\$9.40	3.22	423,000	423,000
Total	7.28	2,768,612	2,082,199

The Company's share-based compensation expense for the years ended December 31, 2015 and 2014 was recognized as follows:

Share-based Compensation	2015	2014
Research and Development	\$ 260,204	\$ 308,847
General and Administrative	394,277	411,303
Total	\$ 654,481	\$ 720,150

At December 31, 2015, the total compensation cost for stock options not yet recognized was approximately \$773,197 and will be expensed over the next three years.

#### Warrants to Purchase Common Stock

Warrant activity for the years ended December 31, 2015 and 2014 was as follows:

	Warrants	Weighted Average Warrant Exercise Price
<b>Balance at December 31, 2013</b>	8,156,526	\$ 2.17
Granted	1,169,318	1.48
Exercised	(586,081)	1.65
Expired	(1,470,263)	3.49
<b>Balance at December 31, 2014</b>	7,269,500	\$ 1.15
Exercised	(1,746,429)	0.64
Expired	(596,952)	5.59
<b>Balance at December 31, 2015</b>	4,926,119	\$ 0.74

The weighted-average remaining life, by price range, for outstanding warrants at December 31, 2015 was:

Price Range	Weighted Average Contractual Life in Years	Outstanding Warrants	Exercisable Warrants
\$0.51-\$0.53	2.4	3,811,801	3,811,801
\$1.48-\$2.05	4.0	1,114,318	1,114,318
Total	2.7	4,926,119	4,926,119

#### Note 9. Concentrations

At December 31, 2015 and 2014, the Company had deposits in major financial institutions that exceeded the amount under protection by the Securities Investor Protection Corporation (“SIPC”). Currently, the Company is covered up to \$1,000,000 by the SIPC and at times maintains cash balances in excess of the SIPC coverage.

#### Note 10. Commitments and Contingencies

The Company has commitments of approximately \$500,000 at December 31, 2015 for several licensing agreements with consultants and universities. Additionally, the Company has collaboration and license agreements, which upon clinical or commercialization success, may require the payment of milestones of up to \$7.9 million and/or royalties up to 6% of net sales of covered products, if and when achieved. However, there can be no assurance that clinical or commercialization success will occur. As of December 31, 2015 no milestones or royalty payments have been paid or accrued.

In December 2014, the Company entered into a lease agreement through May 31, 2018 for existing and expanded office space. The rent for the first 12 months was approximately \$12,300 per month, or approximately \$20.85 per square foot. This rent increased to approximately \$12,375 per month, or approximately \$20.95 per square foot, for the next 12 months and will increase to approximately \$12,460 per month, or approximately \$21.13 per square foot for the remainder of the lease. The Company paid rent expense in the amount of \$142,935 and \$94,400 for 2015 and 2014, respectively.

On September 3, 2014, the Company entered into an asset purchase agreement with Hy Biopharma, Inc. (“Hy Biopharma”) pursuant to which the Company acquired certain intangible assets, properties and rights of Hy Biopharma related to the development of Hy BioPharma’s synthetic hypericin product. As consideration for the assets acquired, the Company paid \$250,000 in cash and issued 1,849,113 shares of common stock with a fair value based on the Company’s stock price on the date of grant of \$3,750,000. These amounts were charged to research and development expense during the third quarter of 2014 as the assets will be used in the Company’s research and development activities and do not have alternative future use pursuant to generally accepted accounting principles in the United States. Provided all future success-oriented milestones are attained, the Company will be required to make additional payments of up to \$10.0 million, if and when achieved. Payments will be payable in restricted securities of the Company provided that Hy BioPharma’s ownership is not to exceed 19.9% of the Company’s outstanding stock. As of December 31, 2015, no milestone payments have been paid or accrued.

In February 2007, the Company’s Board of Directors authorized the issuance of 50,000 shares of the Company’s common stock to Dr. Schaber immediately prior to the completion of a transaction, or series or a combination of related transactions, negotiated by its Board of Directors whereby, directly or indirectly, a majority of its capital stock or a majority of its assets are transferred from the Company and/or its stockholders to a third party. Dr. Schaber’s amended employment agreement includes the Company’s obligation to issue such shares if such event occurs.

As a result of the above agreements, the Company has future contractual obligations over the next five years as follows:

Year	Research and Development	Property and Other Leases	Total
2016	\$ 100,000	\$ 157,000	\$ 257,000
2017	100,000	151,000	251,000
2018	100,000	52,000	152,000
2019	100,000	-	100,000
2020	100,000	-	100,000
Total	\$ 500,000	\$ 360,000	\$ 860,000

## Note 11. Operating Segments

The Company maintains two active operating segments: BioTherapeutics and Vaccines/BioDefense. Each segment includes an element of overhead costs specifically associated with its operations, with its corporate shared services group responsible for support functions generic to both operating segments.

	For the Years Ended December 31,	
	2015	2014
<b>Revenues</b>		
Vaccines/BioDefense	\$ 8,754,418	\$ 6,756,388
BioTherapeutics	13,972	286,628
Total	<u>\$ 8,768,390</u>	<u>\$ 7,043,016</u>
<b>Income (Loss) from Operations</b>		
Vaccines/BioDefense	\$ 1,263,709	\$ 807,164
BioTherapeutics	(4,487,988)	(7,674,381)
Corporate	(3,885,997)	(3,894,132)
Total	<u>\$ (7,110,276)</u>	<u>\$ (10,761,349)</u>
<b>Amortization and Depreciation Expense</b>		
Vaccines/BioDefense	\$ 39,925	\$ 39,625
BioTherapeutics	199,661	199,196
Corporate	7,872	6,966
Total	<u>\$ 247,458</u>	<u>\$ 245,787</u>
<b>Other Income (Expense), Net</b>		
Corporate	\$ (1,209,887)	\$ 3,437,505
<b>Share-Based Compensation</b>		
Vaccines/BioDefense	\$ 111,960	\$ 114,920
BioTherapeutics	148,244	193,926
Corporate	394,277	411,304
Total	<u>\$ 654,481</u>	<u>\$ 720,150</u>
<b>Identifiable Assets</b>		
Vaccines/BioDefense	\$ 2,123,676	\$ 1,025,220
BioTherapeutics	76,183	204,308
Corporate	5,187,263	5,724,720
Total	<u>\$ 7,387,122</u>	<u>\$ 6,954,248</u>

## Note 12. Subsequent Events

The Company entered into a purchase agreement with Lincoln Park on March 22, 2016 pursuant to which Lincoln Park has committed to purchase up to \$12 million of the Company's common stock. Concurrently with the execution of the purchase agreement, the Company issued 100,000 shares of its common stock to Lincoln Park as a partial fee for its commitment to purchase shares of the Company's common stock under the purchase agreement. The shares that may be sold pursuant to the purchase agreement may be sold by the Company to Lincoln Park at the Company's discretion from time to time over the remaining term of approximately 36 months, once the registration statement registering the resale of the shares of common stock sold to Lincoln Park under the purchase agreement is declared effective by the SEC. The purchase price for the shares that the Company may sell to Lincoln Park under the purchase agreement will fluctuate based on the price of the Company's common stock.

The Company has the right to control the timing and amount of any sales of its shares to Lincoln Park, except that, pursuant to the terms of the agreements with Lincoln Park, the Company would be unable to sell shares to Lincoln Park that would cause Lincoln Park to beneficially own more than 4.99% of the Company's issued and outstanding common stock. Sales of the Company's common stock, if any, to Lincoln Park will depend upon market conditions and other factors to be determined by the Company.

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Shareholders  
Soligenix, Inc.

We have audited the accompanying consolidated balance sheets of Soligenix, Inc. and subsidiaries (the "Company") as of December 31, 2015 and 2014, and the related consolidated statements of operations, shareholders' deficiency, and cash flows for each of the years then ended. The financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Soligenix, Inc. and subsidiaries as of December 31, 2015 and 2014, and the consolidated results of their operations and their cash flows for each of the years then ended, in conformity with accounting principles generally accepted in the United States of America.

/s/ EisnerAmper LLP

Philadelphia, PA  
March 24, 2016

## PURCHASE AGREEMENT

**PURCHASE AGREEMENT** (the "Agreement"), dated as of March 22, 2016, by and between **SOLIGENIX, INC.**, a Delaware corporation (the "Company"), and **LINCOLN PARK CAPITAL FUND, LLC**, an Illinois limited liability company (the "Investor").

**WHEREAS:**

Subject to the terms and conditions set forth in this Agreement, the Company wishes to sell to the Investor, and the Investor wishes to buy from the Company, up to Twelve Million Dollars (\$12,000,000) of the Company's common stock, par value \$0.001 per share (the "Common Stock"). The shares of Common Stock to be purchased hereunder are referred to herein as the "Purchase Shares."

NOW THEREFORE, in consideration of the mutual covenants contained in this Agreement, and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Company and the Investor hereby agree as follows:

**1. CERTAIN DEFINITIONS.**

For purposes of this Agreement, the following terms shall have the following meanings:

(a) "Accelerated Purchase Share Amount" means, with respect to any Accelerated Purchase made pursuant to Section 2(b) hereof, the number of Purchase Shares directed by the Company to be purchased by the Investor on an Accelerated Purchase Notice, which number of Purchase Shares shall not exceed the lesser of (i) 300% of the number of Purchase Shares directed by the Company to be purchased by the Investor pursuant to the corresponding Regular Purchase Notice for the corresponding Regular Purchase referred to in Section 2(b) hereof (subject to the Purchase Share limitations contained in Section 2(a) hereof) and (ii) the Accelerated Purchase Share Percentage multiplied by the trading volume of the Common Stock on the Principal Market during normal trading hours on the Accelerated Purchase Date.

(b) "Accelerated Purchase Date" means, with respect to any Accelerated Purchase made pursuant to Section 2(b) hereof, the Business Day immediately following the applicable Purchase Date with respect to the corresponding Regular Purchase referred to in Section 2(b) hereof.

(c) "Accelerated Purchase Notice" means, with respect to any Accelerated Purchase made pursuant to Section 2(b) hereof, an irrevocable written notice from the Company to the Investor directing the Investor to buy a specified Accelerated Purchase Share Amount on the applicable Accelerated Purchase Date pursuant to Section 2(b) hereof at the applicable Accelerated Purchase Price.

(d) "Accelerated Purchase Share Percentage" means, with respect to any Accelerated Purchase made pursuant to Section 2(b) hereof, 0.30.

(e) "Accelerated Purchase Price" means, with respect to any particular Accelerated Purchase made pursuant to Section 2(b) hereof, the lower of (i) ninety-five percent (95%) of the VWAP during (A) the entire trading day on the Accelerated Purchase Date, if the volume of shares of Common Stock traded on the Principal Market on the Accelerated Purchase Date has not exceeded the Accelerated Purchase Share Volume Maximum, or (B) the portion of the trading day of the Accelerated Purchase Date (calculated starting at the beginning of normal trading hours) until such time at which the volume of shares of Common Stock traded on the Principal Market has exceeded the Accelerated Purchase Share Volume Maximum or (ii) the Closing Sale Price on the Accelerated Purchase Date (to be appropriately adjusted for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split or other similar transaction).

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(f) "Accelerated Purchase Share Volume Maximum" means the number of shares of Common Stock traded on the Principal Market during normal trading hours on the Accelerated Purchase Date equal to (i) the amount of shares of Common Stock properly directed by the Company to be purchased on the Accelerated Purchase Notice, divided by (ii) the Accelerated Purchase Share Percentage (to be appropriately adjusted for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split or other similar transaction).

(g) "Available Amount" means, initially, Twelve Million Dollars (\$12,000,000) in the aggregate, which amount shall be reduced by the Purchase Amount each time the Investor purchases shares of Common Stock pursuant to Section 2 hereof.

(h) "Bankruptcy Law" means Title 11, U.S. Code, or any similar federal or state law for the relief of debtors.

(i) "Business Day" means any day on which the Principal Market is open for trading, including any day on which the Principal Market is open for trading for a period of time less than the customary time.

(j) "Closing Sale Price" means, for any security as of any date, the last closing sale price for such security on the Principal Market as reported by the Principal Market.

(k) "Confidential Information" means any information disclosed by either party to the other party, either directly or indirectly, in writing, orally or by inspection of tangible objects (including, without limitation, documents, prototypes, samples, plant and equipment), which is designated as "Confidential," "Proprietary" or some similar designation. Information communicated orally shall be considered Confidential Information if such information is confirmed in writing as being Confidential Information within ten (10) Business Days after the initial disclosure. Confidential Information may also include information disclosed to a disclosing party by third parties. Confidential Information shall not, however, include any information which (i) was publicly known and made generally available in the public domain prior to the time of disclosure by the disclosing party; (ii) becomes publicly known and made generally available after disclosure by the disclosing party to the receiving party through no action or inaction of the receiving party; (iii) is already in the possession of the receiving party at the time of disclosure by the disclosing party as shown by the receiving party's files and records immediately prior to the time of disclosure; (iv) is obtained by the receiving party from a third party without a breach of such third party's obligations of confidentiality; (v) is independently developed by the receiving party without use of or reference to the disclosing party's Confidential Information, as shown by documents and other competent evidence in the receiving party's possession; or (vi) is required by law to be disclosed by the receiving party, provided that the receiving party gives the disclosing party prompt written notice of such requirement prior to such disclosure and assistance in obtaining an order protecting the information from public disclosure.

(l) "Custodian" means any receiver, trustee, assignee, liquidator or similar official under any Bankruptcy Law.

(m) "DTC" means The Depository Trust Company, or any successor performing substantially the same function for the Company.



(n) “DWAC Shares” means shares of Common Stock that are (i) issued in electronic form, (ii) freely tradable and transferable and without restriction on resale and (iii) timely credited by the Company to the Investor’s or its designee’s specified Deposit/Withdrawal at Custodian (DWAC) account with DTC under its Fast Automated Securities Transfer (FAST) Program, or any similar program hereafter adopted by DTC performing substantially the same function.

(o) “Exchange Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

(p) “Material Adverse Effect” means any material adverse effect on (i) the enforceability of any Transaction Document, (ii) the results of operations, assets, business or financial condition of the Company and its Subsidiaries, taken as a whole, other than any material adverse effect that resulted exclusively from (A) any change in the United States or foreign economies or securities or financial markets in general that does not have a disproportionate effect on the Company and its Subsidiaries, taken as a whole, (B) any change that generally affects the industry in which the Company and its Subsidiaries operate that does not have a disproportionate effect on the Company and its Subsidiaries, taken as a whole, (C) any change arising in connection with earthquakes, hostilities, acts of war, sabotage or terrorism or military actions or any escalation or material worsening of any such hostilities, acts of war, sabotage or terrorism or military actions existing as of the date hereof, (D) any action taken by the Investor, its affiliates or its or their successors and assigns with respect to the transactions contemplated by this Agreement, (E) the effect of any change in applicable laws or accounting rules that does not have a disproportionate effect on the Company and its Subsidiaries, taken as a whole, or (F) any change resulting from compliance with terms of this Agreement or the consummation of the transactions contemplated by this Agreement, or (iii) the Company’s ability to perform in any material respect on a timely basis its obligations under any Transaction Document to be performed as of the date of determination.

(q) “Maturity Date” means the first day of the month immediately following the thirty-six (36) month anniversary of the Commencement Date.

(r) “PEA Period” means the period commencing at 9:30 a.m., Eastern time, on the twentieth (20<sup>th</sup>) Business Day immediately prior to the filing of any post-effective amendment to the Registration Statement (as defined herein) or New Registration Statement (as such term is defined in the Registration Rights Agreement), and ending at 9:30 a.m., Eastern time, on the Business Day immediately following, the effective date of any post-effective amendment to the Registration Statement (as defined herein) or New Registration Statement (as such term is defined in the Registration Rights Agreement).

(s) “Person” means an individual or entity including but not limited to any limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization and a government or any department or agency thereof.

(t) “Principal Market” means the OTCQB operated by the OTC Markets Group, Inc. (or any nationally recognized successor thereto); provided, however, that in the event the Company’s Common Stock is ever listed or traded on The NASDAQ Capital Market, The NASDAQ Global Market, The NASDAQ Global Select Market, the New York Stock Exchange, the NYSE MKT, the NYSE Arca, the OTC Bulletin Board or the OTCQX operated by the OTC Markets Group, Inc. (or any nationally recognized successor to any of the foregoing), then the “Principal Market” shall mean such other market or exchange on which the Company’s Common Stock is then listed or traded.

(u) "Purchase Amount" means, with respect to any Regular Purchase or any Accelerated Purchase made hereunder, the portion of the Available Amount to be purchased by the Investor pursuant to Section 2 hereof.

(v) "Purchase Date" means, with respect to any Regular Purchase made pursuant to Section 2(a) hereof, the Business Day on which the Investor receives by 5:00 p.m., Eastern time, of such Business Day a valid Regular Purchase Notice that the Investor is to buy Purchase Shares pursuant to Section 2(a) hereof.

(w) "Purchase Price" means, with respect to any Regular Purchase made pursuant to Section 2(a) hereof, the lower of: (i) the lowest Sale Price on the applicable Purchase Date and (ii) the arithmetic average of the three (3) lowest Closing Sale Prices for the Common Stock during the twelve (12) consecutive Business Days ending on the Business Day immediately preceding such Purchase Date (in each case, to be appropriately adjusted for any reorganization, recapitalization, non-cash dividend, stock split or other similar transaction that occurs on or after the date of this Agreement).

(x) "Regular Purchase Notice" means, with respect to any Regular Purchase pursuant to Section 2(a) hereof, an irrevocable written notice from the Company to the Investor directing the Investor to buy such applicable amount of Purchase Shares at the applicable Purchase Price as specified by the Company therein on the Purchase Date.

(y) "Sale Price" means any trade price for the shares of Common Stock on the Principal Market as reported by the Principal Market.

(z) "SEC" means the U.S. Securities and Exchange Commission.

(aa) "Securities" means, collectively, the Purchase Shares and the Commitment Shares.

(bb) "Securities Act" means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

(cc) "Subsidiary" means any Person the Company wholly-owns or controls, or in which the Company, directly or indirectly, owns a majority of the voting stock or similar voting interest, in each case that would be disclosable pursuant to Item 601(b)(21) of Regulation S-K promulgated under the Securities Act.

(dd) "Transaction Documents" means, collectively, this Agreement and the schedules and exhibits hereto, the Registration Rights Agreement and the schedules and exhibits thereto, and each of the other agreements, documents, certificates and instruments entered into or furnished by the parties hereto in connection with the transactions contemplated hereby and thereby.

(ee) "Transfer Agent" means American Stock Transfer & Trust Co., or such other Person who is then serving as the transfer agent for the Company in respect of the Common Stock.

(ff) "YWAP" means in respect of an applicable Accelerated Purchase Date, the volume weighted average price of the Common Stock on the Principal Market, as reported on the Principal Market.

## 2. PURCHASE OF COMMON STOCK.

Subject to the terms and conditions set forth in this Agreement, the Company has the right to sell to the Investor, and the Investor has the obligation to purchase from the Company, Purchase Shares as follows:

(a) Commencement of Regular Sales of Common Stock. Upon the satisfaction of the conditions set forth in Sections 7 and 8 hereof (the “Commencement” and the date of satisfaction of such conditions the “Commencement Date”) and thereafter, the Company shall have the right, but not the obligation, to direct the Investor, by its delivery to the Investor of a Regular Purchase Notice from time to time, to purchase up to One Hundred Thousand (100,000) Purchase Shares (each such purchase a “Regular Purchase”), at the Purchase Price on the Purchase Date; provided, however, that (i) the Regular Purchase may be increased to up to One Hundred Fifty Thousand (150,000) Purchase Shares, provided that the Closing Sale Price of the Common Stock is not below \$1.00 on the Purchase Date, (ii) the Regular Purchase may be increased to up to Two Hundred Thousand (200,000) Purchase Shares, provided that the Closing Sale Price of the Common Stock is not below \$1.50 on the Purchase Date, and (iii) the Regular Purchase may be increased to up to Two Hundred Fifty Thousand (250,000) Purchase Shares, provided that the Closing Sale Price of the Common Stock is not below \$2.00 on the Purchase Date (all of which share and dollar amounts shall be appropriately adjusted for any reorganization, recapitalization, non-cash dividend (excluding dividends of rights and shares of capital stock issuable upon exercise of such rights), stock split or other similar transaction); provided, further, however, that the Investor’s committed obligation under any single Regular Purchase shall not exceed Seven Hundred Fifty Thousand Dollars (\$750,000). If the Company delivers any Regular Purchase Notice for a Purchase Amount in excess of the limitations contained in the immediately preceding sentence, such Regular Purchase Notice shall be void *ab initio* to the extent of the amount by which the amount of Purchase Shares set forth in such Regular Purchase Notice exceeds the amount of Purchase Shares which the Company is permitted to include in such Purchase Notice in accordance herewith, and the Investor shall have no obligation to purchase such excess Purchase Shares in respect of such Regular Purchase Notice; provided that the Investor shall remain obligated to purchase the amount of Purchase Shares which the Company is permitted to include in such Regular Purchase Notice. The Company may deliver multiple Regular Purchase Notices to the Investor so long as at least one (1) Business Day has passed since the most recent Regular Purchase was completed. Notwithstanding the foregoing, the Company shall not deliver any Regular Purchase Notices during the PEA Period.

(b) Accelerated Purchases. Subject to the terms and conditions of this Agreement, in addition to purchases of Purchase Shares as described in Section 2(a) above, the Company shall also have the right, but not the obligation, to direct the Investor by the Company’s delivery to the Investor of an Accelerated Purchase Notice from time to time, and the Investor thereupon shall have the obligation, to buy Purchase Shares at the Accelerated Purchase Price on the Accelerated Purchase Date in an amount equal to the Accelerated Purchase Share Amount (each such purchase, an “Accelerated Purchase”). The Company may deliver an Accelerated Purchase Notice to the Investor only on a Purchase Date on which the Company also properly submitted a Regular Purchase Notice for a Regular Purchase and the Closing Sale Price is not below \$0.75 (to be appropriately adjusted for any reorganization, recapitalization, non-cash dividend, stock split or other similar transaction and, effective upon the consummation of any such reorganization, recapitalization, non-cash dividend, stock split or other similar transaction, the Closing Sale Price is not below the lower of (i) the adjusted price and (ii) \$0.75). If the Company delivers any Accelerated Purchase Notice for an Accelerated Purchase Share Amount in excess of the limitations contained in the definition of Accelerated Purchase Share Amount, such Accelerated Purchase Notice shall be void *ab initio* to the extent of the amount by which the number of Purchase Shares set forth in such Accelerated Purchase Notice exceeds the Accelerated Purchase Share Amount which the Company is permitted to include in such Accelerated Purchase Notice in accordance herewith (which shall be confirmed in an Accelerated Purchase Confirmation (defined below)), and the Investor shall have no obligation to purchase such excess Purchase Shares in respect of such Accelerated Purchase Notice; provided that the Investor shall remain obligated to purchase the Accelerated Purchase Share Amount which the Company is permitted to include in such Accelerated Purchase Notice. Upon completion of each Accelerated Purchase Date, the Accelerated Purchase Share Amount and the applicable Accelerated Purchase Price shall be set forth on a confirmation of the Accelerated Purchase to be provided to the Company by the Investor (an “Accelerated Purchase Confirmation”).

(c) Payment for Purchase Shares. For each Regular Purchase, the Investor shall pay to the Company an amount equal to the Purchase Amount with respect to such Regular Purchase as full payment for such Purchase Shares via wire transfer of immediately available funds on the same Business Day that the Investor receives such Purchase Shares, if such Purchase Shares are received by the Investor before 1:00 p.m., Eastern time, or, if such Purchase Shares are received by the Investor after 1:00 p.m., Eastern time, the next Business Day. For each Accelerated Purchase, the Investor shall pay to the Company an amount equal to the Purchase Amount with respect to such Accelerated Purchase as full payment for such Purchase Shares via wire transfer of immediately available funds on the third Business Day following the date that the Investor receives such Purchase Shares. If the Company or the Transfer Agent shall fail for any reason or for no reason to electronically transfer any Purchase Shares as DWAC Shares in respect of a Regular Purchase or Accelerated Purchase (as applicable) within five (5) Business Days following the receipt by the Company of the Purchase Price or Accelerated Purchase Price, respectively, therefor in compliance with this Section 2(c), and if on or after such Business Day the Investor purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Investor of such Purchase Shares that the Investor anticipated receiving from the Company in respect of such Regular Purchase or Accelerated Purchase (as applicable), then the Company shall, within five (5) Business Days after the Investor's request, either (i) pay cash to the Investor in an amount equal to the Investor's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased (the "Cover Price"), at which point the Company's obligation to deliver such Purchase Shares as DWAC Shares shall terminate, or (ii) promptly honor its obligation to deliver to the Investor such Purchase Shares as DWAC Shares and pay cash to the Investor in an amount equal to the excess (if any) of the Cover Price over the total Purchase Price for such Regular Purchase plus the total Accelerated Purchase Price for such Accelerated Purchase (as applicable). The Company shall not issue any fraction of a share of Common Stock upon any Regular Purchase or Accelerated Purchase. If the issuance would result in the issuance of a fraction of a share of Common Stock, the Company shall round such fraction of a share of Common Stock up or down to the nearest whole share. All payments made under this Agreement shall be made in lawful money of the United States of America or wire transfer of immediately available funds to such account as the Company may from time to time designate by written notice in accordance with the provisions of this Agreement. Whenever any amount expressed to be due by the terms of this Agreement is due on any day that is not a Business Day, the same shall instead be due on the next succeeding day that is a Business Day.

(d) Beneficial Ownership Limitation. Notwithstanding anything to the contrary contained in this Agreement, the Company shall not issue or sell, and the Investor shall not purchase or acquire, any shares of Common Stock under this Agreement which, when aggregated with all other shares of Common Stock then beneficially owned by the Investor and its affiliates (as calculated pursuant to Section 13(d) of the Exchange Act and Rule 13d-3 promulgated thereunder), would result in the beneficial ownership by the Investor and its affiliates of more than 4.99% of the then issued and outstanding shares of Common Stock (the "Beneficial Ownership Limitation"). Upon the written or oral request of the Investor, the Company shall promptly (but not later than 24 hours) confirm orally or in writing to the Investor the number of shares of Common Stock then outstanding. The Investor and the Company shall each cooperate in good faith in the determinations required hereby and the application hereof. The Investor's written certification to the Company of the applicability of the Beneficial Ownership Limitation, and the resulting effect thereof hereunder at any time, shall be conclusive with respect to the applicability thereof and such result absent manifest error.

### 3. INVESTOR'S REPRESENTATIONS AND WARRANTIES.

The Investor represents and warrants to the Company that as of the date hereof and as of the Commencement Date:

(a) Investment Purpose. The Investor is acquiring the Securities as principal for its own account and not with a view to or for distributing or reselling such Securities or any part thereof in violation of the Securities Act or any applicable state securities law, will not distribute any of such Securities in violation of the Securities Act or any applicable state securities law and has no direct or indirect arrangement or understandings with any other Persons to distribute or regarding the distribution of such Securities in violation of the Securities Act or any applicable state securities law (this representation and warranty not limiting the Investor's right to sell the Securities at any time pursuant to the Registration Statement described herein or otherwise in compliance with applicable federal and state securities laws). The Investor is acquiring the Securities hereunder in the ordinary course of its business.

(b) Accredited Investor Status. The Investor is an "accredited investor" as that term is defined in Rule 501(a)(3) of Regulation D promulgated under the Securities Act.

(c) Reliance on Exemptions. The Investor understands that the Securities may be offered and sold to it in reliance on specific exemptions from the registration requirements of United States federal and state securities laws and that the Company is relying in part upon the truth and accuracy of, and the Investor's compliance with, the representations, warranties, agreements, acknowledgments and understandings of the Investor set forth herein in order to determine the availability of such exemptions and the eligibility of the Investor to acquire the Securities.

(d) Information. The Investor understands that its investment in the Securities involves a high degree of risk. The Investor (i) is able to bear the economic risk of an investment in the Securities including a total loss thereof, (ii) has such knowledge and experience in financial and business matters that it is capable of evaluating the merits and risks of the proposed investment in the Securities and (iii) has had an opportunity to ask questions of and receive answers from the officers of the Company concerning the financial condition and business of the Company and others matters related to an investment in the Securities. Neither such inquiries nor any other due diligence investigations conducted by the Investor or its representatives shall modify, amend or affect the Investor's right to rely on the Company's representations and warranties contained in Section 4 below. The Investor has sought such accounting, legal and tax advice as it has considered necessary to make an informed investment decision with respect to its acquisition of the Securities.

(e) No Governmental Review. The Investor understands that no U.S. federal or state agency or any other government or governmental agency has passed on or made any recommendation or endorsement of the Securities or the fairness or suitability of an investment in the Securities nor have such authorities passed upon or endorsed the merits of the offering of the Securities.

(f) Transfer or Sale. The Investor understands that (i) the Securities may not be offered for sale, sold, assigned or transferred unless (A) registered pursuant to the Securities Act or (B) an exemption exists permitting such Securities to be sold, assigned or transferred without such registration; (ii) any sale of the Securities made in reliance on Rule 144 may be made only in accordance with the terms of Rule 144 and further, if Rule 144 is not applicable, any resale of the Securities under circumstances in which the seller (or the Person through whom the sale is made) may be deemed to be an underwriter (as that term is defined in the Securities Act) may require compliance with some other exemption under the Securities Act or the rules and regulations of the SEC thereunder.

(g) Validity; Enforcement. This Agreement has been duly and validly authorized, executed and delivered on behalf of the Investor and is a valid and binding agreement of the Investor enforceable against the Investor in accordance with its terms, subject as to enforceability to general principles of equity and to applicable bankruptcy, insolvency, reorganization, moratorium, liquidation and other similar laws relating to, or affecting generally, the enforcement of applicable creditors' rights and remedies.

(h) Residency. The Investor is a resident of the State of Illinois.

(i) No Short Selling. The Investor represents and warrants to the Company that at no time prior to the date of this Agreement has any of the Investor, its agents, representatives or affiliates engaged in or effected, in any manner whatsoever, directly or indirectly, any (i) "short sale" (as such term is defined in Rule 200 of Regulation SHO of the Exchange Act) of the Common Stock or (ii) hedging transaction, which establishes a net short position with respect to the Common Stock.

#### **4. REPRESENTATIONS AND WARRANTIES OF THE COMPANY.**

The Company represents and warrants to the Investor that as of the date hereof and as of the Commencement Date:

(a) Organization and Qualification. The Company and each of its Subsidiaries is an entity duly incorporated or otherwise organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization, with the requisite corporate power and authority to own and use its properties and assets and to carry on its business as currently conducted. Neither the Company nor any of its Subsidiaries is in violation or default of any of the provisions of its respective certificate or articles of incorporation, bylaws or other organizational or charter documents. Each of the Company and its Subsidiaries is duly qualified to conduct business and is in good standing as a foreign corporation or other entity in each jurisdiction in which the nature of the business conducted or property owned by it makes such qualification necessary, except where the failure to be so qualified or in good standing, as the case may be, could not have or reasonably be expected to result in a Material Adverse Effect and no proceeding has been instituted in any such jurisdiction revoking, limiting or curtailing or seeking to revoke, limit or curtail such power and authority or qualification. The Company has no Subsidiaries except as set forth on Schedule 4(a) hereof.

(b) Authorization; Enforcement; Validity. (i) The Company has the requisite corporate power and authority to enter into and perform its obligations under this Agreement, the Registration Rights Agreement and each of the other Transaction Documents, and to issue the Securities in accordance with the terms hereof and thereof, (ii) the execution and delivery of the Transaction Documents by the Company and the consummation by it of the transactions contemplated hereby and thereby, including without limitation, the issuance of the Commitment Shares (as defined below in Section 5(e)) and the reservation for issuance and the issuance of the Purchase Shares issuable under this Agreement, have been duly authorized by the Company's Board of Directors and no further consent or authorization is required by the Company, its Board of Directors or its stockholders, (iii) this Agreement has been, and each other Transaction Document shall be on the Commencement Date, duly executed and delivered by the Company and (iv) this Agreement constitutes, and each other Transaction Document upon its execution on behalf of the Company, shall constitute, the valid and binding obligations of the Company enforceable against the Company in accordance with their terms, except as such enforceability may be limited by general principles of equity or applicable bankruptcy, insolvency, reorganization, moratorium, liquidation or similar laws relating to, or affecting generally, the enforcement of creditors' rights and remedies. The Board of Directors of the Company has approved the resolutions (the "Signing Resolutions") substantially in the form as set forth as Exhibit C attached hereto to authorize this Agreement and the transactions contemplated hereby. The Signing Resolutions are valid, in full force and effect and have not been modified or supplemented in any respect. The Company has delivered to the Investor a true and correct copy of a unanimous written consent adopting the Signing Resolutions executed by all of the members of the Board of Directors of the Company. Except as set forth in this Agreement, no other approvals or consents of the Company's Board of Directors, any authorized committee thereof, and/or stockholders is necessary under applicable laws and the Company's Restated Certificate of Incorporation and/or Bylaws to authorize the execution and delivery of this Agreement or any of the transactions contemplated hereby, including, but not limited to, the issuance of the Commitment Shares and the issuance of the Purchase Shares.

(c) Capitalization. As of the date hereof, the authorized capital stock of the Company is set forth in Schedule 4(c) hereof. Except as disclosed in the SEC Documents (as defined below), (i) no shares of the Company's capital stock are subject to preemptive rights or any other similar rights or any liens or encumbrances suffered or permitted by the Company, (ii) there are no outstanding debt securities, (iii) there are no outstanding options, warrants, scrip, rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities or rights convertible into, any shares of capital stock of the Company or any of its Subsidiaries, or contracts, commitments, understandings or arrangements by which the Company or any of its Subsidiaries is or may become bound to issue additional shares of capital stock of the Company or any of its Subsidiaries or options, warrants, scrip, rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities or rights convertible into, any shares of capital stock of the Company or any of its Subsidiaries, (iv) there are no agreements or arrangements under which the Company or any of its Subsidiaries is obligated to register the sale of any of their securities under the Securities Act (except the Registration Rights Agreement), (v) there are no outstanding securities or instruments of the Company or any of its Subsidiaries which contain any redemption or similar provisions, and there are no contracts, commitments, understandings or arrangements by which the Company or any of its Subsidiaries is or may become bound to redeem a security of the Company or any of its Subsidiaries, (vi) there are no securities or instruments containing anti-dilution or similar provisions that will be triggered by the issuance of the Securities as described in this Agreement and (vii) the Company does not have any stock appreciation rights or "phantom stock" plans or agreements or any similar plan or agreement. The Company has furnished to the Investor true and correct copies of the Company's Restated Certificate of Incorporation, as amended and as in effect on the date hereof (the "Certificate of Incorporation"), and the Company's Bylaws, as amended and as in effect on the date hereof (the "Bylaws"), and summaries of the terms of all securities convertible into or exercisable for Common Stock, if any, and copies of any documents containing the material rights of the holders thereof in respect thereto.

(d) Issuance of Securities. Upon issuance and payment therefor in accordance with the terms and conditions of this Agreement, the Purchase Shares shall be validly issued, fully paid and nonassessable and free from all taxes, liens, charges, restrictions, rights of first refusal and preemptive rights with respect to the issue thereof, with the holders being entitled to all rights accorded to a holder of Common Stock. Upon issuance in accordance with the terms and conditions of this Agreement, the Commitment Shares (as defined below in Section 5(e)) shall be validly issued, fully paid and nonassessable and free from all taxes, liens, charges, restrictions, rights of first refusal and preemptive rights with respect to the issue thereof, with the holders being entitled to all rights accorded to a holder of Common Stock. 5,000,000 shares of Common Stock have been duly authorized and reserved for issuance upon purchase under this Agreement as Purchase Shares. 500,000 shares of Common Stock (subject to equitable adjustment for any reorganization, recapitalization, non-cash dividend, stock split or other similar transaction) have been duly authorized and reserved for issuance as Additional Commitment Shares in accordance with this Agreement.

(e) No Conflicts. The execution, delivery and performance of the Transaction Documents by the Company and the consummation by the Company of the transactions contemplated hereby and thereby (including, without limitation, the reservation for issuance and issuance of the Purchase Shares and the Commitment Shares) will not (i) result in a violation of the Certificate of Incorporation, any Certificate of Designations, Preferences and Rights of any outstanding series of preferred stock of the Company or the Bylaws or (ii) conflict with, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any agreement, indenture or instrument to which the Company or any of its Subsidiaries is a party, or result in a violation of any law, rule, regulation, order, judgment or decree (including federal and state securities laws and regulations and the rules and regulations of the Principal Market applicable to the Company or any of its Subsidiaries) or by which any property or asset of the Company or any of its Subsidiaries is bound or affected, except in the case of conflicts, defaults, terminations, amendments, accelerations, cancellations and violations under clause (ii), which could not reasonably be expected to result in a Material Adverse Effect. Neither the Company nor its Subsidiaries is in violation of any term of or in default under its Certificate of Incorporation, any Certificate of Designation, Preferences and Rights of any outstanding series of preferred stock of the Company or Bylaws or their organizational charter or bylaws, respectively. Neither the Company nor any of its Subsidiaries is in violation of any term of or is in default under any material contract, agreement, mortgage, indebtedness, indenture, instrument, judgment, decree or order or any statute, rule or regulation applicable to the Company or its Subsidiaries, except for possible conflicts, defaults, terminations or amendments that could not reasonably be expected to have a Material Adverse Effect. The business of the Company and its Subsidiaries is not being conducted, and shall not be conducted, in violation of any law, ordinance, regulation of any governmental entity, except for possible violations, the sanctions for which either individually or in the aggregate could not reasonably be expected to have a Material Adverse Effect. Except as specifically contemplated by this Agreement and as required under the Securities Act or applicable state securities laws and the rules and regulations of the Principal Market, the Company is not required to obtain any consent, authorization or order of, or make any filing or registration with, any court or governmental agency or any regulatory or self-regulatory agency in order for it to execute, deliver or perform any of its obligations under or contemplated by the Transaction Documents in accordance with the terms hereof or thereof. Except as set forth elsewhere in this Agreement, all consents, authorizations, orders, filings and registrations which the Company is required to obtain pursuant to the preceding sentence shall be obtained or effected on or prior to the Commencement Date. Since one year prior to the date hereof, the Company has not received nor delivered any notices or correspondence from or to the Principal Market. The Principal Market has not commenced any delisting proceedings against the Company.

(f) SEC Documents; Financial Statements. The Company has filed all reports, schedules, forms, statements and other documents required to be filed by the Company under the Securities Act and the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the twelve months preceding the date hereof (or such shorter period as the Company was required by law or regulation to file such material) (the foregoing materials, including the exhibits thereto and documents incorporated by reference therein, being collectively referred to herein as the “SEC Documents”) on a timely basis or has received a valid extension of such time of filing and has filed any such SEC Documents prior to the expiration of any such extension. As of their respective dates and to the best of the Company’s knowledge, the SEC Documents complied in all material respects with the requirements of the Securities Act and the Exchange Act, as applicable. None of the SEC Documents, when filed, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The financial statements of the Company included in the SEC Documents comply in all material respects with applicable accounting requirements and the rules and regulations of the SEC with respect thereto as in effect at the time of filing. Such financial statements have been prepared in accordance with United States generally accepted accounting principles applied on a consistent basis during the periods involved (“GAAP”), except as may be otherwise specified in such financial statements or the notes thereto and except that unaudited financial statements may not contain all footnotes required by GAAP, and fairly present in all material respects the financial position of the Company and its consolidated Subsidiaries as of and for the dates thereof and the results of operations and cash flows for the periods then ended, subject, in the case of unaudited statements, to normal, immaterial, year-end audit adjustments. Except as set forth in the SEC Documents, the Company has received no notices or correspondence from the SEC for the one year preceding the date hereof. The SEC has not commenced any enforcement proceedings against the Company or any of its Subsidiaries.



(g) Absence of Certain Changes. Except as disclosed in the SEC Documents, since December 31, 2014, there has been no material adverse change in the business, properties, operations, financial condition or results of operations of the Company or its Subsidiaries. The Company has not taken any steps, and does not currently expect to take any steps, to seek protection pursuant to any Bankruptcy Law nor does the Company or any of its Subsidiaries have any knowledge or reason to believe that its creditors intend to initiate involuntary bankruptcy or insolvency proceedings. The Company is financially solvent and is generally able to pay its debts as they become due.

(h) Absence of Litigation. There is no action, suit, proceeding, inquiry or investigation before or by any court, public board, government agency, self-regulatory organization or body pending or, to the knowledge of the Company or any of its Subsidiaries, threatened against or affecting the Company, the Common Stock or any of the Company's or its Subsidiaries' officers or directors in their capacities as such, which could reasonably be expected to have a Material Adverse Effect.

(i) Acknowledgment Regarding Investor's Status. The Company acknowledges and agrees that the Investor is acting solely in the capacity of arm's length purchaser with respect to the Transaction Documents and the transactions contemplated hereby and thereby. The Company further acknowledges that the Investor is not acting as a financial advisor or fiduciary of the Company (or in any similar capacity) with respect to the Transaction Documents and the transactions contemplated hereby and thereby and any advice given by the Investor or any of its representatives or agents in connection with the Transaction Documents and the transactions contemplated hereby and thereby is merely incidental to the Investor's purchase of the Securities. The Company further represents to the Investor that the Company's decision to enter into the Transaction Documents has been based solely on the independent evaluation by the Company and its representatives and advisors.

(j) No General Solicitation; No Integrated Offering. Neither the Company, nor any of its affiliates, nor any Person acting on its or their behalf, has engaged in any form of general solicitation or general advertising (within the meaning of Regulation D under the Securities Act) in connection with the offer or sale of the Securities. Neither the Company, nor any of its affiliates, nor any Person acting on their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would require registration of the offer and sale of any of the Securities under the Securities Act, whether through integration with prior offerings or otherwise, or cause this offering of the Securities to be integrated with prior offerings by the Company in a manner that would require stockholder approval pursuant to the rules of the Principal Market on which any of the securities of the Company are listed or designated. The issuance and sale of the Securities hereunder does not contravene the rules and regulations of the Principal Market.

(k) Intellectual Property Rights. The Company and its Subsidiaries own or possess adequate rights or licenses to use all material trademarks, trade names, service marks, service mark registrations, service names, patents, patent rights, copyrights, inventions, licenses, approvals, governmental authorizations, trade secrets and rights necessary to conduct their respective businesses as now conducted. None of the Company's material trademarks, trade names, service marks, service mark registrations, service names, patents, patent rights, copyrights, inventions, licenses, approvals, governmental authorizations, trade secrets or other intellectual property rights have expired or terminated, or, by the terms and conditions thereof, could expire or terminate within two years from the date of this Agreement. The Company and its Subsidiaries do not have any knowledge of any infringement by the Company or its Subsidiaries of any material trademark, trade name rights, patents, patent rights, copyrights, inventions, licenses, service names, service marks, service mark registrations, trade secret or other similar rights of others, or of any such development of similar or identical trade secrets or technical information by others, and there is no claim, action or proceeding being made or brought against, or to the Company's knowledge, being threatened against, the Company or its Subsidiaries regarding trademark, trade name, patents, patent rights, invention, copyright, license, service names, service marks, service mark registrations, trade secret or other infringement, which could reasonably be expected to have a Material Adverse Effect.

(l) Environmental Laws. The Company and its Subsidiaries (i) are in compliance with any and all applicable foreign, federal, state and local laws and regulations relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants ("Environmental Laws"), (ii) have received all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses and (iii) are in compliance with all terms and conditions of any such permit, license or approval, except where, in each of the three foregoing clauses, the failure to so comply could not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect.

(m) Title. The Company and its Subsidiaries have good and marketable title in fee simple to all real property owned by them and good and marketable title in all personal property owned by them that is material to the business of the Company and its Subsidiaries, in each case free and clear of all liens, encumbrances and defects ("Liens") and, except for Liens as do not materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company and its Subsidiaries and Liens for the payment of federal, state or other taxes, the payment of which is neither delinquent nor subject to penalties. Any real property and facilities held under lease by the Company and its Subsidiaries are held by them under valid, subsisting and enforceable leases with which the Company and its Subsidiaries are in compliance with such exceptions as are not material and do not interfere with the use made and proposed to be made of such property and buildings by the Company and its Subsidiaries.

(n) Insurance. The Company and each of its Subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as management of the Company believes to be prudent and customary in the businesses in which the Company and its Subsidiaries are engaged. Neither the Company nor any such Subsidiary has been refused any insurance coverage sought or applied for and neither the Company nor any such Subsidiary has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not materially and adversely affect the condition, financial or otherwise, or the earnings, business or operations of the Company and its Subsidiaries, taken as a whole.

(o) Regulatory Permits. The Company and its Subsidiaries possess all material certificates, authorizations and permits issued by the appropriate federal, state or foreign regulatory authorities necessary to conduct their respective businesses, and neither the Company nor any such Subsidiary has received any notice of proceedings relating to the revocation or modification of any such certificate, authorization or permit.

(p) Tax Status. The Company and each of its Subsidiaries has made or filed all federal and state income and all other material tax returns, reports and declarations required by any jurisdiction to which it is subject (unless and only to the extent that the Company and each of its Subsidiaries has set aside on its books provisions reasonably adequate for the payment of all unpaid and unreported taxes) and has paid all taxes and other governmental assessments and charges that are material in amount, shown or determined to be due on such returns, reports and declarations, except those being contested in good faith and has set aside on its books provision reasonably adequate for the payment of all taxes for periods subsequent to the periods to which such returns, reports or declarations apply. There are no unpaid taxes in any material amount claimed to be due by the taxing authority of any jurisdiction, and the officers of the Company know of no basis for any such claim.

(q) Transactions With Affiliates. Except as set forth in the SEC Documents, none of the officers or directors of the Company and, to the knowledge of the Company, none of the employees of the Company is presently a party to any transaction with the Company or any Subsidiary (other than for services as employees, officers and directors), including any contract, agreement or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, or otherwise requiring payments to or from any officer, director or such employee or, to the knowledge of the Company, any entity in which any officer, director, or any such employee has a substantial interest or is an officer, director, trustee or partner, in each case in excess of \$120,000 other than for (i) payment of salary or consulting fees for services rendered, (ii) reimbursement for expenses incurred on behalf of the Company and (iii) other employee benefits, including stock option agreements under any stock option plan of the Company.

(r) Application of Takeover Protections. The Company and its board of directors have taken or will take prior to the Commencement Date all necessary action, if any, in order to render inapplicable any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or other similar anti-takeover provision under the Certificate of Incorporation or the laws of the state of its incorporation which is or could become applicable to the Investor as a result of the transactions contemplated by this Agreement, including, without limitation, the Company's issuance of the Securities and the Investor's ownership of the Securities.

(s) Disclosure. Except with respect to the material terms and conditions of the transactions contemplated by the Transaction Documents that will be timely publicly disclosed by the Company, the Company confirms that neither it nor any other Person acting on its behalf has provided the Investor or its agents or counsel with any information that it believes constitutes or might constitute material, non-public information which is not otherwise disclosed in the Registration Statement or the SEC Documents. The Company understands and confirms that the Investor will rely on the foregoing representation in effecting purchases and sales of securities of the Company. All of the disclosure furnished by or on behalf of the Company to the Investor regarding the Company, its business and the transactions contemplated hereby, including the disclosure schedules to this Agreement, is true and correct and does not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements made therein, in light of the circumstances under which they were made, not misleading. The press releases disseminated by the Company during the twelve months preceding the date of this Agreement taken as a whole do not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made and when made, not misleading. The Company acknowledges and agrees that the Investor neither makes nor has made any representations or warranties with respect to the transactions contemplated hereby other than those specifically set forth in Section 3 hereof.

(t) Foreign Corrupt Practices. Neither the Company, nor to the knowledge of the Company, any agent or other Person acting on behalf of the Company, has (i) directly or indirectly, used any funds for unlawful contributions, gifts, entertainment or other unlawful expenses related to foreign or domestic political activity, (ii) made any unlawful payment to foreign or domestic government officials or employees or to any foreign or domestic political parties or campaigns from corporate funds, (iii) failed to disclose fully any contribution made by the Company (or made by any Person acting on its behalf of which the Company is aware) which is in violation of law, or (iv) violated in any material respect any provision of the Foreign Corrupt Practices Act of 1977, as amended.

(u) DTC Eligibility. The Company, through the Transfer Agent, currently participates in the DTC Fast Automated Securities Transfer (FAST) Program and the Common Stock can be transferred electronically to third parties via the DTC Fast Automated Securities Transfer (FAST) Program.

(v) Sarbanes-Oxley. The Company is in compliance with all provisions of the Sarbanes-Oxley Act of 2002, as amended, which are applicable to it as of the date hereof, except where the failure to be in compliance is not reasonably likely to result in a Material Adverse Effect.

(w) Certain Fees. Except as disclosed on Schedule 4(w), no brokerage or finder's fees or commissions are or will be payable by the Company to any broker, financial advisor or consultant, finder, placement agent, investment banker, bank or other Person with respect to the transactions contemplated by the Transaction Documents. Except as disclosed on Schedule 4(w), the Investor shall have no obligation with respect to any fees or with respect to any claims made by or on behalf of other Persons for fees of a type contemplated in this Section 4(w) that may be due in connection with the transactions contemplated by the Transaction Documents.

(x) Investment Company. The Company is not, and immediately after receipt of payment for the Securities will not be, an "investment company" within the meaning of the Investment Company Act of 1940, as amended.

(y) Listing and Maintenance Requirements. The Common Stock is registered pursuant to Section 12(g) of the Exchange Act, and the Company has taken no action designed to, or which to its knowledge is likely to have the effect of, terminating the registration of the Common Stock pursuant to the Exchange Act nor has the Company received any notification that the SEC is currently contemplating terminating such registration. The Company has not, in the twelve (12) months preceding the date hereof, received any notice from any Person to the effect that the Company is not in compliance with the listing or maintenance requirements of the Principal Market. The Company is, and has no reason to believe that it will not in the foreseeable future continue to be, in compliance with all such listing and maintenance requirements.

(z) Accountants. The Company's accountants are set forth in the SEC Documents and, to the knowledge of the Company, such accountants are an independent registered public accounting firm as required by the Securities Act.

(aa) No Market Manipulation. The Company has not, and to its knowledge no Person acting on its behalf has, (i) taken, directly or indirectly, any action designed to cause or to result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of any of the Securities, (ii) sold, bid for, purchased, or, paid any compensation for soliciting purchases of, any of the Securities, or (iii) paid or agreed to pay to any Person any compensation for soliciting another to purchase any other securities of the Company.

(bb) Shell Company Status. The Company is not currently, and has never been, an issuer identified in Rule 144(i)(1) under the Securities Act.

(cc) No Disqualification Events. None of the Company, any of its predecessors, any affiliated issuer, any director, executive officer, other officer of the Company participating in the offering contemplated hereby, any beneficial owner of 20% or more of the Company's outstanding voting equity securities, calculated on the basis of voting power, nor any promoter (as that term is defined in Rule 405 under the Securities Act) connected with the Company in any capacity at the time of sale (each, an "Issuer Covered Person") is subject to any of the "Bad Actor" disqualifications described in Rule 506(d)(1)(i) to (viii) under the Securities Act (a "Disqualification Event"), except for a Disqualification Event covered by Rule 506(d)(2) or (d)(3) under the Securities Act. The Company has exercised reasonable care to determine whether any Issuer Covered Person is subject to a Disqualification Event.

## 5. COVENANTS.

(a) Filing of Current Report and Registration Statement. The Company agrees that it shall, within the time required under the Exchange Act, file with the SEC a report on Form 8-K relating to the transactions contemplated by, and describing the material terms and conditions of, the Transaction Documents (the "Current Report"). The Company shall also file with the SEC, within thirty (30) calendar days from the date hereof, a new registration statement (the "Registration Statement") covering only the resale of the Purchase Shares and the Commitment Shares in accordance with the terms of the Registration Rights Agreement between the Company and the Investor, dated as of the date hereof (the "Registration Rights Agreement"). The Company shall permit the Investor to review and comment upon the final pre-filing draft version of the Current Report at least two (2) Business Days prior to its filing with the SEC, and the Company shall give due consideration to all such comments. The Investor shall use its reasonable best efforts to comment upon the final pre-filing draft version of the Current Report within one (1) Business Day from the date the Investor receives it from the Company.

(b) Blue Sky. The Company shall take all such action, if any, as is reasonably necessary in order to obtain an exemption for or to register or qualify (i) the issuance of the Commitment Shares and the sale of the Purchase Shares to the Investor under this Agreement and (ii) any subsequent resale of all Commitment Shares and all Purchase Shares by the Investor, in each case, under applicable securities or "Blue Sky" laws of the states of the United States in such states as is reasonably requested by the Investor from time to time, and shall provide evidence of any such action so taken to the Investor.

(c) Listing/DTC. The Company shall promptly secure the listing of all of the Purchase Shares and Commitment Shares to be issued to the Investor hereunder on the Principal Market (subject to official notice of issuance) and upon each other national securities exchange or automated quotation system, if any, upon which the Common Stock is then listed, and shall use reasonable best efforts to maintain, so long as any shares of Common Stock shall be so listed, such listing of all such Securities from time to time issuable hereunder. The Company shall use reasonable best efforts to maintain the listing of the Common Stock on the Principal Market and shall comply in all respects with the Company's reporting, filing and other obligations under the bylaws or rules and regulations of the Principal Market. Neither the Company nor any of its Subsidiaries shall take any action that would reasonably be expected to result in the delisting or suspension of the Common Stock on the Principal Market. The Company shall promptly, and in no event later than the following Business Day, provide to the Investor copies of any notices it receives from the Principal Market regarding the continued eligibility of the Common Stock for listing on the Principal Market; provided, however, that the Company shall not be required to provide the Investor copies of any such notice that the Company reasonably believes constitutes material non-public information and the Company would not be required to publicly disclose such notice in any report or statement filed with the SEC under the Exchange Act (including on Form 8-K) or the Securities Act. The Company shall pay all fees and expenses in connection with satisfying its obligations under this Section 5(c). The Company shall take all action necessary to ensure that its Common Stock can be transferred electronically as DWAC Shares.

(d) Prohibition of Short Sales and Hedging Transactions. The Investor agrees that beginning on the date of this Agreement and ending on the date of termination of this Agreement as provided in Section 11, the Investor and its agents, representatives and affiliates shall not in any manner whatsoever enter into or effect, directly or indirectly, any (i) "short sale" (as such term is defined in Rule 200 of Regulation SHO of the Exchange Act) of the Common Stock or (ii) hedging transaction, which establishes a net short position with respect to the Common Stock.

(e) Issuance of Commitment Shares. In consideration for the Investor's execution and delivery of this Agreement, the Company shall cause to be issued to the Investor a total of 100,000 shares of Common Stock (the "Initial Commitment Shares") immediately upon the execution of this Agreement and shall deliver to the Transfer Agent the Irrevocable Transfer Agent Instructions with respect to the issuance of such Initial Commitment Shares. The Company shall cause to be issued to the Investor up to 500,000 shares of Common Stock (the "Additional Commitment Shares" and, collectively with the Initial Commitment Shares, the "Commitment Shares"), as follows: in connection with each purchase of Purchase Shares hereunder, the Company shall issue to the Investor a number of shares of Common Stock equal to the product of (i) 500,000 and (y) the Purchase Amount Fraction. The "Purchase Amount Fraction" shall mean a fraction, the numerator of which is the Purchase Amount purchased by the Investor with respect to such purchase of Purchase Shares and the denominator of which is Twelve Million Dollars (\$12,000,000). The Additional Commitment Shares shall be equitably adjusted for any reorganization, recapitalization, non-cash dividend, stock split or other similar transaction. For the avoidance of doubt, (1) all of the Initial Commitment Shares shall be fully earned as of the date of this Agreement, whether or not the Commencement shall occur or any Purchase Shares are purchased by the Investor under this Agreement and irrespective of any subsequent termination of this Agreement and (2) the Additional Commitment Shares shall be fully earned as of the date of their issuance pursuant to this Agreement, irrespective of any subsequent termination of this Agreement.

(f) Due Diligence; Non-Public Information. The Investor shall have the right, from time to time as the Investor may reasonably deem appropriate, to perform reasonable due diligence on the Company during normal business hours. The Company and its officers and employees shall provide information and reasonably cooperate with the Investor in connection with any reasonable request by the Investor related to the Investor's due diligence of the Company. Each party hereto agrees not to disclose any Confidential Information of the other party to any third party and shall not use the Confidential Information for any purpose other than in connection with, or in furtherance of, the transactions contemplated hereby. Each party hereto acknowledges that the Confidential Information shall remain the property of the disclosing party and agrees that it shall take all reasonable measures to protect the secrecy of any Confidential Information disclosed by the other party. The Company confirms that neither it nor any other Person acting on its behalf shall provide the Investor or its agents or counsel with any information that constitutes or might constitute material, non-public information, unless a simultaneous public announcement thereof is made by the Company in the manner contemplated by Regulation FD. In the event of a breach of the foregoing covenant by the Company or any Person acting on its behalf (as determined in the reasonable good faith judgment of the Investor), in addition to any other remedy provided herein or in the other Transaction Documents, the Investor shall have the right to make a public disclosure, in the form of a press release, public advertisement or otherwise, of such material, non-public information without the prior approval by the Company; provided the Investor shall have first provided notice to the Company that it believes it has received information that constitutes material, non-public information, the Company shall have at least 24 hours to respond to such notice, and thereafter the Investor shall have provided a draft final version of such press release, public advertisement or otherwise at least 24 hours prior to the Investor's intended public disclosure, and the Investor shall have incorporated any reasonable comments made by the Company on such draft press release, and the Company shall have failed to publicly disclose such material, non-public information prior to such disclosure by the Investor. The Investor shall not have any liability to the Company, any of its Subsidiaries, or any of their respective directors, officers, employees, stockholders or agents, for any such disclosure. The Company understands and confirms that the Investor shall be relying on the foregoing covenants in effecting transactions in securities of the Company.

(g) Purchase Records. The Investor and the Company shall each maintain records showing the remaining Available Amount at any given time and the dates and Purchase Amounts for each Regular Purchase and Accelerated Purchase or shall use such other method, reasonably satisfactory to the Investor and the Company.

(h) Taxes. The Company shall pay any and all transfer, stamp or similar taxes that may be payable with respect to the issuance and delivery of any shares of Common Stock to the Investor made under this Agreement.

(i) Use of Proceeds. The Company will use the net proceeds from the offering as described in the Registration Statement or the SEC Documents.

(j) Other Transactions. The Company shall not enter into, announce or recommend to its stockholders any agreement, plan, arrangement or transaction in or of which the terms thereof would restrict, materially delay, conflict with or impair the ability or right of the Company to perform its obligations under the Transaction Documents, including, without limitation, the obligation of the Company to deliver the Purchase Shares and the Commitment Shares to the Investor in accordance with the terms of the Transaction Documents.

(k) Integration. From and after the date of this Agreement, neither the Company, nor or any of its affiliates will, and the Company shall use its reasonable best efforts to ensure that no Person acting on their behalf will, directly or indirectly, make any offers or sales of any security or solicit any offers to buy any security, under circumstances that would require registration of the offer and sale of any of the Securities under the Securities Act.

(l) Limitation on Variable Rate Transactions and Continuous Offerings. From and after the date of this Agreement until the earlier of (i) the six-month anniversary of the date of this Agreement (irrespective of any earlier termination of this Agreement) and (ii) a Change-in-Control, the Company shall be prohibited from effecting or entering into an agreement to effect any issuance by the Company or any of its Subsidiaries of Common Stock or Common Stock Equivalents (or a combination of units thereof) involving a Variable Rate Transaction, other than in connection with an Exempt Issuance. From and after the date of this Agreement until the earlier of (i) the 24-month anniversary of the date of this Agreement (irrespective of any earlier termination of this Agreement) and (ii) a Change-in-Control, the Company shall be prohibited from effecting or entering into an agreement to effect any issuance by the Company or any of its Subsidiaries of Common Stock or Common Stock Equivalents (or a combination of units thereof) in a Continuous Offering, other than in connection with an Exempt Issuance. “Common Stock Equivalents” means any securities of the Company or its Subsidiaries which entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, rights, options, warrants or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock. “Variable Rate Transaction” means a transaction in which the Company issues or sells any debt or equity securities that are convertible into, exchangeable or exercisable for, or include the right to receive additional shares of Common Stock or Common Stock Equivalents either (i) at a conversion price, exercise price or exchange rate or other price that is based upon and/or varies with the trading prices of or quotations for the Common Stock at any time after the initial issuance of such debt or equity securities, or (ii) with a conversion, exercise or exchange price that is subject to being reset at some future date after the initial issuance of such debt or equity security or upon the occurrence of specified or contingent events directly or indirectly related to the business of the Company or the market for the Common Stock (including, without limitation, any “full ratchet” or “weighted average” anti-dilution provisions). A “Continuous Offering” means a transaction in which the Company enters into any agreement, including, but not limited to, an “equity line of credit”, “at-the-market offering” or other continuous offering or similar offering of Common Stock or Common Stock Equivalents, whereby the Company may sell Common Stock or Common Stock Equivalents at a future determined price. “Exempt Issuance” means the issuance of (a) Common Stock or options to employees, officers, directors or vendors of the Company pursuant to any stock or option plan duly adopted for such purpose, by the Board of Directors or a majority of the members of a committee of directors established for such purpose, (b) securities upon the exercise or exchange of or conversion of any Securities issued hereunder and/or other securities exercisable or exchangeable for or convertible into Common Stock issued and outstanding on the date of this Agreement, provided that such securities have not been amended since the date of this Agreement to increase the number of such securities or to decrease the exercise price, exchange price or conversion price of such securities, (c) securities issued pursuant to acquisitions or strategic transactions approved by the Board of Directors or a majority of the members of a committee of directors established for such purpose, which acquisitions or strategic transactions can have a Variable Rate Transaction component, provided that any such issuance shall only be to a Person (or to the equity holders of a Person) which is, itself or through its subsidiaries, an operating company or an asset in a business synergistic with the business of the Company and shall provide to the Company additional benefits in addition to the investment of funds, but shall not include a transaction in which the Company is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities; and (d) Common Stock issued and sold pursuant to an “at-the-market offering” of Common Stock through a registered broker-dealer. “Change-in-Control” means any one or more of the following: (i) the Company shall, directly or indirectly, in one or more related transactions, (1) consolidate or merge with or into (whether or not the Company is the surviving corporation) another Person, with the result that the holders of the Company’s capital stock immediately prior to such consolidation or merger together beneficially own less than 50% of the outstanding voting power of the surviving or resulting corporation, or (2) sell, lease, license, assign, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Company to another Person, or (3) consummate a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person whereby such other Person acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination) or (ii) the consummation of any purchase, tender or exchange offer by any Person or “group” (as such term is used for purposes of Sections 13(d) and 14(d) of the Exchange Act), whereby such Person or group is or shall become the “beneficial owner” (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of 50% of the aggregate ordinary voting power represented by issued and outstanding Common Stock (not including any shares of Common Stock held by the Person or Persons making or party to, or associated or affiliated with the Persons making or party to, such purchase, tender or exchange offer).



## 6. TRANSFER AGENT INSTRUCTIONS.

(a) On the date of this Agreement, the Company shall issue irrevocable instructions to the Transfer Agent substantially in the form attached hereto as **Exhibit E** to issue the Initial Commitment Shares in accordance with the terms of this Agreement (the “Irrevocable Transfer Agent Instructions”). The certificate(s) representing the Initial Commitment Shares, except as set forth below, shall bear the following restrictive legend (the “Restrictive Legend”):

**THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES HAVE BEEN ACQUIRED FOR INVESTMENT AND MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS, UNLESS SOLD PURSUANT TO: (1) RULE 144 UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (2) AN OPINION OF HOLDER’S COUNSEL, IN A CUSTOMARY FORM, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR APPLICABLE STATE SECURITIES LAWS.**

(b) On the earlier of (i) the Commencement Date and (ii) such time that the Investor shall request, provided all conditions of Rule 144 under the Securities Act are met, the Company shall, no later than one (1) Business Day following the delivery by the Investor to the Company or the Transfer Agent of one or more legended certificates representing the Initial Commitment Shares (which certificates the Investor shall promptly deliver on or prior to the first to occur of the events described in clauses (i) and (ii) of this sentence), as directed by the Investor, issue and deliver (or cause to be issued and delivered) to the Investor, as requested by the Investor, either: (A) a certificate representing such Initial Commitment Shares that is free from all restrictive and other legends or (B) a number of shares of Common Stock equal to the number of Initial Commitment Shares represented by the certificate(s) so delivered by the Investor as DWAC Shares. The Company shall take all actions to carry out the intent and accomplish the purposes of the immediately preceding sentence, including, without limitation, delivering all such legal opinions, consents, certificates, resolutions and instructions to the Transfer Agent, and any successor transfer agent of the Company, as may be requested from time to time by the Investor or necessary or desirable to carry out the intent and accomplish the purposes of the immediately preceding sentence. On the Commencement Date, the Company shall issue to the Transfer Agent, and any subsequent transfer agent, (i) irrevocable instructions in the form substantially similar to those used by the Investor in substantially similar transactions (the “Commencement Irrevocable Transfer Agent Instructions”) and (ii) the notice of effectiveness of the Registration Statement in the form attached as an exhibit to the Registration Rights Agreement (the “Notice of Effectiveness of Registration Statement”), in each case to issue the Initial Commitment Shares, the Additional Commitment Shares and the Purchase Shares in accordance with the terms of this Agreement and the Registration Rights Agreement. All Purchase Shares and Additional Commitment Shares to be issued from and after Commencement to or for the benefit of the Investor pursuant to this Agreement shall be issued only as DWAC Shares. The Company represents and warrants to the Investor that, while this Agreement is effective, no instruction other than the Commencement Irrevocable Transfer Agent Instructions and the Notice of Effectiveness of Registration Statement referred to in this Section 6(b) will be given by the Company to the Transfer Agent with respect to the Initial Commitment Shares, the Additional Commitment Shares or the Purchase Shares from and after Commencement, and the Initial Commitment Shares, the Additional Commitment Shares and the Purchase Shares covered by the Registration Statement shall otherwise be freely transferable on the books and records of the Company. The Company agrees that if the Company fails to fully comply with the provisions of this Section 6(b) within five (5) Business Days of the Investor providing the deliveries referred to above, the Company shall, at the Investor’s written instruction, purchase such shares of Common Stock containing the Restrictive Legend from the Investor at the greater of the (i) Purchase Price or Accelerated Purchase Price paid for such shares of Common Stock (as applicable) and (ii) the Closing Sale Price of the Common Stock on the date of the Investor’s written instruction.

## 7. CONDITIONS TO THE COMPANY'S RIGHT TO COMMENCE SALES OF SHARES OF COMMON STOCK.

The right of the Company hereunder to commence sales of the Purchase Shares on the Commencement Date is subject to the satisfaction of each of the following conditions:

(a) The Investor shall have executed each of the Transaction Documents and delivered the same to the Company;

(b) The Registration Statement covering the resale of the Commitment Shares and Purchase Shares shall have been declared effective under the Securities Act by the SEC and no stop order with respect to the Registration Statement shall be pending or threatened by the SEC; and

(c) The representations and warranties of the Investor shall be true and correct in all material respects as of the date hereof and as of the Commencement Date as though made at that time.

## 8. CONDITIONS TO THE INVESTOR'S OBLIGATION TO PURCHASE SHARES OF COMMON STOCK.

The obligation of the Investor to buy Purchase Shares under this Agreement is subject to the satisfaction of each of the following conditions on or prior to the Commencement Date and, once such conditions have been initially satisfied, there shall not be any ongoing obligation to satisfy such conditions after the Commencement has occurred:

(a) The Company shall have executed each of the Transaction Documents and delivered the same to the Investor;

(b) The Company shall have issued or caused to be issued to the Investor (i) one or more certificates representing the Initial Commitment Shares free from all restrictive and other legends or (ii) a number of shares of Common Stock equal to the number of Initial Commitment Shares as DWAC Shares, in each case in accordance with Section 6(b);

(c) The Common Stock shall be listed or quoted on the Principal Market, trading in the Common Stock shall not have been within the last 365 days suspended by the SEC or the Principal Market, and all Securities to be issued by the Company to the Investor pursuant to this Agreement shall have been approved for listing or quotation on the Principal Market in accordance with the applicable rules and regulations of the Principal Market, subject only to official notice of issuance;

(d) The Investor shall have received the opinions of the Company's legal counsel dated as of the Commencement Date substantially in the form of Exhibit A attached hereto;

(e) The representations and warranties of the Company shall be true and correct in all material respects (except to the extent that any of such representations and warranties is already qualified as to materiality in Section 4 above, in which case, such representations and warranties shall be true and correct without further qualification) as of the date hereof and as of the Commencement Date as though made at that time (except for representations and warranties that speak as of a specific date, which shall be true and correct as of such date) and the Company shall have performed, satisfied and complied with the covenants, agreements and conditions required by the Transaction Documents to be performed, satisfied or complied with by the Company at or prior to the Commencement Date. The Investor shall have received a certificate, executed by the CEO, President or CFO of the Company, dated as of the Commencement Date, to the foregoing effect in the form attached hereto as Exhibit B;

(f) The Board of Directors of the Company shall have adopted resolutions in the form attached hereto as **Exhibit C** which shall be in full force and effect without any amendment or supplement thereto as of the Commencement Date;

(g) As of the Commencement Date, the Company shall have reserved out of its authorized and unissued Common Stock, (i) solely for the purpose of effecting purchases of Purchase Shares hereunder, 5,000,000 shares of Common Stock, and (ii) solely for the purpose of effecting the issuance of Additional Commitment Shares hereunder, 500,000 shares of Common Stock;

(h) The Commencement Irrevocable Transfer Agent Instructions and the Notice of Effectiveness of Registration Statement each shall have been delivered to and acknowledged in writing by the Company and the Company's Transfer Agent (or any successor transfer agent);

(i) The Company shall have delivered to the Investor a certificate evidencing the incorporation and good standing of the Company in the State of Delaware issued by the Secretary of State of the State of Delaware as of a date within ten (10) Business Days of the Commencement Date;

(j) The Company shall have delivered to the Investor a certified copy of the Certificate of Incorporation as certified by the Secretary of State of the State of Delaware within ten (10) Business Days of the Commencement Date;

(k) The Company shall have delivered to the Investor a secretary's certificate executed by the Secretary of the Company, dated as of the Commencement Date, in the form attached hereto as **Exhibit D**;

(l) The Registration Statement covering the resale of the Commitment Shares and Purchase Shares shall have been declared effective under the Securities Act by the SEC and no stop order with respect to the Registration Statement shall be pending or threatened by the SEC. The Company shall have prepared and filed with the SEC, not later than one (1) Business Day after the effective date of the Registration Statement, a final and complete prospectus (the preliminary form of which shall be included in the Registration Statement) and shall have delivered to the Investor a true and complete copy thereof. Such prospectus shall be current and available for the resale by the Investor of all of the Securities covered thereby. The Current Report shall have been filed with the SEC, as required pursuant to Section 5(a). All reports, schedules, registrations, forms, statements, information and other documents required to have been filed by the Company with the SEC at or prior to the Commencement Date pursuant to the reporting requirements of the Exchange Act shall have been filed with the SEC within the applicable time periods prescribed for such filings under the Exchange Act;

(m) No Event of Default has occurred, or any event which, after notice and/or lapse of time, would become an Event of Default has occurred;

(n) All federal, state and local governmental laws, rules and regulations applicable to the transactions contemplated by the Transaction Documents and necessary for the execution, delivery and performance of the Transaction Documents and the consummation of the transactions contemplated thereby in accordance with the terms thereof shall have been complied with, and all consents, authorizations and orders of, and all filings and registrations with, all federal, state and local courts or governmental agencies and all federal, state and local regulatory or self-regulatory agencies necessary for the execution, delivery and performance of the Transaction Documents and the consummation of the transactions contemplated thereby in accordance with the terms thereof shall have been obtained or made, including, without limitation, in each case those required under the Securities Act, the Exchange Act, applicable state securities or "Blue Sky" laws or applicable rules and regulations of the Principal Market, or otherwise required by the SEC, the Principal Market or any state securities regulators;

(o) No statute, regulation, order, decree, writ, ruling or injunction shall have been enacted, entered, promulgated, threatened or endorsed by any federal, state, local or foreign court or governmental authority of competent jurisdiction which prohibits the consummation of or which would materially modify or delay any of the transactions contemplated by the Transaction Documents; and

(p) No action, suit or proceeding before any federal, state, local or foreign arbitrator or any court or governmental authority of competent jurisdiction shall have been commenced or threatened, and no inquiry or investigation by any federal, state, local or foreign governmental authority of competent jurisdiction shall have been commenced or threatened, against the Company, or any of the officers, directors or affiliates of the Company, seeking to restrain, prevent or change the transactions contemplated by the Transaction Documents, or seeking material damages in connection with such transactions.

## **9. INDEMNIFICATION.**

In consideration of the Investor's execution and delivery of the Transaction Documents and acquiring the Securities hereunder and in addition to all of the Company's other obligations under the Transaction Documents, the Company shall defend, protect, indemnify and hold harmless the Investor and all of its affiliates, stockholders, officers, directors, employees and direct or indirect investors and any of the foregoing Person's agents or other representatives (including, without limitation, those retained in connection with the transactions contemplated by this Agreement) (collectively, the "Indemnitees") from and against any and all actions, causes of action, suits, claims, losses, costs, penalties, fees, liabilities and damages, and expenses in connection therewith (irrespective of whether any such Indemnatee is a party to the action for which indemnification hereunder is sought), and including reasonable attorneys' fees and disbursements (the "Indemnified Liabilities"), incurred by any Indemnatee as a result of, or arising out of, or relating to (a) any misrepresentation or breach of any representation or warranty made by the Company in the Transaction Documents or any other certificate, instrument or document contemplated hereby or thereby, (b) any breach of any covenant, agreement or obligation of the Company contained in the Transaction Documents or any other certificate, instrument or document contemplated hereby or thereby, or (c) any cause of action, suit or claim brought or made against such Indemnatee and arising out of or resulting from the execution, delivery, performance or enforcement of the Transaction Documents or any other certificate, instrument or document contemplated hereby or thereby, other than, in the case of clause (c), with respect to Indemnified Liabilities which directly and primarily result from the fraud, gross negligence or willful misconduct of an Indemnatee. The indemnity in this Section 9 shall not apply to amounts paid in settlement of any claim if such settlement is effected without the prior written consent of the Company, which consent shall not be unreasonably withheld, conditioned or delayed. To the extent that the foregoing undertaking by the Company may be unenforceable for any reason, the Company shall make the maximum contribution to the payment and satisfaction of each of the Indemnified Liabilities which is permissible under applicable law. Payment under this indemnification shall be made within thirty (30) days from the date Investor makes written request for it. A certificate containing reasonable detail as to the amount of such indemnification submitted to the Company by Investor shall be conclusive evidence, absent manifest error, of the amount due from the Company to Investor. If any action shall be brought against any Indemnatee in respect of which indemnity may be sought pursuant to this Agreement, such Indemnatee shall promptly notify the Company in writing, and the Company shall have the right to assume the defense thereof with counsel of its own choosing reasonably acceptable to the Indemnatee. Any Indemnatee shall have the right to employ separate counsel in any such action and participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of such Indemnatee, except to the extent that (i) the employment thereof has been specifically authorized by the Company in writing, (ii) the Company has failed after a reasonable period of time to assume such defense and to employ counsel or (iii) in such action there is, in the reasonable opinion of such separate counsel, a material conflict on any material issue between the position of the Company and the position of such Indemnatee, in which case the Company shall be responsible for the reasonable fees and expenses of no more than one such separate counsel.

## 10. EVENTS OF DEFAULT.

An "Event of Default" shall be deemed to have occurred at any time as any of the following events occurs:

(a) the effectiveness of a registration statement registering the resale of the Securities lapses for any reason (including, without limitation, the issuance of a stop order or similar order) or such registration statement (or the prospectus forming a part thereof) is unavailable to the Investor for resale of any or all of the Securities to be issued to the Investor under the Transaction Documents, and such lapse or unavailability continues for a period of ten (10) consecutive Business Days or for more than an aggregate of thirty (30) Business Days in any 365-day period, but excluding a lapse or unavailability where (i) the Company terminates a registration statement after the Investor has confirmed in writing that all of the Securities covered thereby have been resold or (ii) the Company supersedes one registration statement with another registration statement, including (without limitation) by terminating a prior registration statement when it is effectively replaced with a new registration statement covering Securities (provided in the case of this clause (ii) that all of the Securities covered by the superseded (or terminated) registration statement that have not theretofore been resold are included in the superseding (or new) registration statement);

(b) the suspension of the Common Stock from trading on the Principal Market for a period of one (1) Business Day, provided that the Company may not direct the Investor to purchase any shares of Common Stock during any such suspension;

(c) the delisting of the Common Stock from the OTCQB operated by the OTC Markets Group, Inc., provided, however, that the Common Stock is not immediately thereafter trading on the New York Stock Exchange, the NYSE MKT, the NYSE Arca, The NASDAQ Capital Market, The NASDAQ Global Market, The NASDAQ Global Select Market, the OTC Bulletin Board or the OTCQX operated by the OTC Markets Group, Inc. (or nationally recognized successor to any of the foregoing);

(d) the failure for any reason by the Transfer Agent to issue (i) the Additional Commitment Shares to the Investor within five (5) Business Days after the date on which the Investor is entitled to receive such Additional Commitment Shares pursuant to Section 5(e) hereof and (ii) Purchase Shares to the Investor within five (5) Business Days after the applicable Purchase Date or Accelerated Purchase Date (as applicable) on which the Investor is entitled to receive such Purchase Shares;

(e) the Company breaches any representation, warranty, covenant or other term or condition under any Transaction Document if such breach could have a Material Adverse Effect and except, in the case of a breach of a covenant which is reasonably curable, only if such breach continues for a period of at least five (5) Business Days;

(f) if any Person commences a proceeding against the Company pursuant to or within the meaning of any Bankruptcy Law;

(g) if the Company, pursuant to or within the meaning of any Bankruptcy Law, (i) commences a voluntary case, (ii) consents to the entry of an order for relief against it in an involuntary case, (iii) consents to the appointment of a Custodian of it or for all or substantially all of its property, or (iv) makes a general assignment for the benefit of its creditors or is generally unable to pay its debts as the same become due;

(h) a court of competent jurisdiction enters an order or decree under any Bankruptcy Law that (i) is for relief against the Company in an involuntary case, (ii) appoints a Custodian of the Company or for all or substantially all of its property, or (iii) orders the liquidation of the Company or any Subsidiary; or

(i) if at any time the Company is not eligible to transfer its Common Stock electronically as DWAC Shares.

In addition to any other rights and remedies under applicable law and this Agreement, so long as an Event of Default has occurred and is continuing, or if any event which, after notice and/or lapse of time, would become an Event of Default, has occurred and is continuing, the Company shall not deliver to the Investor any Regular Purchase Notice or Accelerated Purchase Notice.

## 11. TERMINATION

This Agreement may be terminated only as follows:

(a) If pursuant to or within the meaning of any Bankruptcy Law, the Company commences a voluntary case or any Person commences a proceeding against the Company, which is not discharged within 90 days, a Custodian is appointed for the Company or for all or substantially all of its property, or the Company makes a general assignment for the benefit of its creditors (any of which would be an Event of Default as described in Sections 10(f), 10(g) and 10(h) hereof), this Agreement shall automatically terminate without any liability or payment to the Company (except as set forth below) without further action or notice by any Person.

(b) In the event that the Commencement shall not have occurred on or before July 15, 2016, due to the failure to satisfy the conditions set forth in Sections 7 and 8 above with respect to the Commencement, this Agreement may be terminated by either party at the close of business on such date or thereafter without liability of such party to the other party (except as set forth below); provided, however, that the right to terminate this Agreement under this Section 11(b) shall not be available to any party if such party is then in breach of any covenant or agreement contained in this Agreement or any representation or warranty of such party contained in this Agreement fails to be true and correct such that the conditions set forth in Section 7(c) or Section 8(e), as applicable, could not then be satisfied.

(c) At any time after the Commencement Date, the Company shall have the option to terminate this Agreement for any reason or for no reason by delivering notice (a "Company Termination Notice") to the Investor electing to terminate this Agreement without any liability whatsoever of any party to any other party under this Agreement (except as set forth below). The Company Termination Notice shall not be effective until one (1) Business Day after it has been received by the Investor.

(d) This Agreement shall automatically terminate on the date that the Company sells and the Investor purchases the full Available Amount as provided herein, without any action or notice on the part of any party and without any liability whatsoever of any party to any other party under this Agreement (except as set forth below).

(e) If, for any reason or for no reason, the full Available Amount has not been purchased in accordance with Section 2 of this Agreement by the Maturity Date, this Agreement shall automatically terminate on the Maturity Date, without any action or notice on the part of any party and without any liability whatsoever of any party to any other party under this Agreement (except as set forth below).

Except as set forth in Sections 11(a) (in respect of an Event of Default under Sections 10(f), 10(g) and 10(h)), 11(d) and 11(e), any termination of this Agreement pursuant to this Section 11 shall be effected by written notice from the Company to the Investor, or the Investor to the Company, as the case may be, setting forth the basis for the termination hereof. The representations and warranties and covenants of the Company and the Investor contained in Sections 3, 4, 5, and 6 hereof, the indemnification provisions set forth in Section 9 hereof and the agreements and covenants set forth in Sections 10, 11 and 12 shall survive the Commencement and any termination of this Agreement. No termination of this Agreement shall (i) affect the Company's or the Investor's rights or obligations under (A) this Agreement with respect to pending Regular Purchases and Accelerated Purchases and the Company and the Investor shall complete their respective obligations with respect to any pending Regular Purchases and Accelerated Purchases under this Agreement and (B) the Registration Rights Agreement, which shall survive any such termination, or (ii) be deemed to release the Company or the Investor from any liability for intentional misrepresentation or willful breach of any of the Transaction Documents.

## 12. MISCELLANEOUS.

(a) Governing Law; Jurisdiction; Jury Trial. The corporate laws of the State of Delaware shall govern all issues concerning the relative rights of the Company and its stockholders. All other questions concerning the construction, validity, enforcement and interpretation of this Agreement and the other Transaction Documents shall be governed by the internal laws of the State of Illinois, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of Illinois or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of Illinois. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the State of Illinois, County of Cook, for the adjudication of any dispute hereunder or under the other Transaction Documents or in connection herewith or therewith, or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to such party at the address for such notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. **EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION HEREWITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.**

(b) Counterparts. This Agreement may be executed in two or more identical counterparts, all of which shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other party; provided that a facsimile signature or signature delivered by e-mail in a ".pdf" format data file shall be considered due execution and shall be binding upon the signatory thereto with the same force and effect as if the signature were an original signature.

(c) Headings. The headings of this Agreement are for convenience of reference and shall not form part of, or affect the interpretation of, this Agreement.

(d) Severability. If any provision of this Agreement shall be invalid or unenforceable in any jurisdiction, such invalidity or unenforceability shall not affect the validity or enforceability of the remainder of this Agreement in that jurisdiction or the validity or enforceability of any provision of this Agreement in any other jurisdiction.

(e) Entire Agreement. The Transaction Documents supersede all other prior oral or written agreements between the Investor, the Company, their affiliates and Persons acting on their behalf with respect to the subject matter thereof, and this Agreement, the other Transaction Documents and the instruments referenced herein contain the entire understanding of the parties with respect to the matters covered herein and therein and, except as specifically set forth herein or therein, neither the Company nor the Investor makes any representation, warranty, covenant or undertaking with respect to such matters. The Company acknowledges and agrees that it has not relied on, in any manner whatsoever, any representations or statements, written or oral, other than as expressly set forth in the Transaction Documents.

(f) Notices. Any notices, consents or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered: (i) upon receipt when delivered personally; (ii) upon receipt when sent by facsimile or email (provided confirmation of transmission is mechanically or electronically generated and kept on file by the sending party); or (iii) one Business Day after deposit with a nationally recognized overnight delivery service, in each case properly addressed to the party to receive the same. The addresses for such communications shall be:

If to the Company:

Soligenix, Inc.  
29 Emmons Drive, Suite C-10  
Princeton, New Jersey 08540  
Telephone: 609-538-8200  
Facsimile: 609-452-6467  
E-mail: cschaber@soligenix.com  
Attention: Christopher J. Schaber, Ph.D., CEO

With a copy to (which shall not constitute notice or service of process):

Duane Morris LLP  
200 South Biscayne Boulevard, Suite 3400  
Miami, Florida 33131-2318  
Telephone: 305-960-2200  
Facsimile: 305-397-1882  
E-mail: ljcroland@duanemorris.com  
Attention: Leslie J. Croland, Esq.

If to the Investor:

Lincoln Park Capital Fund, LLC  
440 North Wells, Suite 410  
Chicago, IL 60654  
Telephone: 312-822-9300  
Facsimile: 312-822-9301  
E-mail: jscheinfeld@lpcfunds.com/jcope@lpcfunds.com  
Attention: Josh Scheinfeld/Jonathan Cope



With a copy to (which shall not constitute notice or service of process):

Greenberg Traurig, LLP  
The MetLife Building  
200 Park Avenue  
New York, NY 10166  
Telephone: (212) 801-9200  
Facsimile: (212) 801-6400  
E-mail: marsicoa@gtlaw.com  
Attention: Anthony J. Marsico, Esq.

If to the Transfer Agent:

American Stock Transfer & Trust Co.  
6201 15<sup>th</sup> Avenue, 2<sup>nd</sup> Floor  
Brooklyn, NY 11219  
Telephone: 718-921-8360  
Facsimile: 718-921-8323  
Attention: Angelia Brown

or at such other address and/or facsimile number and/or to the attention of such other Person as the recipient party has specified by written notice given to each other party three (3) Business Days prior to the effectiveness of such change. Written confirmation of receipt (A) given by the recipient of such notice, consent or other communication, (B) mechanically or electronically generated by the sender's facsimile machine or email account containing the time, date, and recipient facsimile number or email address, as applicable, and an image of the first page of such transmission or (C) provided by a nationally recognized overnight delivery service, shall be rebuttable evidence of personal service, receipt by facsimile or receipt from a nationally recognized overnight delivery service in accordance with clause (i), (ii) or (iii) above, respectively.

(g) Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their respective successors and assigns. The Company shall not assign this Agreement or any rights or obligations hereunder without the prior written consent of the Investor, including by merger or consolidation. The Investor may not assign its rights or obligations under this Agreement.

(h) No Third Party Beneficiaries. This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns, and is not for the benefit of, nor may any provision hereof be enforced by, any other Person.

(i) Publicity. The Company shall afford the Investor and its counsel with the opportunity to review and comment upon, shall consult with the Investor and its counsel on the form and substance of, and shall give due consideration to all such comments from the Investor or its counsel on, any press release, SEC filing or any other public disclosure by or on behalf of the Company relating to the Investor, its purchases hereunder or any aspect of the Transaction Documents or the transactions contemplated thereby, not less than 24 hours prior to the issuance, filing or public disclosure thereof. The Investor must be provided with a final version of any such press release, SEC filing or other public disclosure at least 24 hours prior to any release, filing or use by the Company thereof. The Company agrees and acknowledges that its failure to fully comply with this provision constitutes a Material Adverse Effect.

(j) Further Assurances. Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as the other party may reasonably request in order to consummate and make effective, as soon as reasonably possible, the Commencement, and to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

(k) No Financial Advisor, Placement Agent, Broker or Finder. The Company represents and warrants to the Investor that, except as disclosed in Schedule 4(w), it has not engaged any financial advisor, placement agent, broker or finder in connection with the transactions contemplated hereby. The Investor represents and warrants to the Company that it has not engaged any financial advisor, placement agent, broker or finder in connection with the transactions contemplated hereby. The Company shall be responsible for the payment of any fees or commissions, if any, of any financial advisor, placement agent, broker or finder relating to or arising out of the transactions contemplated hereby. The Company shall pay, and hold the Investor harmless against, any liability, loss or expense (including, without limitation, attorneys' fees and out of pocket expenses) arising in connection with any such claim.

(l) No Strict Construction. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent, and no rules of strict construction will be applied against any party.

(m) Remedies, Other Obligations, Breaches and Injunctive Relief. The Investor's remedies provided in this Agreement, including, without limitation, the Investor's remedies provided in Section 9, shall be cumulative and in addition to all other remedies available to the Investor under this Agreement, at law or in equity (including a decree of specific performance and/or other injunctive relief), no remedy of the Investor contained herein shall be deemed a waiver of compliance with the provisions giving rise to such remedy and nothing herein shall limit the Investor's right to pursue actual damages for any failure by the Company to comply with the terms of this Agreement. The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Investor and that the remedy at law for any such breach may be inadequate. The Company therefore agrees that, in the event of any such breach or threatened breach, the Investor shall be entitled, in addition to all other available remedies, to an injunction restraining any breach, without the necessity of showing economic loss and without any bond or other security being required.

(n) Enforcement Costs. If: (i) this Agreement is placed by the Investor in the hands of an attorney for enforcement or is enforced by the Investor through any legal proceeding; (ii) an attorney is retained to represent the Investor in any bankruptcy, reorganization, receivership or other proceedings affecting creditors' rights and involving a claim under this Agreement; or (iii) an attorney is retained to represent the Investor in any other proceedings whatsoever in connection with this Agreement, then the Company shall pay to the Investor, as incurred by the Investor, all reasonable costs and expenses including attorneys' fees incurred in connection therewith, in addition to all other amounts due hereunder. If this Agreement is placed by the Company in the hands of an attorney for enforcement or is enforced by the Company through any legal proceeding, then the Investor shall pay to the Company, as incurred by the Company, all reasonable costs and expenses including attorneys' fees incurred in connection therewith, in addition to all other amounts due hereunder.

(o) Amendment and Waiver; Failure or Indulgence Not Waiver. No provision of this Agreement may be amended or waived by the parties from and after the date that is one (1) Business Day immediately preceding the filing of the initial Registration Statement with the SEC. Subject to the immediately preceding sentence, (i) no provision of this Agreement may be amended other than by a written instrument signed by both parties hereto and (ii) no provision of this Agreement may be waived other than in a written instrument signed by the party against whom enforcement of such waiver is sought. No failure or delay in the exercise of any power, right or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such power, right or privilege preclude other or further exercise thereof or of any other right, power or privilege.

\* \* \* \* \*

IN WITNESS WHEREOF, the Investor and the Company have caused this Purchase Agreement to be duly executed as of the date first written above.

**THE COMPANY:**

**SOLIGENIX, INC.**

By: /s/ Christopher J. Schaber

Name: Christopher J. Schaber, Ph.D.

Title: President and Chief Executive Officer

**INVESTOR:**

**LINCOLN PARK CAPITAL FUND, LLC**

**BY: LINCOLN PARK CAPITAL, LLC**

**BY: ROCKLEDGE CAPITAL CORPORATION**

By: /s/ Josh Scheinfeld

Name: Josh Scheinfeld

Title: President

## **SCHEDULES**

Schedule 4(a) Subsidiaries  
Schedule 4(c) Capitalization  
Schedule 4(w) Agent's Fees

## **EXHIBITS**

Exhibit A Form of Company Counsel Opinion  
Exhibit B Form of Officer's Certificate  
Exhibit C Form of Resolutions of Board of Directors of the Company  
Exhibit D Form of Secretary's Certificate  
Exhibit E Form of Letter to Transfer Agent

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**DISCLOSURE SCHEDULES**

Schedule 4(a) – Subsidiaries

Schedule 4(c) – Capitalization

Schedule 4(w) – Agent’s Fees

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## EXHIBIT A

### FORM OF COMPANY COUNSEL OPINION

Capitalized terms used herein but not defined herein, have the meaning set forth in the Purchase Agreement. Based on the foregoing, and subject to the assumptions and qualifications set forth herein, we are of the opinion that:

1. The Company is a corporation existing and in good standing under the laws of the State of Delaware. The Company is qualified to do business as a foreign corporation and is in good standing in the State of New Jersey.

2. The Company has the corporate power to execute and deliver, and perform its obligations under, each Transaction Document to which it is a party. The Company has the corporate power to conduct its business as, to the best of our knowledge, it is now conducted, and to own and use the properties owned and used by it.

3. The execution, delivery and performance by the Company of the Transaction Documents to which it is a party have been duly authorized by all necessary corporate action on the part of the Company. The execution and delivery of the Transaction Documents by the Company, the performance of the obligations of the Company thereunder and the consummation by it of the transactions contemplated therein have been duly authorized and approved by the Company's Board of Directors and no further consent, approval or authorization of the Company, its Board of Directors or its stockholders is required. The Transaction Documents to which the Company is a party have been duly executed and delivered by the Company and are the valid and binding obligations of the Company, enforceable against the Company in accordance with their terms except as such enforceability may be limited by general principles of equity or applicable bankruptcy, insolvency, reorganization, moratorium, liquidation or similar laws relating to, or affecting creditor's rights and remedies.

4. The execution, delivery and performance by the Company of the Transaction Documents, the consummation by the Company of the transactions contemplated thereby including the offering, sale and issuance of the Commitment Shares and the Purchase Shares in accordance with the terms and conditions of the Purchase Agreement, and fulfillment and compliance with terms of the Transaction Documents, does not and shall not: (i) conflict with, constitute a breach of or default (or an event which, with the giving of notice or lapse of time or both, constitutes or could constitute a breach or a default), under (a) the Certificate of Incorporation or the Bylaws of the Company, (b) any material agreement, note, lease, mortgage, deed or other material instrument to which to our knowledge the Company is a party or by which the Company or any of its assets are bound ("Material Agreements"), (ii) result in any violation of any statute, law, rule or regulation applicable to the Company, or (iii) to our knowledge, violate any order, writ, injunction or decree applicable to the Company or any of its subsidiaries.

5. The issuance of the Purchase Shares and the Commitment Shares pursuant to the terms and conditions of the Transaction Documents has been duly authorized by all necessary corporate action on the part of the Company. The Initial Commitment Shares are validly issued, fully paid and non-assessable, and to our knowledge, free of all taxes, liens, charges, restrictions, rights of first refusal and preemptive rights. 500,000 shares of Common Stock have been properly reserved for issuance as Additional Commitment Shares under the Purchase Agreement. 5,000,000 shares of Common Stock have been properly reserved for issuance as Purchase Shares under the Purchase Agreement. When issued in accordance with the Purchase Agreement, the Additional Commitment Shares shall be validly issued, fully paid and non-assessable, to our knowledge, free of all taxes, liens, charges, restrictions, rights of first refusal and preemptive rights. When issued and paid for in accordance with the Purchase Agreement, the Purchase Shares shall be validly issued, fully paid and non-assessable, to our knowledge, free of all taxes, liens, charges, restrictions, rights of first refusal and preemptive rights. To our knowledge, the execution and delivery of the Registration Rights Agreement do not, and the performance by the Company of its obligations thereunder shall not, give rise to any rights of any other Person for the registration under the Securities Act of any shares of Common Stock or other securities of the Company which have not been waived.

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6. As of the date hereof, the authorized capital stock of the Company consists of 50,000,000 shares of common stock, par value \$0.001 per share per share, of which to our knowledge 31,269,522 shares are issued and outstanding.

7. Assuming the accuracy of the representations and your compliance with the covenants made by you in the Transaction Documents, the offering, sale and issuance of the Commitment Shares and the Purchase Shares to you pursuant to the Transaction Documents is exempt from registration under the Securities Act.

8. Other than that which has been obtained and completed prior to the date hereof, no authorization, approval, consent, filing or other order of any federal or state governmental body, regulatory agency, or stock exchange or market, or any court, or, to our knowledge, any third party is required to be obtained by the Company to enter into and perform its obligations under the Transaction Documents or for the Company to issue and sell the Commitment Shares and the Purchase Shares as contemplated by the Transaction Documents.

9. The Common Stock is registered pursuant to Section 12(g) of the Exchange Act. To our knowledge, since one year preceding the date of the Purchase Agreement, the Company has been in compliance with the reporting requirements of the Exchange Act applicable to it. To our knowledge, since one year preceding the date of the Purchase Agreement, the Company has not received any written notice from any Person stating that the Company has not been in compliance with any of the rules and regulations (including the requirements for continued listing) of the Principal Market.

10. The Company is not, and after giving effect to the issuance of the Commitment Shares and the Purchase Shares and the application of the proceeds as described in the Prospectus, will not be, an "investment company," as that term is defined in the Investment Company Act of 1940, as amended.

11. Except as described in the Registration Statement and the Prospectus or the SEC Documents, none of the Material Agreements grants to any person the right to require the Company to file a registration statement under the Securities Act with respect to any securities of the Company owned or to be owned by such person or to require the Company to include such securities in the securities registered pursuant to the Registration Statement or in any securities being registered pursuant to any other registration statement filed by the Company under the Securities Act.

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[THE FOLLOWING MAY BE MADE IN A SEPARATE NEGATIVE ASSURANCES LETTER]

The primary purpose of our professional engagement was not to establish or confirm factual matters or financial, quantitative, statistical or accounting information, and many determinations involved in the preparation of the Offering Document are of a non-legal character. In addition, we have not undertaken any obligation to verify independently the accuracy, completeness or fairness of any of the factual matters set forth in the Offering Document or in the documents incorporated by reference therein (the "Incorporated Documents"). Consequently, in this letter we are not passing upon and do not assume any responsibility for the accuracy, completeness or fairness of the statements contained or incorporated by reference in the Offering Document. Also, we do not make any statement herein with respect to any of the financial statements and related notes thereto, the financial statement schedules or the financial, statistical, quantitative or accounting data contained in, or incorporated by reference in or omitted from, the Offering Document.

We have reviewed the Offering Document (including the Incorporated Documents) and we have participated in conferences with representatives of the Company, its independent public accountants, you and your counsel, at which conferences the contents of the Offering Document and related matters were discussed. However, we did not participate in the preparation of the certain of Incorporated Documents.

Subject to the foregoing, we confirm to you that, on the basis of the information we gained in the course of performing the services referred to above (the "Legal Services"), no facts have come to the attention of the Primary Lawyer Group (as hereinafter defined) which cause us to believe that the Registration Statement, at the effective time thereof (including the Incorporated Documents), contained an untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements contained therein not misleading or that the Prospectus (including any Incorporated Documents), as of its date and as of the date hereof, contained or contains any untrue statement of a material fact or omitted or omits to state any material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading (in each case other than the financial statements and the related notes thereto, the financial statement schedules and the other financial, statistical, quantitative and accounting data included therein or which should be included therein, as to which we express no view). "Primary Lawyer Group" means any lawyer in this firm who (i) signs this letter on behalf of the firm or (ii) actively renders Legal Services. In connection with delivering this letter, the lawyers in the Primary Lawyer Group, with your consent, have not made any inquiry of other lawyers practicing law with this firm or any review of files maintained by this firm.

The statements made herein are set forth solely for your benefit and are addressed to you solely in your capacity as the initial purchaser of the Securities. Neither this letter nor any of such statements may be used or relied upon by, or assigned to, any other person (including any subsequent purchaser or transferee of the Securities), and neither this letter nor any copies hereof may be furnished to any other person, filed with a governmental agency, quoted, cited or otherwise referred to without our prior written consent.

We inform you that the Registration Statement became effective under the Securities Act on \_\_\_\_\_, 201\_\_ and that no stop order suspending the effectiveness of the Registration Statement has been issued under the Securities Act.

We are not representing the Company in any pending litigation in which it is a named defendant that challenges the validity or enforceability of, or seeks to enjoin the performance of, the Transaction Documents.

Further, we confirm to you that the Registration Statement, as of its effective date, and the Prospectus, as of its date, appeared to us on their face to respond in all material respects to the requirements of Form S-1, except that the foregoing statement does not address any requirement relating to financial statements, notes or schedules and financial and accounting data or information contained in or omitted from the Registration Statement or the Prospectus Supplement.

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**EXHIBIT B**

**FORM OF OFFICER'S CERTIFICATE**

This Officer's Certificate ("**Certificate**") is being delivered pursuant to Section 8(e) of that certain Purchase Agreement dated as of March 22, 2016, ("**Purchase Agreement**"), by and between **SOLIGENIX, INC.**, a Delaware corporation (the "**Company**"), and **LINCOLN PARK CAPITAL FUND, LLC** (the "**Investor**"). Terms used herein and not otherwise defined shall have the meanings ascribed to them in the Purchase Agreement.

The undersigned, \_\_\_\_\_, \_\_\_\_\_ of the Company, hereby certifies as follows:

1. I am the \_\_\_\_\_ of the Company and make the statements contained in this Certificate;

2. The representations and warranties of the Company are true and correct in all material respects (except to the extent that any of such representations and warranties is already qualified as to materiality in Section 4 of the Purchase Agreement, in which case, such representations and warranties are true and correct without further qualification) as of the date when made and as of the Commencement Date as though made at that time (except for representations and warranties that speak as of a specific date, in which case such representations and warranties are true and correct as of such date);

3. The Company has performed, satisfied and complied in all material respects with covenants, agreements and conditions required by the Transaction Documents to be performed, satisfied or complied with by the Company at or prior to the Commencement Date.

4. The Company has not taken any steps, and does not currently expect to take any steps, to seek protection pursuant to any Bankruptcy Law nor does the Company or any of its Subsidiaries have any knowledge or reason to believe that its creditors intend to initiate involuntary bankruptcy or insolvency proceedings. The Company is financially solvent and is generally able to pay its debts as they become due.

IN WITNESS WHEREOF, I have hereunder signed my name on this \_\_\_ day of \_\_\_\_\_.

\_\_\_\_\_  
Name:  
Title:

The undersigned as Secretary of **SOLIGENIX, INC.**, a Delaware corporation, hereby certifies that \_\_\_\_\_ is the duly elected, appointed, qualified and acting \_\_\_\_\_ of \_\_\_\_\_ and that the signature appearing above is his genuine signature.

\_\_\_\_\_  
Secretary

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**EXHIBIT C**

**FORM OF COMPANY RESOLUTIONS  
FOR SIGNING PURCHASE AGREEMENT**

**UNANIMOUS WRITTEN CONSENT OF  
SOLIGENIX, INC.**

In accordance with the corporate laws of the State of Delaware, the undersigned, being all of the directors of **SOLIGENIX, INC.**, a Delaware corporation (the "Corporation"), do hereby consent to and adopt the following resolutions as the action of the Board of Directors for and on behalf of the Corporation and hereby direct that this Consent be filed with the minutes of the proceedings of the Board of Directors:

WHEREAS, there has been presented to the Board of Directors of the Corporation a draft of the Purchase Agreement (the "Purchase Agreement") by and between the Corporation and Lincoln Park Capital Fund, LLC ("Lincoln Park"), providing for the purchase by Lincoln Park of up to Twelve Million Dollars (\$12,000,000) of the Corporation's common stock, par value \$0.001 per share per share (the "Common Stock"); and

WHEREAS, after careful consideration of the Purchase Agreement, the documents incident thereto and other factors deemed relevant by the Board of Directors, the Board of Directors has determined that it is advisable and in the best interests of the Corporation to engage in the transactions contemplated by the Purchase Agreement, including, but not limited to, the issuance of up to 600,000 shares of Common Stock to Lincoln Park as a commitment fee (the "Commitment Shares") and the sale of shares of Common Stock to Lincoln Park up to the available amount under the Purchase Agreement (the "Purchase Shares").

**Transaction Documents**

NOW, THEREFORE, BE IT RESOLVED, that the transactions described in the Purchase Agreement are hereby approved and \_\_\_\_\_ (the "Authorized Officers") are severally authorized to execute and deliver the Purchase Agreement, and any other agreements or documents contemplated thereby including, without limitation, a registration rights agreement (the "Registration Rights Agreement") providing for the registration of the shares of the Company's Common Stock issuable in respect of the Purchase Agreement on behalf of the Corporation, with such amendments, changes, additions and deletions as the Authorized Officers may deem to be appropriate and approve on behalf of, the Corporation, such approval to be conclusively evidenced by the signature of an Authorized Officer thereon; and

FURTHER RESOLVED, that the terms and provisions of the Registration Rights Agreement by and among the Corporation and Lincoln Park are hereby approved and the Authorized Officers are authorized to execute and deliver the Registration Rights Agreement (pursuant to the terms of the Purchase Agreement), with such amendments, changes, additions and deletions as the Authorized Officer may deem appropriate and approve on behalf of, the Corporation, such approval to be conclusively evidenced by the signature of an Authorized Officer thereon; and

FURTHER RESOLVED, that the terms and provisions of the forms of Commencement Irrevocable Transfer Agent Instructions and Notice of Effectiveness of Registration Statement (collectively, the "Instructions") are hereby approved and the Authorized Officers are authorized to execute and deliver the Instructions on behalf of the Company in accordance with the Purchase Agreement, with such amendments, changes, additions and deletions as the Authorized Officers may deem appropriate and approve on behalf of, the Corporation, such approval to be conclusively evidenced by the signature of an Authorized Officer thereon; and

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**Execution of Purchase Agreement**

FURTHER RESOLVED, that the Corporation be and it hereby is authorized to execute the Purchase Agreement providing for the purchase of up to Twelve Million Dollars (\$12,000,000) of the Corporation's common stock; and

**Issuance of Common Stock**

FURTHER RESOLVED, that the Corporation is hereby authorized to issue to Lincoln Park Capital Fund, LLC, 100,000 shares of Common Stock as Initial Commitment Shares and that upon issuance of the Initial Commitment Shares pursuant to the Purchase Agreement the Initial Commitment Shares shall be duly authorized, validly issued, fully paid and nonassessable with no personal liability attaching to the ownership thereof; and

FURTHER RESOLVED, that the Corporation is hereby authorized to issue 500,000 shares of Common Stock as Additional Commitment Shares under the Purchase Agreement in accordance with the terms of the Purchase Agreement and that, upon issuance of the Additional Commitment Shares pursuant to the Purchase Agreement, the Additional Commitment Shares will be duly authorized, validly issued, fully paid and nonassessable with no personal liability attaching to the ownership thereof; and

FURTHER RESOLVED, that the Corporation shall reserve 500,000 shares of Common Stock for issuance as Additional Commitment Shares under the Purchase Agreement; and

FURTHER RESOLVED, that the Corporation is hereby authorized to issue shares of Common Stock upon the purchase of Purchase Shares up to the Available Amount under the Purchase Agreement in accordance with the terms of the Purchase Agreement and that, upon issuance of the Purchase Shares pursuant to the Purchase Agreement, the Purchase Shares will be duly authorized, validly issued, fully paid and nonassessable with no personal liability attaching to the ownership thereof; and

FURTHER RESOLVED, that the Corporation shall initially reserve 5,000,000 shares of Common Stock for issuance as Purchase Shares under the Purchase Agreement.

**Approval of Actions**

FURTHER RESOLVED, that, without limiting the foregoing, the Authorized Officers are, and each of them hereby is, authorized and directed to proceed on behalf of the Corporation and to take all such steps as deemed necessary or appropriate, with the advice and assistance of counsel, to cause the Corporation to consummate the agreements referred to herein and to perform its obligations under such agreements; and

FURTHER RESOLVED, that the Authorized Officers be, and each of them hereby is, authorized, empowered and directed on behalf of and in the name of the Corporation, to take or cause to be taken all such further actions and to execute and deliver or cause to be executed and delivered all such further agreements, amendments, documents, certificates, reports, schedules, applications, notices, letters and undertakings and to incur and pay all such fees and expenses as in their judgment shall be necessary, proper or desirable to carry into effect the purpose and intent of any and all of the foregoing resolutions, and that all actions heretofore taken by any officer or director of the Corporation in connection with the transactions contemplated by the agreements described herein are hereby approved, ratified and confirmed in all respects.

IN WITNESS WHEREOF, the Board of Directors has executed and delivered this Consent effective as of \_\_\_\_\_, 2016.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

being all of the directors of **SOLIGENIX, INC.**

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**EXHIBIT D**

**FORM OF SECRETARY'S CERTIFICATE**

This Secretary's Certificate ("Certificate") is being delivered pursuant to Section 8(k) of that certain Purchase Agreement dated as of March 22, 2016 ("Purchase Agreement"), by and between **SOLIGENIX, INC.**, a Delaware corporation (the "Company"), and **LINCOLN PARK CAPITAL FUND, LLC** (the "Investor"), pursuant to which the Company may sell to the Investor up to Twelve Million Dollars (\$12,000,000) of the Company's Common Stock, par value \$0.001 per share per share (the "Common Stock"). Terms used herein and not otherwise defined shall have the meanings ascribed to them in the Purchase Agreement.

The undersigned, \_\_\_\_\_, Secretary of the Company, hereby certifies as follows:

1. I am the Secretary of the Company and make the statements contained in this Secretary's Certificate.

2. Attached hereto as Exhibit A and Exhibit B are true, correct and complete copies of the Company's bylaws ("Bylaws") and Certificate of Incorporation ("Charter"), in each case, as amended through the date hereof, and no action has been taken by the Company, its directors, officers or stockholders, in contemplation of the filing of any further amendment relating to or affecting the Bylaws or Charter.

3. Attached hereto as Exhibit C are true, correct and complete copies of the resolutions duly adopted by the Board of Directors of the Company on \_\_\_\_\_, at which a quorum was present and acting throughout. Such resolutions have not been amended, modified or rescinded and remain in full force and effect and such resolutions are the only resolutions adopted by the Company's Board of Directors, or any committee thereof, or the stockholders of the Company relating to or affecting (i) the entering into and performance of the Purchase Agreement, or the issuance, offering and sale of the Purchase Shares and the Commitment Shares and (ii) and the performance of the Company of its obligation under the Transaction Documents as contemplated therein.

4. As of the date hereof, the authorized, issued and reserved capital stock of the Company is as set forth on Exhibit D hereto.

**IN WITNESS WHEREOF**, I have hereunder signed my name on this \_\_\_\_ day of \_\_\_\_\_.

\_\_\_\_\_  
Secretary

The undersigned as \_\_\_\_\_ of **SOLIGENIX, INC.**, a Delaware corporation, hereby certifies that \_\_\_\_\_ is the duly elected, appointed, qualified and acting Secretary of \_\_\_\_\_, and that the signature appearing above is his genuine signature.

\_\_\_\_\_

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EXHIBIT E

**FORM OF LETTER TO THE TRANSFER AGENT FOR THE ISSUANCE OF THE INITIAL COMMITMENT SHARES AT SIGNING OF THE PURCHASE AGREEMENT**

[COMPANY LETTERHEAD]

[DATE]

[TRANSFER AGENT]

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Re: Issuance of Common Stock to Lincoln Park Capital Fund, LLC

Dear \_\_\_\_\_,

On behalf of **SOLIGENIX, INC.**, (the "Company"), you are hereby instructed to issue **as soon as possible** a share certificate representing an aggregate of 100,000 shares of our common stock in the name of **Lincoln Park Capital Fund, LLC**. The share certificate should be dated [DATE OF THE PURCHASE AGREEMENT]. I have included a true and correct copy of a unanimous written consent executed by all of the members of the Board of Directors of the Company adopting resolutions approving the issuance of these shares. The share certificate should bear the following restrictive legend:

**THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES HAVE BEEN ACQUIRED FOR INVESTMENT AND MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS, UNLESS SOLD PURSUANT TO: (1) RULE 144 UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (2) AN OPINION OF HOLDER'S COUNSEL, IN A CUSTOMARY FORM, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR APPLICABLE STATE SECURITIES LAWS.**

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The share certificate should be sent **as soon as possible via overnight mail** to the following address:

Lincoln Park Capital Fund, LLC  
440 North Wells, Suite 410  
Chicago, IL 60654  
Attention: Josh Scheinfeld/Jonathan Cope

Thank you very much for your help. Please call me at \_\_\_\_\_ if you have any questions or need anything further.

**SOLIGENIX, INC.**

BY: \_\_\_\_\_  
[name]  
[title]

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## REGISTRATION RIGHTS AGREEMENT

**REGISTRATION RIGHTS AGREEMENT** (this "Agreement"), dated as of March 22, 2016, by and between **SOLIGENIX, INC.**, a Delaware corporation (the "Company"), and **LINCOLN PARK CAPITAL FUND, LLC**, an Illinois limited liability company (together with it permitted assigns, the "Buyer"). Capitalized terms used herein and not otherwise defined herein shall have the respective meanings set forth in the Purchase Agreement by and between the parties hereto, dated as of the date hereof (as amended, restated, supplemented or otherwise modified from time to time, the "Purchase Agreement").

**WHEREAS:**

The Company has agreed, upon the terms and subject to the conditions of the Purchase Agreement, to sell to the Buyer up to Twelve Million Dollars (\$12,000,000) of Purchase Shares and to induce the Buyer to enter into the Purchase Agreement, the Company has agreed to provide certain registration rights under the Securities Act of 1933, as amended, and the rules and regulations thereunder, or any similar successor statute (collectively, the "Securities Act"), and applicable state securities laws.

**NOW, THEREFORE**, in consideration of the promises and the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company and the Buyer hereby agree as follows:

**1. DEFINITIONS.**

As used in this Agreement, the following terms shall have the following meanings:

a. "Investor" means the Buyer, any transferee or assignee thereof to whom a Buyer assigns its rights under this Agreement in accordance with Section 9 and who agrees to become bound by the provisions of this Agreement, and any transferee or assignee thereof to whom a transferee or assignee assigns its rights under this Agreement in accordance with Section 9 and who agrees to become bound by the provisions of this Agreement.

b. "Person" means any individual or entity including but not limited to any corporation, a limited liability company, an association, a partnership, an organization, a business, an individual, a governmental or political subdivision thereof or a governmental agency.

c. "Register," "registered," and "registration" refer to a registration effected by preparing and filing one or more registration statements of the Company in compliance with the Securities Act and pursuant to Rule 415 under the Securities Act or any successor rule providing for offering securities on a continuous basis ("Rule 415"), and the declaration or ordering of effectiveness of such registration statement(s) by the United States Securities and Exchange Commission (the "SEC").

d. "Registrable Securities" means all of the Initial Commitment Shares, all of the Additional Commitment Shares and all of the Purchase Shares that may, from time to time, be issued or become issuable to the Investor under the Purchase Agreement (without regard to any limitation or restriction on purchases), and any and all shares of capital stock issued or issuable with respect to the Purchase Shares, the Initial Commitment Shares or the Additional Commitment Shares or the Purchase Agreement as a result of any stock split, stock dividend, recapitalization, exchange or similar event or otherwise, without regard to any limitation on purchases under the Purchase Agreement.

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e. "Registration Statement" means one or more registration statements of the Company covering only the sale of the Registrable Securities.

## 2. REGISTRATION.

a. Mandatory Registration. The Company shall, within thirty (30) calendar days after the date hereof, file with the SEC an initial Registration Statement covering 5,600,000 of the Registrable Securities so as to permit the resale of such Registrable Securities by the Investor under Rule 415 under the Securities Act at then prevailing market prices (and not fixed prices). The initial Registration Statement shall register only the Registrable Securities. The Investor and its counsel shall have a reasonable opportunity to review and comment upon such Registration Statement and any amendment or supplement to such Registration Statement and any related prospectus prior to its filing with the SEC, and the Company shall give due consideration to all such comments. The Investor shall furnish all information reasonably requested by the Company for inclusion therein. The Company shall use its best efforts to have the Registration Statement and any amendment declared effective by the SEC at the earliest possible date. The Company shall use reasonable best efforts to keep the Registration Statement effective pursuant to Rule 415 promulgated under the Securities Act and available for the resale by the Investor of all of the Registrable Securities covered thereby at all times until the date on which the Investor shall have resold all the Registrable Securities covered thereby and no Available Amount remains under the Purchase Agreement (the "Registration Period"). The Registration Statement (including any amendments or supplements thereto and prospectuses contained therein) shall not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein, or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading.

b. Rule 424 Prospectus. The Company shall, as required by applicable securities regulations, from time to time file with the SEC, pursuant to Rule 424 promulgated under the Securities Act, the prospectus and prospectus supplements, if any, to be used in connection with sales of the Registrable Securities under the Registration Statement. The Investor and its counsel shall have a reasonable opportunity to review and comment upon such prospectus prior to its filing with the SEC, and the Company shall give due consideration to all such comments. The Investor shall use its reasonable best efforts to comment upon such prospectus within one (1) Business Day from the date the Investor receives the final pre-filing version of such prospectus.

c. Sufficient Number of Shares Registered. Provided the Company's Certificate of Amendment, as amended, has been amended to increase the number of shares of Common Stock, in the event the number of shares available under the Registration Statement is insufficient to cover the Registrable Securities, as mutually determined by both the Company and the Investor in consultation with their respective legal counsel, the Company shall amend the Registration Statement or file a new Registration Statement (a "New Registration Statement"), so as to cover all of such Registrable Securities (subject to the limitations set forth in Section 2(a)) as soon as practicable, but in any event not later than ten (10) Business Days after the necessity therefor arises, subject to any limits that may be imposed by the SEC pursuant to Rule 415 under the Securities Act. The Company shall use its reasonable best efforts to cause such amendment and/or New Registration Statement to become effective as soon as practicable following the filing thereof.



d. Offering. If the staff of the SEC (the “Staff”) or the SEC seeks to characterize any offering pursuant to a Registration Statement filed pursuant to this Agreement as constituting an offering of securities that does not permit such Registration Statement to become effective and be used for resales by the Investor under Rule 415 at then-prevailing market prices (and not fixed prices), or if after the filing of the initial Registration Statement with the SEC pursuant to Section 2(a), the Company is otherwise required by the Staff or the SEC to reduce the number of Registrable Securities included in such initial Registration Statement, then the Company shall reduce the number of Registrable Securities to be included in such initial Registration Statement (with the prior consent, which shall not be unreasonably withheld, of the Investor and its legal counsel as to the specific Registrable Securities to be removed therefrom) until such time as the Staff and the SEC shall so permit such Registration Statement to become effective and be used as aforesaid. In the event of any reduction in Registrable Securities pursuant to this paragraph, the Company shall file one or more New Registration Statements in accordance with Section 2(c) until such time as all Registrable Securities have been included in Registration Statements that have been declared effective and the prospectus contained therein is available for use by the Investor. Notwithstanding any provision herein or in the Purchase Agreement to the contrary, the Company’s obligations to register Registrable Securities (and any related conditions to the Investor’s obligations) shall be qualified as necessary to comport with any requirement of the SEC or the Staff as addressed in this Section 2(d).

### 3. RELATED OBLIGATIONS.

With respect to the Registration Statement and whenever any Registrable Securities are to be registered pursuant to Section 2 including on any New Registration Statement, the Company shall use its reasonable best efforts to effect the registration of the Registrable Securities in accordance with the intended method of disposition thereof and, pursuant thereto, the Company shall have the following obligations:

a. The Company shall prepare and file with the SEC such amendments (including post-effective amendments) and supplements to any registration statement and the prospectus used in connection with such registration statement, which prospectus is to be filed pursuant to Rule 424 promulgated under the Securities Act, as may be necessary to keep the Registration Statement or any New Registration Statement effective at all times during the Registration Period, and, during such period, comply with the provisions of the Securities Act with respect to the disposition of all Registrable Securities of the Company covered by the Registration Statement or any New Registration Statement until such time as all of such Registrable Securities shall have been disposed of in accordance with the intended methods of disposition by the seller or sellers thereof as set forth in such registration statement.

b. The Company shall permit the Investor to review and comment upon the Registration Statement or any New Registration Statement and all amendments and supplements thereto at least two (2) Business Days prior to their filing with the SEC, and not file any document in a form to which Investor reasonably objects. The Investor shall use its reasonable best efforts to comment upon the Registration Statement or any New Registration Statement and any amendments or supplements thereto within two (2) Business Days from the date the Investor receives the final version thereof. The Company shall furnish to the Investor, without charge any correspondence from the SEC or the staff of the SEC to the Company or its representatives relating to the Registration Statement or any New Registration Statement.

c. Upon request of the Investor, the Company shall furnish to the Investor, (i) promptly after the same is prepared and filed with the SEC, at least one copy of such registration statement and any amendment(s) thereto, including financial statements and schedules, all documents incorporated therein by reference and all exhibits, (ii) upon the effectiveness of any registration statement, a copy of the prospectus included in such registration statement and all amendments and supplements thereto (or such other number of copies as the Investor may reasonably request) and (iii) such other documents, including copies of any preliminary or final prospectus, as the Investor may reasonably request from time to time in order to facilitate the disposition of the Registrable Securities owned by the Investor. For the avoidance of doubt, any filing available to the Investor via the SEC’s live EDGAR system shall be deemed “furnished to the Investor” hereunder.

d. The Company shall use reasonable best efforts to (i) register and qualify the Registrable Securities covered by a registration statement under such other securities or "blue sky" laws of such jurisdictions in the United States as the Investor reasonably requests, (ii) prepare and file in those jurisdictions, such amendments (including post-effective amendments) and supplements to such registrations and qualifications as may be necessary to maintain the effectiveness thereof during the Registration Period, (iii) take such other actions as may be necessary to maintain such registrations and qualifications in effect at all times during the Registration Period, and (iv) take all other actions reasonably necessary or advisable to qualify the Registrable Securities for sale in such jurisdictions; provided, however, that the Company shall not be required in connection therewith or as a condition thereto to (x) qualify to do business in any jurisdiction where it would not otherwise be required to qualify but for this Section 3(d), (y) subject itself to general taxation in any such jurisdiction, or (z) file a general consent to service of process in any such jurisdiction. The Company shall promptly notify the Investor who holds Registrable Securities of the receipt by the Company of any notification with respect to the suspension of the registration or qualification of any of the Registrable Securities for sale under the securities or "blue sky" laws of any jurisdiction in the United States or its receipt of actual notice of the initiation or threatening of any proceeding for such purpose.

e. As promptly as practicable after becoming aware of such event or facts, the Company shall notify the Investor in writing of the happening of any event or existence of such facts as a result of which the prospectus included in any registration statement, as then in effect, includes an untrue statement of a material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, and promptly prepare a supplement or amendment to such registration statement to correct such untrue statement or omission, and deliver a copy of such supplement or amendment to the Investor (or such other number of copies as the Investor may reasonably request). The Company shall also promptly notify the Investor in writing (i) when a prospectus or any prospectus supplement or post-effective amendment has been filed, and when a registration statement or any post-effective amendment has become effective (notification of such effectiveness shall be delivered to the Investor by email or facsimile on the same day of such effectiveness and by overnight mail), (ii) of any request by the SEC for amendments or supplements to any registration statement or related prospectus or related information, and (iii) of the Company's reasonable determination that a post-effective amendment to a registration statement would be appropriate.

f. The Company shall use its reasonable best efforts to prevent the issuance of any stop order or other suspension of effectiveness of any registration statement, or the suspension of the qualification of any Registrable Securities for sale in any jurisdiction and, if such an order or suspension is issued, to obtain the withdrawal of such order or suspension at the earliest possible moment and to notify the Investor of the issuance of such order and the resolution thereof or its receipt of actual notice of the initiation or threat of any proceeding for such purpose.

g. The Company shall (i) cause all the Registrable Securities to be listed on each securities exchange on which securities of the same class or series issued by the Company are then listed, if any, if the listing of such Registrable Securities is then permitted under the rules of such exchange, or (ii) secure designation and quotation of all the Registrable Securities on the Principal Market. The Company shall pay all fees and expenses in connection with satisfying its obligation under this Section.

h. The Company shall cooperate with the Investor to facilitate the timely preparation and delivery of certificates (not bearing any restrictive legend) representing the Registrable Securities to be offered pursuant to any registration statement and enable such certificates to be in such denominations or amounts as the Investor may reasonably request and registered in such names as the Investor may request.

i. The Company shall at all times provide a transfer agent and registrar with respect to its Common Stock.

j. If reasonably requested by the Investor, the Company shall (i) immediately incorporate in a prospectus supplement or post-effective amendment such information as the Investor believes should be included therein relating to the sale and distribution of Registrable Securities, including, without limitation, information with respect to the number of Registrable Securities being sold, the purchase price being paid therefor and any other terms of the offering of the Registrable Securities; (ii) make all required filings of such prospectus supplement or post-effective amendment as soon as practicable upon notification of the matters to be incorporated in such prospectus supplement or post-effective amendment; and (iii) supplement or make amendments to any registration statement.

k. The Company shall use its reasonable best efforts to cause the Registrable Securities covered by any registration statement to be registered with or approved by such other governmental agencies or authorities as may be necessary to consummate the disposition of such Registrable Securities.

l. Within one (1) Business Day after any registration statement which includes the Registrable Securities is ordered effective by the SEC, the Company shall deliver, and shall cause legal counsel for the Company to deliver, to the transfer agent for such Registrable Securities (with copies to the Investor) confirmation that such registration statement has been declared effective by the SEC in the form attached hereto as Exhibit A. Thereafter, if requested by the Buyer at any time, the Company shall require its counsel to deliver to the Buyer a written confirmation whether or not the effectiveness of such registration statement has lapsed at any time for any reason (including, without limitation, the issuance of a stop order) and whether or not the registration statement is current and available to the Buyer for sale of all of the Registrable Securities.

m. The Company shall take all other reasonable actions necessary to expedite and facilitate disposition by the Investor of Registrable Securities pursuant to any registration statement.

#### 4. OBLIGATIONS OF THE INVESTOR.

a. The Company shall notify the Investor in writing of the information the Company reasonably requires from the Investor in connection with any registration statement hereunder. Within two (2) Business Days of the Company's request, the Investor shall furnish to the Company such information regarding itself, the Registrable Securities held by it and the intended method of disposition of the Registrable Securities held by it as shall be reasonably required to effect the registration of such Registrable Securities and shall execute such documents in connection with such registration as the Company may reasonably request.

b. The Investor agrees to cooperate with the Company as reasonably requested by the Company in connection with the preparation and filing of any registration statement hereunder.

c. The Investor agrees that, upon receipt of any notice from the Company of the happening of any event or existence of facts of the kind described in Section 3(f) or the first sentence of Section 3(e), the Investor will immediately discontinue disposition of Registrable Securities pursuant to any registration statement(s) covering such Registrable Securities until the Investor's receipt of the copies of the supplemented or amended prospectus contemplated by Section 3(f) or the first sentence of Section 3(e). Notwithstanding anything to the contrary, the Company shall cause its transfer agent to promptly deliver shares of Common Stock without any restrictive legend in accordance with the terms of the Purchase Agreement in connection with any sale of Registrable Securities with respect to which an Investor has entered into a contract for sale prior to the Investor's receipt of a notice from the Company of the happening of any event of the kind described in Section 3(f) or the first sentence of Section 3(e) and for which the Investor has not yet settled.

#### 5. EXPENSES OF REGISTRATION.

All reasonable expenses, other than sales or brokerage commissions, incurred in connection with registrations, filings or qualifications pursuant to Sections 2 and 3, including, without limitation, all registration, listing and qualifications fees, printers and accounting fees, and fees and disbursements of counsel for the Company, shall be paid by the Company.

#### 6. INDEMNIFICATION.

a. To the fullest extent permitted by law, the Company will, and hereby does, indemnify, hold harmless and defend the Investor, each Person, if any, who controls the Investor, the members, the directors, officers, partners, employees, agents, representatives of the Investor and each Person, if any, who controls the Investor within the meaning of the Securities Act or the Securities Exchange Act of 1934, as amended (the "Exchange Act") (each, an "Indemnified Person"), against any losses, claims, damages, liabilities, judgments, fines, penalties, charges, costs, attorneys' fees, amounts paid in settlement or expenses, joint or several, (collectively, "Claims") incurred in investigating, preparing or defending any action, claim, suit, inquiry, proceeding, investigation or appeal taken from the foregoing by or before any court or governmental, administrative or other regulatory agency, body or the SEC, whether pending or threatened, whether or not an indemnified party is or may be a party thereto ("Indemnified Damages"), to which any of them may become subject insofar as such Claims (or actions or proceedings, whether commenced or threatened, in respect thereof) arise out of or are based upon: (i) any untrue statement or alleged untrue statement of a material fact in the Registration Statement, any New Registration Statement or any post-effective amendment thereto or in any filing made in connection with the qualification of the offering under the securities or other "blue sky" laws of any jurisdiction in which Registrable Securities are offered ("Blue Sky Filing"), or the omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements therein not misleading, (ii) any untrue statement or alleged untrue statement of a material fact contained in the final prospectus (as amended or supplemented, if the Company files any amendment thereof or supplement thereto with the SEC) or the omission or alleged omission to state therein any material fact necessary to make the statements made therein, in light of the circumstances under which the statements therein were made, not misleading, (iii) any violation or alleged violation by the Company of the Securities Act, the Exchange Act, any other law, including, without limitation, any state securities law, or any rule or regulation thereunder relating to the offer or sale of the Registrable Securities pursuant to the Registration Statement or any New Registration Statement or (iv) any material violation by the Company of this Agreement (the matters in the foregoing clauses (i) through (iv) being, collectively, "Violations"). The Company shall reimburse each Indemnified Person promptly as such expenses are incurred and are due and payable, for any reasonable legal fees or other reasonable expenses incurred by them in connection with investigating or defending any such Claim. Notwithstanding anything to the contrary contained herein, the indemnification agreement contained in this Section 6(a): (i) shall not apply to a Claim by an Indemnified Person arising out of or based upon a Violation which occurs in reliance upon and in conformity with information about the Investor furnished in writing to the Company by such Indemnified Person expressly for use in connection with the preparation of the Registration Statement, any New Registration Statement or any such amendment thereof or supplement thereto, if such prospectus was timely made available by the Company pursuant to Section 3(c) or Section 3(e); (ii) with respect to any superseded prospectus, shall not inure to the benefit of any such person from whom the person asserting any such Claim purchased the Registrable Securities that are the subject thereof (or to the benefit of any person controlling such person) if the untrue statement or omission of material fact contained in the superseded prospectus was corrected in the revised prospectus, as then amended or supplemented, if such revised prospectus was timely made available by the Company pursuant to Section 3(c) or Section 3(e), and the Indemnified Person was promptly advised in writing not to use the incorrect prospectus prior to the use giving rise to a violation and such Indemnified Person, notwithstanding such advice, used it; (iii) shall not be available to the extent such Claim is based on a failure of the Investor to deliver or to cause to be delivered the prospectus made available by the Company, if such prospectus was timely made available by the Company pursuant to Section 3(c) or Section 3(e); and (iv) shall not apply to amounts paid in settlement of any Claim if such settlement is effected without the prior written consent of the Company, which consent shall not be unreasonably withheld. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of the Indemnified Person and shall survive the transfer of the Registrable Securities by the Investor pursuant to Section 9.

b. In connection with the Registration Statement or any New Registration Statement, the Investor agrees to indemnify, hold harmless and defend, to the same extent and in the same manner as is set forth in Section 6(a), the Company, each of its directors, each of its officers who signs the Registration Statement or any New Registration Statement, each Person, if any, who controls the Company within the meaning of the Securities Act or the Exchange Act (collectively and together with an Indemnified Person, an "Indemnified Party"), against any Claim or Indemnified Damages to which any of them may become subject, under the Securities Act, the Exchange Act or otherwise, insofar as such Claim or Indemnified Damages arise out of or are based upon any Violation, in each case to the extent, and only to the extent, that such Violation occurs in reliance upon and in conformity with written information about the Investor set forth on Exhibit B attached hereto and furnished to the Company by the Investor expressly for use in connection with such registration statement; and, subject to Section 6(d), the Investor will reimburse any legal or other expenses reasonably incurred by them in connection with investigating or defending any such Claim; provided, however, that the indemnity agreement contained in this Section 6(b) and the agreement with respect to contribution contained in Section 7 shall not apply to amounts paid in settlement of any Claim if such settlement is effected without the prior written consent of the Investor, which consent shall not be unreasonably withheld; provided, further, however, that the Investor shall be liable under this Section 6(b) for only that amount of a Claim or Indemnified Damages as does not exceed the net proceeds to the Investor as a result of the sale of Registrable Securities pursuant to such registration statement. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of such Indemnified Party and shall survive the transfer of the Registrable Securities by the Investor pursuant to Section 9.

c. Promptly after receipt by an Indemnified Person or Indemnified Party under this Section 6 of notice of the commencement of any action or proceeding (including any governmental action or proceeding) involving a Claim, such Indemnified Person or Indemnified Party shall, if a Claim in respect thereof is to be made against any indemnifying party under this Section 6, deliver to the indemnifying party a written notice of the commencement thereof, and the indemnifying party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly noticed, to assume control of the defense thereof with counsel mutually satisfactory to the indemnifying party and the Indemnified Person or the Indemnified Party, as the case may be; provided, however, that an Indemnified Person or Indemnified Party shall have the right to retain its own counsel with the reasonable fees and expenses to be paid by the indemnifying party, if, in the reasonable opinion of counsel retained by the indemnifying party, the representation by such counsel of the Indemnified Person or Indemnified Party and the indemnifying party would be inappropriate due to actual or potential differing interests between such Indemnified Person or Indemnified Party and any other party represented by such counsel in such proceeding. It is understood and agreed, however, that the Indemnifying Party shall only be responsible to pay the reasonable fees and expenses of one law firm for all Indemnified Parties. The Indemnified Party or Indemnified Person shall cooperate fully with the indemnifying party in connection with any negotiation or defense of any such action or claim by the indemnifying party and shall furnish to the indemnifying party all information reasonably available to the Indemnified Party or Indemnified Person which relates to such action or claim. The indemnifying party shall keep the Indemnified Party or Indemnified Person fully apprised at all times as to the status of the defense or any settlement negotiations with respect thereto. No indemnifying party shall be liable for any settlement of any action, claim or proceeding effected without its written consent, provided, however, that the indemnifying party shall not unreasonably withhold, delay or condition its consent. No indemnifying party shall, without the consent of the Indemnified Party or Indemnified Person, consent to entry of any judgment or enter into any settlement or other compromise which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party or Indemnified Person of a release from all liability in respect to such claim or litigation. Following indemnification as provided for hereunder, the indemnifying party shall be subrogated to all rights of the Indemnified Party or Indemnified Person with respect to all third parties, firms or corporations relating to the matter for which indemnification has been made. The failure to deliver written notice to the indemnifying party within a reasonable time of the commencement of any such action shall not relieve such indemnifying party of any liability to the Indemnified Person or Indemnified Party under this Section 6, except to the extent that the indemnifying party is prejudiced in its ability to defend such action.

d. The indemnification required by this Section 6 shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills are received or Indemnified Damages are incurred.

e. The indemnity agreements contained herein shall be in addition to (i) any cause of action or similar right of the Indemnified Party or Indemnified Person against the indemnifying party or others, and (ii) any liabilities the indemnifying party may be subject to pursuant to the law.

#### 7. CONTRIBUTION.

To the extent any indemnification by an indemnifying party is prohibited or limited by law, the indemnifying party agrees to make the maximum contribution with respect to any amounts for which it would otherwise be liable under Section 6 to the fullest extent permitted by law; provided, however, that: (i) no seller of Registrable Securities guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any seller of Registrable Securities who was not guilty of fraudulent misrepresentation; and (ii) contribution by any seller of Registrable Securities shall be limited in amount to the net amount of proceeds received by such seller from the sale of such Registrable Securities.

#### 8. REPORTS AND DISCLOSURE UNDER THE SECURITIES ACTS.

With a view to making available to the Investor the benefits of Rule 144 promulgated under the Securities Act or any other similar rule or regulation of the SEC that may at any time permit the Investor to sell securities of the Company to the public without registration ("Rule 144"), the Company agrees, at the Company's sole expense, to:

- a. make and keep public information available, as those terms are understood and defined in Rule 144;

b. file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act so long as the Company remains subject to such requirements and the filing of such reports and other documents is required for the applicable provisions of Rule 144;

c. furnish to the Investor so long as the Investor owns Registrable Securities, promptly upon request, (i) a written statement by the Company that it has complied with the reporting and or disclosure provisions of Rule 144, the Securities Act and the Exchange Act, (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company, and (iii) such other information as may be reasonably requested to permit the Investor to sell such securities pursuant to Rule 144 without registration; and

d. take such additional action as is requested by the Investor to enable the Investor to sell the Registrable Securities pursuant to Rule 144, including, without limitation, delivering all such legal opinions, consents, certificates, resolutions and instructions to the Company's Transfer Agent as may be requested from time to time by the Investor and otherwise fully cooperate with Investor and Investor's broker to effect such sale of securities pursuant to Rule 144.

The Company agrees that damages may be an inadequate remedy for any breach of the terms and provisions of this Section 8 and that Investor shall, whether or not it is pursuing any remedies at law, be entitled to equitable relief in the form of a preliminary or permanent injunctions, without having to post any bond or other security, upon any breach or threatened breach of any such terms or provisions.

#### 9. ASSIGNMENT OF REGISTRATION RIGHTS.

The Company shall not assign this Agreement or any rights or obligations hereunder without the prior written consent of the Investor. The Investor may not assign its rights under this Agreement without the written consent of the Company, other than to an affiliate of the Investor controlled by Jonathan Cope or Josh Scheinfeld.

#### 10. AMENDMENT OF REGISTRATION RIGHTS.

No provision of this Agreement may be amended or waived by the parties from and after the date that is one Business Day immediately preceding the filing of the initial Registration Statement with the SEC. Subject to the immediately preceding sentence, no provision of this Agreement may be (i) amended other than by a written instrument signed by both parties hereto or (ii) waived other than in a written instrument signed by the party against whom enforcement of such waiver is sought. Failure of any party to exercise any right or remedy under this Agreement or otherwise, or delay by a party in exercising such right or remedy, shall not operate as a waiver thereof.

#### 11. MISCELLANEOUS.

a. A Person is deemed to be a holder of Registrable Securities whenever such Person owns or is deemed to own of record such Registrable Securities. If the Company receives conflicting instructions, notices or elections from two or more Persons with respect to the same Registrable Securities, the Company shall act upon the basis of instructions, notice or election received from the registered owner of such Registrable Securities.

b. Any notices, consents, waivers or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered: (i) upon receipt, when delivered personally; (ii) upon receipt, when sent by facsimile or email (provided confirmation of transmission is mechanically or electronically generated and kept on file by the sending party); or (iii) one (1) Business Day after deposit with a nationally recognized overnight delivery service, in each case properly addressed to the party to receive the same. The addresses for such communications shall be:

If to the Company:

Soligenix, Inc.  
29 Emmons Drive, Suite C-10  
Princeton, New Jersey 08540  
Telephone: 609-538-8200  
Facsimile: 609-452-6467  
E-mail: cschaber@soligenix.com  
Attention: Christopher J. Schaber, Ph.D., CEO

With a copy to (which shall not constitute notice or service of process):

Duane Morris LLP  
200 South Biscayne Boulevard, Suite 3400  
Miami, Florida 33131-2318  
Telephone: 305-960-2200  
Facsimile: 305-397-1882  
E-mail: ljcroland@duanemorris.com  
Attention: Leslie J. Croland, Esq.

If to the Investor:

Lincoln Park Capital Fund, LLC  
440 North Wells, Suite 410  
Chicago, IL 60654  
Telephone: 312-822-9300  
Facsimile: 312-822-9301  
E-mail: jscheinfeld@lpcfunds.com/jcope@lpcfunds.com  
Attention: Josh Scheinfeld/Jonathan Cope

With a copy to (which shall not constitute notice or service of process):

Greenberg Traurig, LLP  
The MetLife Building  
200 Park Avenue  
New York, NY 10166  
Telephone: (212) 801-9200  
Facsimile: (212) 801-6400  
E-mail: marsicoa@gtlaw.com  
Attention: Anthony J. Marsico, Esq.

or at such other address and/or facsimile number and/or to the attention of such other person as the recipient party has specified by written notice given to each other party three (3) Business Days prior to the effectiveness of such change. Written confirmation of receipt (A) given by the recipient of such notice, consent, waiver or other communication, (B) mechanically or electronically generated by the sender's facsimile machine or email account containing the time, date, recipient facsimile number or email address, as applicable, and an image of the first page of such transmission or (C) provided by a nationally recognized overnight delivery service, shall be rebuttable evidence of personal service, receipt by facsimile or receipt from a nationally recognized overnight delivery service in accordance with clause (i), (ii) or (iii) above, respectively.



c. The corporate laws of the State of Delaware shall govern all issues concerning the relative rights of the Company and its stockholders. All other questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by the internal laws of the State of Illinois, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of Illinois or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of Illinois. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting the State of Illinois, County of Cook, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to such party at the address for such notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. If any provision of this Agreement shall be invalid or unenforceable in any jurisdiction, such invalidity or unenforceability shall not affect the validity or enforceability of the remainder of this Agreement in that jurisdiction or the validity or enforceability of any provision of this Agreement in any other jurisdiction. **EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION HEREWITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.**

d. This Agreement and the Purchase Agreement constitute the entire agreement among the parties hereto with respect to the subject matter hereof and thereof. There are no restrictions, promises, warranties or undertakings, other than those set forth or referred to herein and therein. This Agreement and the Purchase Agreement supersede all prior agreements and understandings among the parties hereto with respect to the subject matter hereof and thereof.

e. Subject to the requirements of Section 9, this Agreement shall inure to the benefit of and be binding upon the successors and permitted assigns of each of the parties hereto.

f. The headings in this Agreement are for convenience of reference only and shall not limit or otherwise affect the meaning hereof.

g. This Agreement may be executed in identical counterparts, each of which shall be deemed an original but all of which shall constitute one and the same agreement. This Agreement, once executed by a party, may be delivered to the other party hereto by facsimile transmission or by e-mail in a “.pdf” format data file of a copy of this Agreement bearing the signature of the party so delivering this Agreement.

h. Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as the other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

i. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent and no rules of strict construction will be applied against any party.

j. This Agreement is intended for the benefit of the parties hereto and their respective successors and permitted assigns, and is not for the benefit of, nor may any provision hereof be enforced by, any other Person.

\* \* \* \* \*

IN WITNESS WHEREOF, the parties have caused this Registration Rights Agreement to be duly executed as of day and year first above written.

**THE COMPANY:**

**SOLIGENIX, INC.**

By: /s/ Christopher J. Schaber  
Name: Christopher J. Schaber, Ph.D.  
Title: President and Chief Executive Officer

**BUYER:**

**LINCOLN PARK CAPITAL FUND, LLC**  
**BY: LINCOLN PARK CAPITAL, LLC**  
**BY: ROCKLEDGE CAPITAL CORPORATION**

By: /s/ Josh Scheinfeld  
Name: Josh Scheinfeld  
Title: President

**EXHIBIT A**

**TO REGISTRATION RIGHTS AGREEMENT**

**FORM OF NOTICE OF EFFECTIVENESS  
OF REGISTRATION STATEMENT**

[Date]

**[TRANSFER AGENT]**

\_\_\_\_\_  
\_\_\_\_\_

Re: [\_\_\_\_\_]

Ladies and Gentlemen:

We are counsel to Soligenix, Inc., a Delaware corporation (the "Company"), and have represented the Company in connection with that certain Purchase Agreement, dated as of March 22, 2016 (the "Purchase Agreement"), entered into by and between the Company and Lincoln Park Capital Fund, LLC (the "Buyer") pursuant to which the Company has agreed to issue to the Buyer shares of the Company's Common Stock, par value \$0.001 per share (the "Common Stock"), in an amount up to Twelve Million Dollars (\$12,000,000) (the "Purchase Shares"), in accordance with the terms of the Purchase Agreement. In connection with the transactions contemplated by the Purchase Agreement, the Company has registered with the U.S. Securities & Exchange Commission the following shares of Common Stock:

- (1) 5,000,000 shares of Common Stock to be issued to the Buyer upon purchase from the Company by the Buyer from time to time (the "Purchase Shares").
- (2) 100,000 shares of Common Stock that have been issued to the Buyer as a commitment fee (the "Initial Commitment Shares").
- (2) 500,000 shares of Common Stock that may be issued to the Buyer as a commitment fee from time to time (the "Additional Commitment Shares") and, collectively with the Initial Commitment Shares, the "Commitment Shares").

Pursuant to the Purchase Agreement, the Company also has entered into a Registration Rights Agreement, dated as of March 22, 2016 with the Buyer (the "Registration Rights Agreement") pursuant to which the Company agreed, among other things, to register the Purchase Shares and the Commitment Shares under the Securities Act of 1933, as amended (the "Securities Act"). In connection with the Company's obligations under the Purchase Agreement and the Registration Rights Agreement, on [\_\_\_\_], 2016, the Company filed a Registration Statement (File No. 333-[\_\_\_\_]) (the "Registration Statement") with the Securities and Exchange Commission (the "SEC") relating to the resale of the Purchase Shares and the Commitment Shares.

In connection with the foregoing, we advise you that a member of the SEC's staff has advised us by telephone that the SEC has entered an order declaring the Registration Statement effective under the Securities Act at [\_\_\_\_] [A.M./P.M.] on [\_\_\_\_], 201[\_\_\_\_] and we have no knowledge, after telephonic inquiry of a member of the SEC's staff, that any stop order suspending its effectiveness has been issued or that any proceedings for that purpose are pending before, or threatened by, the SEC and the Purchase Shares and the Commitment Shares are available for resale under the Securities Act pursuant to the Registration Statement and may be issued without any restrictive legend.

Very truly yours,  
[Company Counsel]

By: \_\_\_\_\_

cc: Lincoln Park Capital Fund, LLC

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**EXHIBIT B**

**TO REGISTRATION RIGHTS AGREEMENT**

**Information About The Investor Furnished To The Company By The Investor  
Expressly For Use In Connection With The Registration Statement**

**Information With Respect to Lincoln Park Capital**

As of the date of the Purchase Agreement, Lincoln Park Capital Fund, LLC, beneficially owned 100,000 shares of our common stock. Josh Scheinfeld and Jonathan Cope, the Managing Members of Lincoln Park Capital, LLC, the manager of Lincoln Park Capital Fund, LLC, are deemed to be beneficial owners of all of the shares of common stock owned by Lincoln Park Capital Fund, LLC. Messrs. Cope and Scheinfeld have shared voting and investment power over the shares being offered under the prospectus filed with the SEC in connection with the transactions contemplated under the Purchase Agreement. Lincoln Park Capital, LLC is not a licensed broker dealer or an affiliate of a licensed broker dealer.

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## SUBSIDIARIES OF SOLIGENIX, INC.

The following represents a list of Soligenix, Inc.'s subsidiaries:

Name	Ownership	State of Incorporation
Enteron Pharmaceuticals, Inc.	100.00%	Delaware
Orasomal Technologies Inc.	75.30%	Delaware
DOR BioDefense Corp.	100.00%	Delaware
Soligenix BioPharma Canada Incorporated	100.00%	Canada
Soligenix UK Limited	100.00%	United Kingdom

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in the Registration Statements of Soligenix, Inc. on Form S-8 (Nos. 333-130801, 333-196941 and 333-208515) of our report dated March 24, 2016, on our audits of the consolidated financial statements as of December 31, 2015 and 2014 and for each of the years then ended, which report is included in this Annual Report on Form 10-K to be filed on or about March 24, 2016.

/s/ EisnerAmper LLP

Philadelphia, Pennsylvania  
March 24, 2016

**CERTIFICATION PURSUANT TO RULE 13a-14(a)/15d-14(a)  
OF THE SECURITIES EXCHANGE ACT OF 1934**

I, Christopher J. Schaber, Ph.D., certify that:

1. I have reviewed this Form 10-K of the Soligenix, Inc. for the fiscal year ended December 31, 2015;
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.

March 24, 2016

**/s/ Christopher J. Schaber**

Christopher J. Schaber, Ph.D.

President and Chief Executive Officer

**CERTIFICATION PURSUANT TO RULE 13a-14(a)/15d-14(a)  
OF THE SECURITIES EXCHANGE ACT OF 1934**

I, Joseph M. Warusz, certify that:

1. I have reviewed this Form 10-K of the Soligenix, Inc. for the fiscal year ended December 31, 2015;
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.

March 24, 2016

**/s/ Joseph M. Warusz**

Joseph M. Warusz, CPA  
Vice President of Finance, Acting Chief Financial  
Officer and Corporate Secretary



**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 this Form 10-K of Soligenix, Inc. (the "Company") for the fiscal year ended December 31, 2015, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned hereby certifies, pursuant to 18 U.S.C. Section 1350, that:

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.

March 24, 2016

**/s/ Christopher J. Schaber**

Christopher J. Schaber, Ph.D.  
President and Chief Executive Officer

**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 this Form 10-K of Soligenix, Inc. (the "Company") for the fiscal year ended December 31, 2015, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned hereby certifies, pursuant to 18 U.S.C. Section 1350, that:

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.

March 24, 2016

**/s/ Joseph M. Warusz**

Joseph M. Warusz, CPA

Vice President of Finance, Acting Chief Financial  
Officer and Corporate Secretary